

DEPT. NAT. RES & ENV

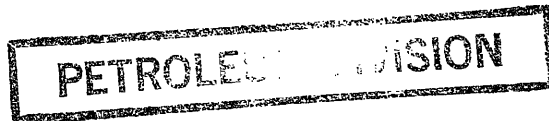


PE903925

# AMITY OIL NL

## BROADBILL-1

### WELL COMPLETION REPORT



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Prepared by

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## 1. INTRODUCTION

Broadbill-1 well was drilled in Permit VIC/P36 between the 17<sup>th</sup> and 31<sup>st</sup> January 1998. The well was located 6kilometres offshore of the Victorian coast and 13 kilometres west of the Perch oilfield within the Gippsland Basin.

The Broadbill Prospect was defined from a reasonable density seismic grid of various vintages ranging from 1981 to 1989. Direct well control was provided by the nearby Tommyruff-1 well. The Prospect was interpreted as a simple anticline with minimal fault impact and was prognosed to contain up to 78mmbbls recoverable oil.

Good oil shows to the west, in the onshore Woodside wells, the existence of the Perch Oilfield some 13 kilometres to the west, plus the well defined structural closure led to this prospect being highly regarded as a potential oil discovery. Prior to drilling, reservoir development was not considered a high risk, although seismic correlation on the available data set did not allow categoric definition of lateral extents of the sandstone section intersected at Top Latrobe Group in the nearby Tommyruff-1 well. There are no direct ties to the onshore Woodside wells.

Formation Tops were intersected at or near prognosis but, contrary to expectations, the Top Latrobe comprised a sequence of coals and shales with thin sandstones. The expected development of a thick sandstone unit similar to that intersected at Tommyruff-1 was absent and the first lithological unit encountered underneath the regional Lakes Entrance Formation seal was a thick coal. This effectively replaced any reservoir at Top Latrobe closure. Gas readings through this shaly coal unit were high. Indeed, gas readings remained high from Top Latrobe to a depth of 966 metres KB. Unfortunately reservoir development was poor throughout this section. No fluorescence was recorded in this upper part of the Latrobe Group. The remainder of the Latrobe Group was effectively devoid of hydrocarbon.

Due to drilling difficulties related to ledging and caving in of the interbedded coals, the well was terminated 5 metres into the Strzelecki Group. The difficult hole problems prevented logs being run over the lower 350 metres of the well.

Broadbill-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 : Broadbill-1
- (ii) Name and Address of Operator : Amity Oil NL  
2<sup>nd</sup> Floor, 18 Richardson Street  
West Perth  
Western Australia 6005
- (iii) Post Drilling Name and Interests of Tenement holders : Amity Oil NL 60.00%  
Latrobe Oil & Gas Pty Ltd 25.00%  
Pan Pacific Petroleum (South Aust.) Pty Ltd 15.00%
- (iv) Exploration Permit : VIC/P36
- (v) Basin : Offshore Gippsland Basin, Victoria
- (vi) Location : Shotpoint 168 1989 Seismic Line GSE89A-08  
Latitude: 38° 35'25.28" South  
Longitude: 147°01'17.40"East
- (vii) Elevations : RKB 31.60 metres above mean sea level  
Water Depth 22 metres  
RKB to Seabed 53.60metres
- (viii) Date Spudded : 17<sup>th</sup> January 1998
- (ix) Date Total Depth Reached : 26<sup>th</sup> January 1998
- (x) Date Rig Released : 31<sup>st</sup> January 1998
- (xi) Drilling Time : 15days
- (xii) Total Depth : 1345 metres KB
- (xiii) Status : Plugged and Abandoned

### 2.2 DRILLING PLANT

- (i) Name and address of Drilling Contractor : Santa Fe Drilling Operations Inc.  
111 Raymond Street  
SALE VIC 3850
- (ii) Drilling Unit : Parameswara  
See Appendix 5 for details

## 2.3 DRILLING SUMMARY

Broadbill-1 well spudded at 1600 hours on 17<sup>th</sup> January, 1998. The 36 inch, (914mm), hole was drilled to 110 mKB with few problems. Ten joints of 30 inch (762mm) casing were run from 0300-0600 hours on 18<sup>th</sup> January. The 30 inch (762mm) riser extension was installed on the A Section. Commenced drilling and casing with 17½ inch (444mm) assembly at 1600 hours on 19<sup>th</sup> January. Tagged cement at 63 mKB and drilled to shoe at 106 mKB. Cleared out rathole to 110 mKB. Made up 12¼ inch (311mm) and commenced drilling at 0130 hours on 19<sup>th</sup> January to 117 mKB. Bit plugged and unable to clear. Cuttings found packed on top of DP float. ROV detects open hole around conductor. Rig up and grout 30 inch annulus through 2⅞ inch (73mm) tubing with 40 bbls slurry at 15.9 ppg. Recommenced drilling 12¼ inch hole at 0630 hours on 20<sup>th</sup> January. Drill to 230mKB. Experiencing fluid losses increasing to 70 bbls/hour. Pump 25 bbl Hi-Vis pill with LCM. Work pipe and circulate out at reduced pump rate. Continue drilling to 413 mKB. Spot 100 lbs LCM pill across open hole. Run single shot survey at 398 mKB. Continue drilling to 701 mKB. Run survey at 686.82 mKB. Continue drilling to 785 mKB. Reach casing point; clean up hole. Run Schlumberger logging at 2330 hours on 21<sup>st</sup> January. Finish logging at 0630 hours on 22<sup>nd</sup> January. Run casing at 0900 hours and cement. Final cut, and nipple up B section at 0600 hours. Pressure test BOPs. All rams 500/3500 psi 5/10 min. Annular 500/2000 psi 5/10 min. Run in with 8¼ inch (210mm) string. Tag cement at 745 mKB. Drill out to 775 mKB. Drill shoe, clean rat hole and drill new formation to 788 mKB. Perform FIT at 788 mKB w/8.8 ppg, leak off at 564 psi, EMW 13 ppg. Drill on from 788 to 1095 mKB. Run MSS survey. Tight hole. Re-enter hole, work pipe at 150 rpm, reduced pump rate from 1065 to 1076 mKB. Regain full returns. Drill on from 1095 to 1345 mKB. Circulate bottom up, run MSS survey. Tight hole. Back reaming with slow progress 1268-1249 mKB. Minor fluid losses. Circulate hole clean and retrieve MSS tool. RIH to bottom; wash and ream 1078-1124 mKB. Hole clean, no problems. Run Schlumberger electric logs at 2000 hours on 26<sup>th</sup> January. Encountered hole problems 860-897 mKB, 960 mKB, 1004 to 1030 mKB. Could not pass 1030 mKB. Pull out logging tools. Re-enter hole at 0300 hours on 27<sup>th</sup> January and work through ledges at 880 and 982 mKB. Work tight hole at 1027 and 1035 mKB. Circulate, clean and displace open hole with Hi Vis. Run in hole with Schlumberger at 1730 hours on 27<sup>th</sup> January. Unable to pass ledging at 857 mKB. Pull out and abandon logging programme. Begin abandonment programme at 0230 hours on 28<sup>th</sup> January. Pull 30 inch conductor at 0430 hours on 30<sup>th</sup> January. Jack down at 2115 hours on 31<sup>st</sup> January.

## 2.4 DRILLING DATA

### 2.4.1 Well Profile

Broadbill-1 well was drilled with the following hole size:

- 914 millimetre (36inch) - 53 metres KB to 110 metres KB.
- 311 millimetre (12¼ inch) - 110 metres KB to 785 metres KB.
- 216 millimetre (8½ inch) - 785 metres KB to 1345 metres KB.

The well profile is illustrated in Figure 3.

### 2.4.2 Bit Record

Refer Table 1.

### 2.4.3. Casing and Cementing

Cementing operations were carried out by Halliburton.

### Surface Casing

10 joints, 762mm (30 inch) OD grade X52; SF60 thread;460kg/m. Float shoe on bottom, landed at 106mKB.

### Cementing Operation

Mixed and pumped 157bbl, (760sx),15.9 ppg, initially with 40bbl, (194sx), top up.

### Intermediate Casing

57 joints; 244mm (9<sup>5</sup>/<sub>8</sub> inch) OD; grade L80; LTC thread; 69.5kg/m. Float shoe on bottom, landed at 779mKB.

### Cementing Operation

Mixed and pumped 302bbl (800sx), 12.5 lead, 41bbl (200sx), 15.8 ppg tail

## 2.4.4 **Drilling Fluid and Mud Summary**

- A. Surface Hole, 914 millimetre - 53 to 110 metres KB.

This section was drilled using a Sea Water/Hi-Vis Aquagel mud. The well was drilled with 40bbl hi-vis sweeps every 5-10 metres, with an 80bbl hi-vis sweep followed by a 35bbl hi-vis sweep at 110mKb. The hole was displaced by unflocculated pre-hydrated Aquagel prior to running 762mm conductor.

- B. Intermediate Hole, 311 millimetre - 110 to 785 mKB.

This section was drilled using a Seawater/Aquagel/Polymer Mud. Fluid properties were maintained with mud weight at 8.9 to 9.2ppg, funnel viscosity 45 to 85 sec/qt and pH 8.2 to 8.5. No problems were experienced during the running and cementing of the 244 millimetre O.D. intermediate casing.

- C. Production Hole, 216 millimetre - 785 to 1345m.

This section was drilled using a KCL/EZ-Mud/Polymer Mud. Fluid properties were maintained with mud weight 8.90 to 9.50ppg. Plastic viscosity averaged 10 to 16 cP, and pH ranged from 8.20 to 9.20. Mud weight was kept at 8.90ppg to 865mKB when coal seam sloughing led to mud loss. Weight increased to 9.50 ppg.

Refer to Appendix 5 for mud engineering report.

## 2.4.5 **Bottom Hole Assembly**

Refer to Table 2 for Bottom hole assembly.

## 2.4.6 **Perforating Record**

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

## 2.4.7 **Fishing**

No fishing was necessary in Broadbill-1.

## **2.5 FORMATION SAMPLING**

### **2.5.1 Ditch Cuttings**

Samplings of ditch cuttings commenced at 100 metres KB, with samples collected at 15 metre intervals to 750 metres KB and every 10 metres from 750 metres KB to T.D. of 1345 metres KB. Over certain intervals, at client request, samples were taken every 5 metres. 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 Broadbill-1 well.

### **2.5.3 Sidewall Coring**

No sidewall cores were taken in Broadbill-1 well.

## **2.6 LOGGING AND SURVEYS**

### **2.6.1 Mudlogging**

The mudlogging unit was provided by Halliburton and was operational from 100 metres KB 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 1:200 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 mudlog forms Enclosure 2.

### 2.6.2 Wireline Logging

Wireline logging was carried out by Schlumberger. Two logging runs were carried out on this well.

LOG	VERTICAL SCALE	DEPTH RANGE	RUN NO.
BHC-DLL-MSFL-CALS-GR-AMS	1:200,500	106 to 783 metres KB	1
LDL-CNL-CALI-GR-AMS	1:200,500	106 to 783 metres KB	1
BHC-DLL-MSFLGR-CALS-AMS	1:200,500	779 to 994 metres KB	2
LDL-CNL-GR-CALI-AMS-SP	1:200,500	779 to 994 metres KB	2

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

### 2.6.3 Deviation Surveys

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

Depth metres KB	Deviation°	Azimuth Corrected
110	0	0°
399	0.15	7°
687	0.30	66°
780	0.25	333°
1074	2.25	45°
1340	3.30	53°

### 2.6.4. Temperature Surveys

No temperature surveys were run on the Broadbill-1 well. Maximum recorded temperatures from log runs were 42°C at 783mKB and 47°C at 994mKB. This gives a temperature gradient of 2.30°C per 100 metres at 783mKB and 2.71°C per 100 metres at 994mKB

### 2.6.5 Velocity Survey

No velocity survey was run in Broadbill-1.

## 2.7 TESTING

### 2.7.1 Drill Stem Tests

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

### 2.7.2 Formation Integrity Test

One formation integrity test (F.I.T.) was performed at 788 metres KB. Mud weight 8.80 ppg; leak off at 564 psi; equivalent mud weight 13.0 ppg

## 2.8 ABANDONMENT OF WELL

Broadbill-1 well was plugged and abandoned on 30<sup>th</sup> January 1998. Cementing operations were carried out by Halliburton. See Fig 3 for final P & A Status.

## 3. GEOLOGY

### 3.1 REGIONAL GEOLOGY AND TECTONIC SETTING

VIC/P36 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 deepcentre.

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. 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 Beach sediments towards the east of the Basin.

In the early Tertiary 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 Pliocene, resulting in rejuvenation of existing structures, initiation of new anticlinal features and tilting of the basin margin.

### 3.2 SUMMARY OF PREVIOUS WORK

Over 3000 kms of 2D seismic data have been acquired across VIC/P36 since 1963. Much of the early seismic is virtually unusable. The bulk of the data was acquired by Australian Aquitaine Petroleum in 1980-1983. In the north and west of the permit there were two speculative seismic surveys acquired in 1985 and since that time there has been a significant amount of detailed 2D and 3D seismic related to the Whiptail to Flying Fish series of structures. Some of the later data in the very north of the permit is available as SEGY data, but the majority of the non-speculative 2D seismic data is only available as hard copy.

Six wells were drilled within VIC/P36 during the 1980s and early 1990s. Although significant shows were intersected in Amberjack-1, Tommyruff-1 and Flying Fish-1, none of these wells were discoveries. There are a number of oilfields adjacent to the permit, including the Perch, Dolphin, Torsk, Tarwhine, Whiptail and Mulloway fields. Onshore, to the west are the good oil shows in the Woodside wells. Amity Oil NL was awarded VIC/P36 in 1995 and since then have re-interpreted all the available seismic data and correlated all available well information. This has led to the identification of several leads and prospects on the western margin of the permit of which the Broadbill prospect was considered to have the highest potential as an oil discovery.

### 3.3 BROADBILL-1 STRATIGRAPHY

For detailed descriptions of the lithology refer to the Composite Well Log, Mudlog and wellsite lithology sample descriptions in Enclosures 1, 2 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 4 and the predicted and actual stratigraphic section of Broadbill-1 is shown in Figure 5.

#### **STREZLECKI GROUP 1340 mKB to T.D. 1345 mKB**

Only five metres of the Strezlecki Group was penetrated in Broadbill-1 well. The top of this group was picked on the evidence of a pink to brown coloration, with traces of volcanic fragments. No electric logs were available over the last 360m of the hole.

### **GOLDEN BEACH GROUP 1290mKB to 1340 mKB**

The top of this unit was picked on a sharp decrease in drill rate and by an increase in quartz overgrowths and lithic fragments leading to a sharp decrease in porosity relative to the overlying Latrobe Group section.

The Golden Beach Group equivalent at Broadbill-1 comprised thick sandstones within interbedded shales and siltstones. Sandstones were medium to coarse grained, translucent to milky white with minor quartz overgrowths and traces of lithic fragments. Shales were soft, light grey to brown, with traces of mica, and the siltstones were argillaceous light brown and blocky. With no electric log over the interval the thickness of individual lithologies cannot be determined.

### **LATROBE GROUP 850 TO 1290 mKB**

The top of the Latrobe Group is picked from logs as an increase in resistivity and a decrease in the gamma. The first lithologic unit intersected beneath the Lakes Entrance claystones was a massive coal unit. The well experienced a severe washout over this interval.

The Latrobe Group at Broadbill comprised interbedded sandstones, siltstones and coals with a high proportion of coals in the first two hundred metres and an increasing percentage of sandstone over the next two hundred and forty metres. Due to hole difficulties no electric logs were obtained over the lower three hundred metres and thicknesses of individual lithologies are hard to determine. From 875 mKB to the base of the Latrobe only the mud log and ROP log are available to correlate lithology. Using a combination of these two logs a reasonably representative correlation can be made with the geological logs.

Sandstones penetrated in Broadbill-1 were generally fine to medium grained, becoming coarser towards the bottom of the sequence, well sorted, generally subrounded and loose grained. Porosity varied from very good at the top of the sequence to fair at the base of the sequence. No fluorescence was recorded in any sandstone within the Latrobe Group, but there were high C<sub>1</sub> gas readings over the first 110 metres of the sequence, and significant gas peaks for the next 100 metres. No significant shows of any kind were detected over the lower 230 metres.

Coals were uniformly dull black; moderately hard and bituminous and varied in thickness from less than 1 metre to 15 metres plus near the top of the sequence.

Siltstones were generally thin and confined to the top 200 metres of the sequence. Generally, they were brown to grey coloured, moderately soft and carbonaceous.

### **LAKES ENTRANCE FORMATION 782 - 850 mKB**

The Lakes Entrance Formation claystones from the major seal for the Latrobe Group sandstones. In Broadbill-1 72 metres of this formation were penetrated. The section was composed entirely of grey to olive-grey, slightly silty and carbonaceous claystones with traces of glauconite towards the base. The claystones were soft to very soft with occasional firm layers and generally calcareous.

### **GIPPSLAND LIMESTONE FORMATION 53-782 mKB**

The Gippsland Limestone Formation at Broadbill consisted of massive interbedded sandstones and limestones well delineated on the sonic logs. The interpreted Miocene sandstone, which had good shows in nearby wells, was intersected only 4 metres low to prognosis and while having good reservoir characteristics, there were no shows.



Sandstones were encountered mainly in the upper part of the Gippsland Limestone Formation with a 140 metre plus sand at the top of the formation. The lower 300 metres of the section was basically sandstone free.

Sandstones of the Gippsland Limestone Formation were medium to fine grained, rounded to subangular, moderately well sorted, with loose quartz grains and good porosity. The upper sandstones especially were highly fossiliferous.

Limestones were massive, generally grey to cream coloured calcarenites to calcilutites with abundant fossil fragments and traces of glauconite.

### **3.4 CONTRIBUTIONS TO GEOLOGICAL KNOWLEDGE**

#### **3.4.1 Trap**

The Broadbill prospect is a low relief four way dip closure at Top Latrobe Group situated on the northern flank of an east-west paleo nose controlled by the intersection of two distinct fault trends within the deeper section. The structure exhibits a multi-phase structural history with initial development in the Oligocene or earlier followed by at least one phase of reactivation within the Miocene. Late Tertiary regional tilting is indicated, with post-Miocene section thickening towards the south and west, as opposed to a north and east dip within the Lakes Entrance Formation and Latrobe Group. Closure at Top Latrobe is a four way dip drape feature over tilted fault block within the Latrobe.

Seismic control is good except on the extreme west of the prospect. This does not compromise the crestal closure in time. Depth conversions maintained the structural integrity.

#### **3.4.2 Reservoir**

Primary reservoir at Broadbill-1 was prognosed as Top Latrobe Group sands, similar to the good sand intersected at the nearby Tommruff-1 well. Geophysical and geological interpretation indicated the vertical closure at Top Latrobe would be a thick sand unit with high porosity of 28 to 30%. Seismic data correlations were hampered by lack of digital data and the poor quality of the hard copy processed data. This reduced the ability to directly correlate the intra-Latrobe lithology, with the seismic signature of the coals and sandstones being impossible to differentiate. In the event the Top Latrobe Group directly beneath the regional Lakes Entrance seal proved to be coal. Gas readings within the coal unit and in the sandstone units below were high, but logs indicated that there was no commercial accumulation.

The intra-Latrobe sands proposed as secondary reservoir objectives, are trapped within a fault controlled block. No significant shows were intersected in the lower part of the Latrobe Group and hole difficulties prevented logging of this section. Post drill correlations indicate the likely distribution of lithology between Tommyruff-1, Broadbill-1 and Woodside-1 (Enclosure 4).

#### **3.4.3 Seal**

Seal for the Broadbill 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 in Broadbill-1.

Intra-formational coals and carbonaceous shales form the seal for the intra-Latrobe sands. Accumulations within these sands, however, are dependent on cross-fault sealing. With the highly interbedded nature of the Latrobe section at Broadbill-1 the likelihood of cross fault leakage is considered to be high.

#### 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/P36 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 northeast and east of the Broadbill-1 location is proposed, as well as some contribution from the Strzelecki Formation which is potentially in the oil window on the southern platform in the south of VIC/P36. The adjacent Perch and Dolphin fields to the east of Broadbill and the good shows in the onshore Woodside wells to the west provide evidence of migration through the area around the Broadbill prospect.

#### 3.4.5 Hydrocarbons and Shows

There were no oil shows within Broadbill-1 in any part of the section. The Lakes Entrance Formation indicated minor gas shows. Gas shows were high in the first 166m of the Latrobe Group, but fell off rapidly after that. Minor gas shows only were recorded from 966 mKB to T.D. of 1345 mKB. Broadbill-1 is interpreted to contain stacked reservoirs of gas at saturations too low to be economic. Failure to obtain logs below 994 mKB did not allow full petrophysical analysis of the Latrobe Group. The complex lithology log, (Enclosure 3), shows the interpretation of the top 110m of the Latrobe Group.

### 3.5 CONCLUSIONS

Broadbill-1 well confirmed the structural interpretation of the Broadbill prospect. The presence of coal at Top Latrobe, within the four way closure controlled by drape of the regional Lakes Entrance seal was unexpected, with the prognosis being a thick, high porosity sand similar to that encountered in Tommyruff-1 to the east. There are several possible explanations for this lack of sand at base seal.

The simplest solution is that erosion of the paleo-high on which Broadbill-1 is located has led to the unfortunate situation of a coal at Top Latrobe.

A more complicated scenario involves a different depositional environment on the paleo-high with more coal deposition at the top of the sequence or a lack of deposition of the younger, high-quality sands. With no cores or sidewall cores at Broadbill-1 there is no definitive age-dating to correlate between Broadbill-1 and Tommyruff-1.

Post-well reinterpretation of the Latrobe Group (Enclosure 4) shows the likely correlation of internal lithology of the upper Latrobe.

The lack of oil shows within the Latrobe Group was unexpected, especially with the nearby Perch oilfield to the east and the good shows in the onshore Woodside wells to the west. The presence of gas within the upper 115 metres of the Latrobe indicates a stacked section of accumulations. With no testing it is uncertain whether there is continuity of column or whether there are a series of small accumulations.

The lack of liquid hydrocarbons is attributed to either lack of closure or to migration shadow during oil generation and migration, possibly related to the Tertiary regional tilting referred to earlier in this report. Later readjustment and reestablishment of four way dip closure allowed the capture of migrating gas.

Broadbill-1 well tested a bonafide closure at Top Latrobe, which recorded a gas charged sequence within the upper 115m of section. Log evaluation indicated low saturation of gas, with a low net to gross reservoir section. The well was plugged and abandoned as a dry hole.

3.6 COST SUMMARY - BROADBILL-1

	\$
Site Preparations - Site Surveys & Government Reports	676,587
Rig Mobilisation-Demobilisation	\$1,408,989
Rig Cost - Overall Cost Spud to Release	2,366,391
Sundry Drilling Costs	1,107,900
Casing	540,702
Cementing	101,964
Mud Engineering and Fluids	60,436
Electric Logging	256,103
Technical Operations (Supervision, Mudlogging, Well Site Geologists etc)	810,326
Insurance and General	<u>152,324</u>
Total Costs	<u>\$7,481,722</u>

TABLE 1

DRILLING PERFORMANCE DATA BASE : BIT RECORDS

Units

Length	Weight	Pressure	Flow	Density	ROP
mtrs	k-lbs	psi	Usgal/m	US ppg	m/hr

BROADBILL-1  
SANTA FE

PARAMESWARA

DATE	BIT#	SIZE	SER#	MF	TYPE	1	2	3	4	TFA	OUT	FTGE	HR	SPP	FLW	WOB	RPM	MW	ROP	I1	I2	I3	I4	D	I	B	
18/01/98	1	26.00	295478	VA	L3AB	3	22	4	17		110	58	4.5	651	901	2	71	0.0	12.9				1	1	NO	A	0
19/01/98	2	17.50	W52CK	SM	R-1	3	20			.920	110	47	2	1151	901	11	86	8.9	23.5				1	1	NO	A	1
21/01/98	3	12.25	G25CX	HU	MAX GT-1	3	16			.588	785	675	21.6	2152	748	12.8	131	9.2	31.2				1	1	no	a	2
26/01/98	4	8.50	L8418D6	OT	ATMT	2	16	1	14	.542	1,345	577	27.1	1302	501	18.3	131	9.4	21.3	4	4	7	2	2	FC	A	E

QUICK-LOOK BIT RECORD

(Check DPD option to generate a compressed bit record)

BROADBILL-1

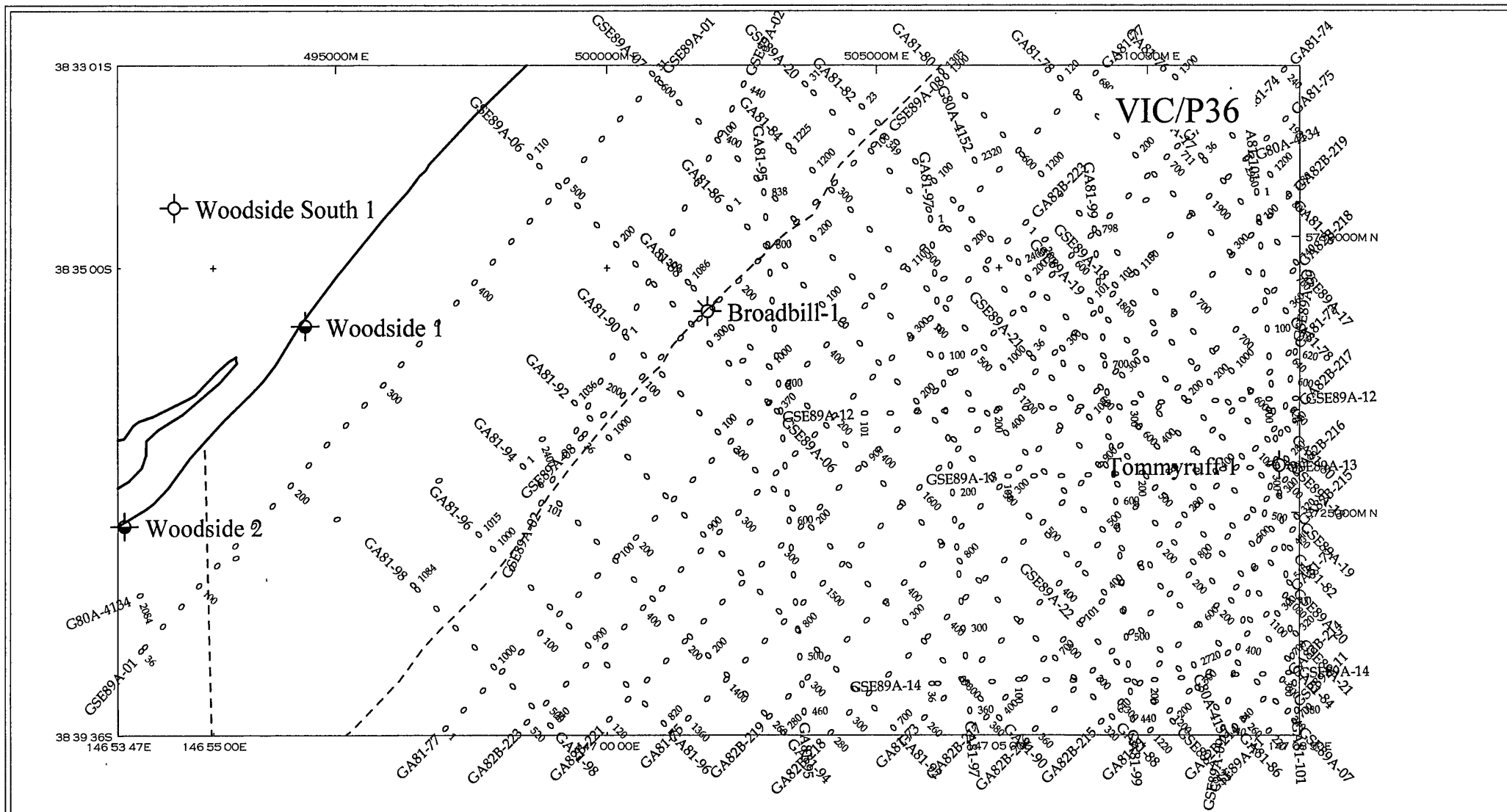
From: 17/01/98  
To: 26/01/98

DATE	BIT#	SIZE	SER#	MFR	TYPE	N1	N2	OUT	HR	FLW	RPM	TOTRPM	ROP	I2	I3	I4	O1	D	L	B	G	O2	R
17/01/98	1	26.00	295478	VA	L3AB	22	4	52	58.0	650	1	0											
18/01/98	1	26.00	295478	VA	L3AB	22	4	52	58.0	650	1	18,900	12.9				1	1	N	A	0	i	NO
19/01/98	2	17.50	W52CK	SM	R-1	20		63	47.0	1150	10	10,200	23.5				1	1	N	A	1	i	NO
19/01/98	3	12.25	G25CX	HU	MAX GT-	16		110	0.0			0											
20/01/98	3	12.25	G25CX	HU	MAX GT-	16		110	435.0	2400	10	98,280	34.5										
21/01/98	3	12.25	G25CX	HU	MAX GT-	16		110	675.0	1700	15	70,200	26.7				1	2	no	a	2	i	no
22/01/98	3	0.00		OT		0	0	785	675.0	0	0	0											
23/01/98	4	8.50	L8418D6	HU	ATMGT	16	1	785	0.0			0		4	4	7.00							
24/01/98	4	8.50	L8418D6	HU	ATMGT	16	1	785	317.0	1240	15	70,200	35.2	4	4	7.00							
25/01/98	4	8.50	L8418D6	HU	ATMGT	16	1	785	567.0	1375	20	127,140	15.3	4	4	7.00							
26/01/98	4	8.50	L8418D6	OT	ATMGT	16	1	785	577.0	1375	20	14,040	5.6	4	4	7.00	2	2	FC	A	E	1	

TABLE 2

WELL: BROADBILL-1  
 DRILLING COMPANY: SANTA FE  
 RIG: PARAMESWARA

#	LENGTH	WT	WBJAR	STNG	P/UPWT	S/OFFWT	TQ MAX	TQONBOT	TQ/O/BOT	HRS	BHA DESCRIPTION
1	109.39	100		100	100	100	300	200	100		26" Bit, 36" Hole opener (s/n 7850), bit sub, 4x9-1/2" DC's, X-O, 1X8" DC, X-o, 6 x HWT
1	110.0	90		90	90	90	200	175	125		171/2" Bit, bit sub, 3x9-1/2" DC's, X-O, X-O 9 x HWT
2	230.80									0.00	12-1/4" Bit, bit sub (float), monel (s/n 94002), 12-1/4" stab 8" DC, 12-1/4" stab, 8" DC, 12-1/4" stab, 7x8" DC's, 8" jars, 2x8" DC's, X/O, 12xHWT
2	230.80	66	37	135	135	135	275	175	125	14.0	12-1/4" Bit, bit sub (float), monel (s/n 94002), 12-1/4" stab 8" DC, 12-1/4" stab, 8" DC, 12-1/4" stab, 7x8" DC's, 8" jars, 2x8" DC's, X/O, 12xHWT
2	230.80	66	37	159	159	155	300	200	130	26.5	12-1/4" Bit, bit sub (float), monel (s/n 94002), 12-1/4" stab 8" DC, 12-1/4" stab, 8" DC, 12-1/4" stab, 7x8" DC's, 8" jars, 2x8" DC's, X/O, 12xHWT
4	258.92	42	23								Bit, NB Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DC, HWDP
4	258.92	42	23	150	155	150	250	220	200	13.5	Bit, NB Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DC, HWDP
4	258.92	42	23	172	175	170	250	200	190	30.5	Bit, NB Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DC, HWDP
4	258.92	42	23	172	175	170	250	200	190	44.0	Bit, NB Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DC, HWDP
5	57.88										6 jt TBG, XO



Amity Oil N.L.  
 VIC/P36  
 Broadbill-1  
 Location Map

Figure 1

# Amity Oil N.L.

## Broadbill-1 Time v. Depth Curve.

Days From Spud

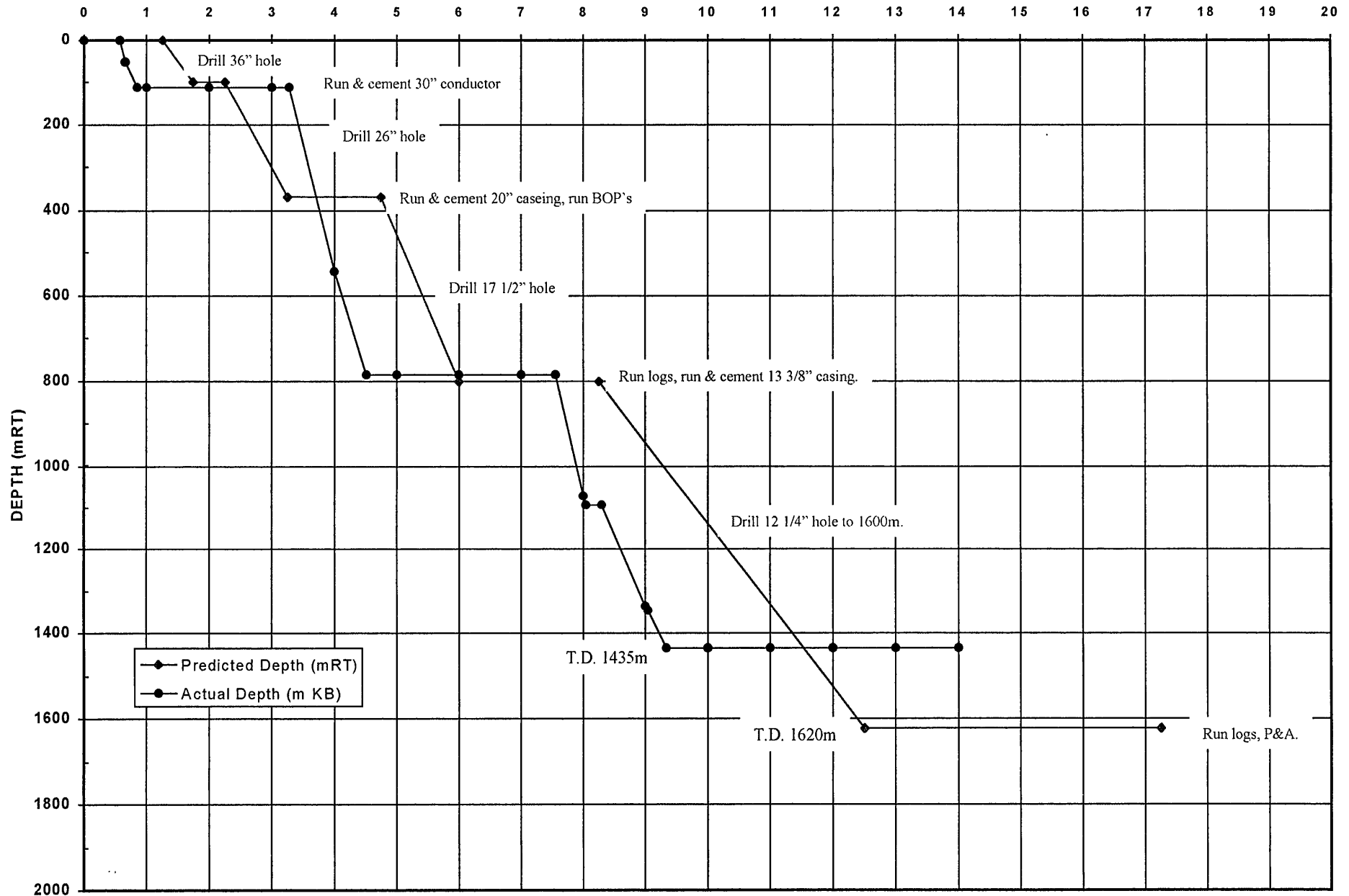
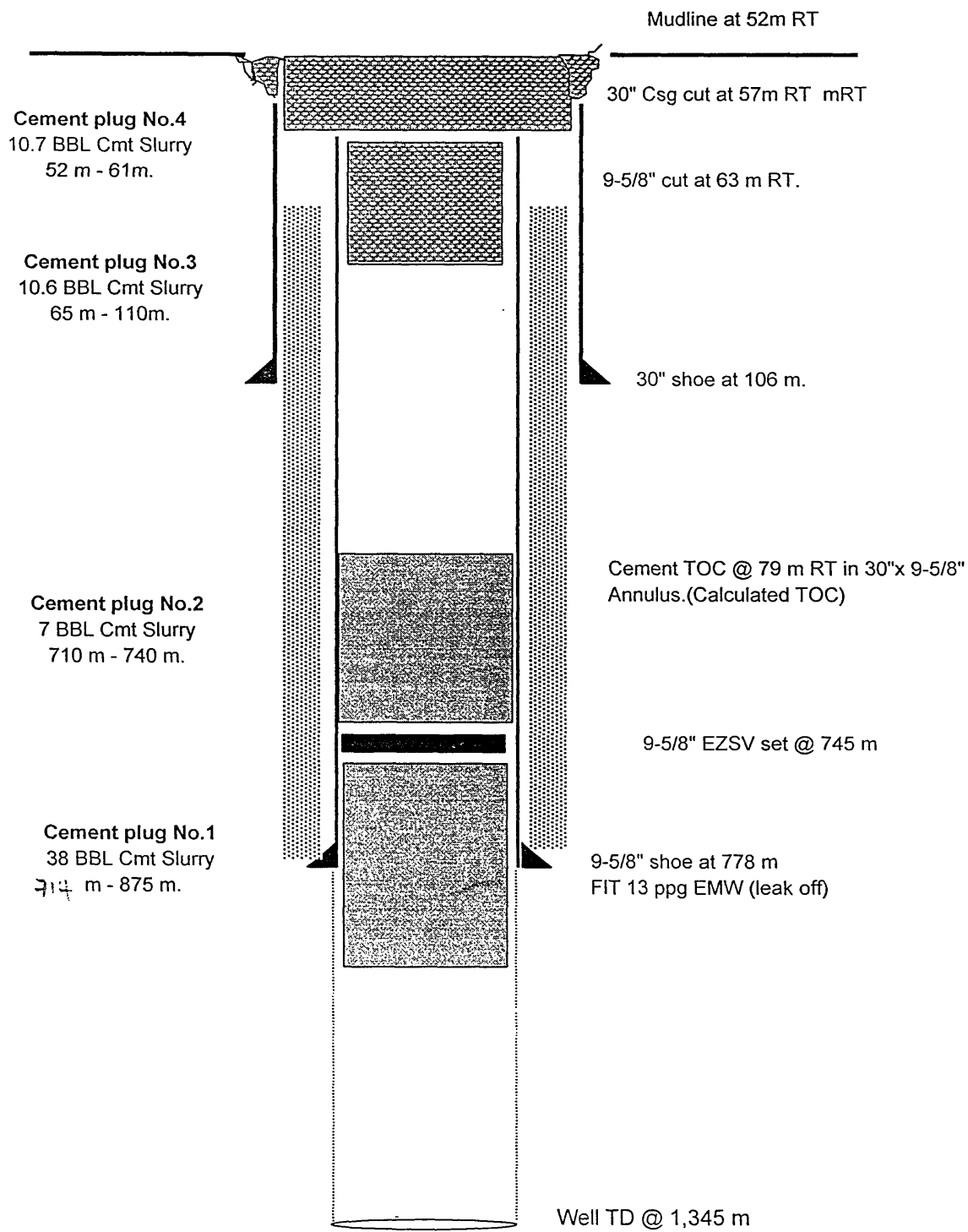
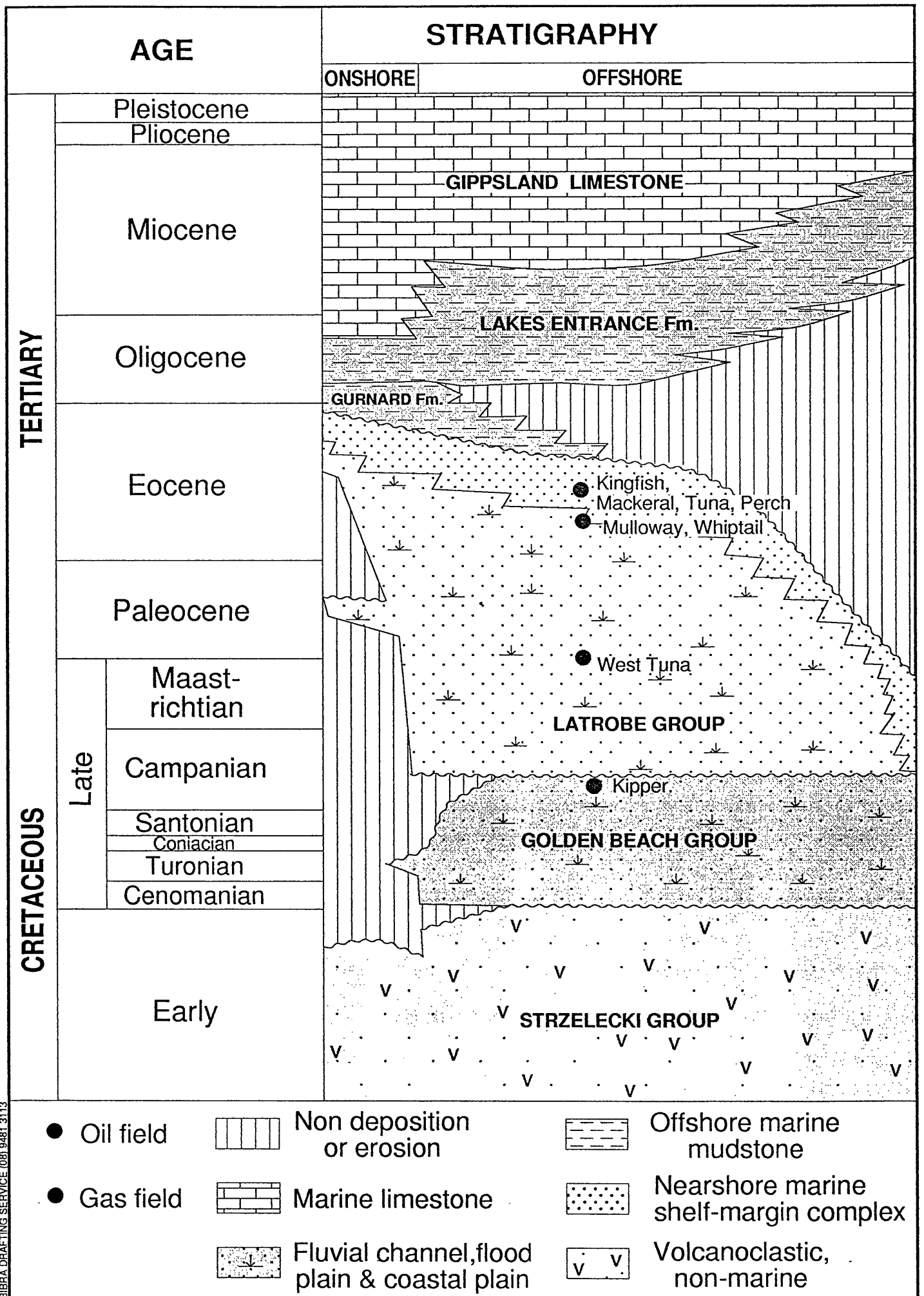


Figure 2

**Broadbill #1**  
**Well Abandonment Status**







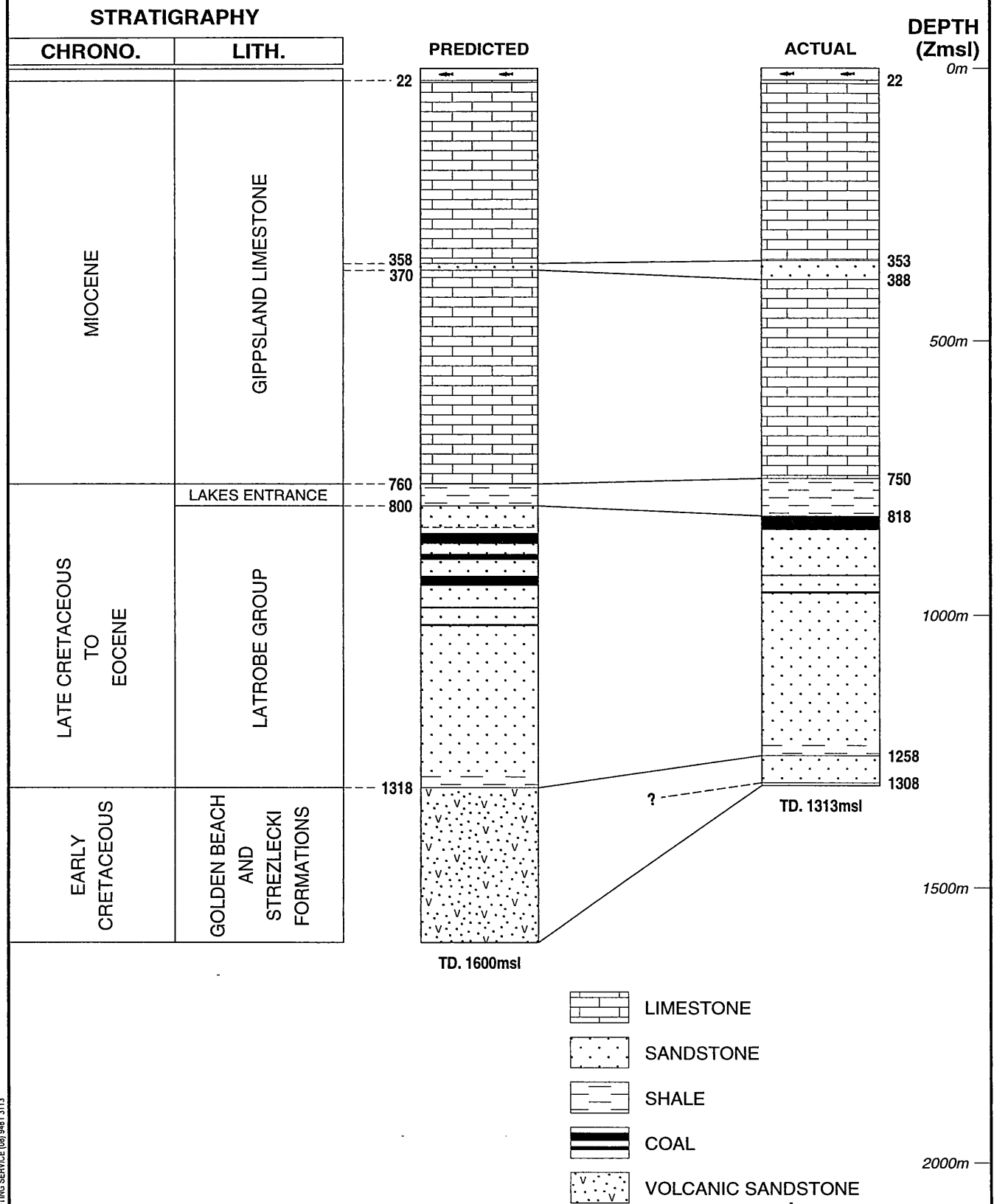
BIBRA DRAFTING SERVICE (08) 9481 3113

FIGURE 4

# AMITY OIL N L

## BROADBILL-1

### PREDICTED Vs ACTUAL STRATIGRAPHIC SECTION



BIBRA DRAFTING SERVICE (08) 9481 3113

FIGURE 5

PE903926

This is an enclosure indicator page.  
The enclosure PE903926 is enclosed within the  
container PE903925 at this location in this  
document.

The enclosure PE903926 has the following characteristics:

ITEM\_BARCODE = PE903926  
CONTAINER\_BARCODE = PE903925  
NAME = Broadbill 1 Well Correlation Cross  
Section  
BASIN = GIPPSLAND  
ON\_OFF = OFFSHORE  
PERMIT = VIC/P36  
TYPE = WELL  
SUBTYPE = XSECTION  
DESCRIPTION = Broadbill 1 Well Correlation Geological  
Cross Section from Woodside South 1 to  
Perch 2. Enclosure 4 from WCR  
REMARKS =  
DATE\_CREATED = 29/07/98  
DATE\_RECEIVED = 04/08/98  
W\_NO = W1219  
WELL\_NAME = Broadbill 1  
CONTRACTOR =  
CLIENT\_OP\_CO = Amity Oil N.L

(Inserted by DNRE - Vic Govt Mines Dept)

**APPENDIX 1**

**WELL INDEX SHEET**

## WELL INDEX SHEET

COMPANY: Amity Oil NL	TYPE: Wildcat	
SPUDED: 17 - 01 - 98	WELL: Broadbill-1	
COMPLETED: 31 - 01 - 98	BASIN: Gippsland	
T.D: 1345metres KB	LICENCE: VIC/P36	ELEVATION KB 31.60metres amsl
	LATITUDE 38° 35'25.28"S	WATER DEPTH 22.00metres
STATUS: Plugged and Abandoned	LONGITUDE: 147° 01'17.40"E	

Formation/Marker	Thickness (m)	Depths (m)			Lithologic Summary	Remarks/ Shows
		K.B.	Sub Sea	Seismic TWT Datum MSL		
EARLY MIOCENE GIPPSLAND LMST	728.4+	53.60	22	-	Predominantly limestones with sandstones and thin claystones	Nil
LAKES ENTRANCE FORMATION	68	782	750	-	grey-green soft claystones	Minor gas shows
LATROBE GROUP	440	850	818	-	mainly sandstones with coals and thin claystones	-No Oil shows. High gas shows from 850 to 966mKB
GOLDEN BEACH GROUP	50	1290	1258	-	mainly sandstones with thin claystones and siltstones	Minor gas shows
STREZLECKI FORMATION	5+	1340	1308	-	pink, lithic siltstones	Nil

L	RUN 1 BHC DLL MSFL CALS GR AMS	106 - 783 mKB
O	RUN 1 LDL CNL CALI GR AMS	106 - 783 mKB
G	RUN 2 BHC DLL MSFL GR CALS AMS SP	779 - 994 mKB
S	RUN 2 LDL CNL GR CALI AMS SP	779 - 994mKB

T E S T S	No Testing was undertaken in this well
-----------------------	--

SIDEWALL CORES		CUTTINGS SAMPLES	STORED
NIL		110 TO 1345 metres KB	

P			
L	Plug No 1	744-875mKb	38.0bbbls C/s
U	Plug No 2	710-740mKB	7.0bbbls C/s
G	Plug No 3	65-110mKb	10.6bbbls C/s
S	Plug No 4	52-61mKB	10.7bbbls C/s

Broadbill-1 was plugged and abandoned on 31<sup>st</sup> January 1998

LICENCE	VIC/P36
WELL NAME:	BROADBILL-1
OPERATOR:	Amity Oil NL

**APPENDIX 2**  
**DAILY REPORTS**

**APPENDIX 2a**

**DAILY DRILLING REPORTS**





**AMITY OIL NL**

**DAILY DRILLING REPORT # 1**

Report Date: 16.01.98

FROM: Westman / Jackson.  
 TO: M. Lanzer

**BROADBILL -1**

**Drills, Permits & Inspections**

DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL FIRE PIT DRILL INCIDENT	10.1.98	BOP TEST NEXT TEST DUE DATE RIG INSPECTION DAYS SINCE LTA	9.1.98  172	LTI MTI JSA #PTW Safety Meeting	Held weekly crew mtg

**Casing**

CSG OD (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)

TYPE	LNPTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD

**Pump Data**

Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNR (%)	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPP (psi)	DEPTH (m RT)	MW (ppg)	

**Personnel : on Site = 83**

JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisors	Westman/Jack	RBT	2
O/M	Freidell	Santa Fe	1
Toolpushers	Walker/Abrams	Santa Fe	2
Mud Engineer	Doust	Barold	1
Cementar	Danlon	Hibtn	1
ROV Operators	Lobe/White	Contract Diving Ser	2
Rig Crews		Santa Fe	47
Sub Contractors		Santa Fe	10
Catering		P&O	8

**Solids Data**

		HRB RUN	sand	silt	clean
MESH 1	0	DISCARD RATE (gpm)	0.0	0.0	0.0
MESH 2	0	DISCARD WT (ppg)	0.00	0.00	0.00
MESH 3	0	RETURN WT (ppg)	0.00	0.00	0.00

**Survey**

Last Tool Type :

Magnetic Declination : 0.00

Survey method : Min Curvature

MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE

# AMITY OIL NL

## DAILY DRILLING REPORT # 2

Report Date: 17.01.98

FROM: Westman / Jackson.  
 TO: M. Lanzer

BROADBILL -1

<b>Well Data</b>		DEPTH (m RT): 110	CUR. HOLE SIZE (?): 38.00	DAILY COST \$:
DRILL CO.: SANTA FE		PROGRESS (m): 68	CSG OD (?): 0.00	CUM COST \$: \$0
RIG: PARAMESWARA		DAYS FROM SPUD: 0.33	SHOE TVD (m RT): 0	AFE COST \$:
MUD CO: BAROID		DAYS +/- CURVE:	LEAK-OFF EMW(ppg) 0.00	AFE BASIS: UNKNOWN
RT ABOVE MSL (m): 30.7		CURRENT OP @ 0400: Running 30" Casing		
WATER DEPTH @MSL (m): 21.7		PLANNED OP.: Run and cement 30" casing.		
RT TO SEABED (m): 52.4				

**Summary of period 00:00 to 24:00 hrs:**

Finish offloading boat and rigging up ROV. Jump ROV for inspection.  
 Spud well and drill to 110m. POOH to run casing.

**Formation Tops - This report only**

FORMATION	TOP(MBRT)
-----------	-----------

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 17.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
36	PD	RU	00:00	06:00	6.00	0	Offload Pacific Commander - 9-5/8" & 30" casing strings, drill tools, bulk gel, barite & cmt. Rig fir pick up drill pipe, HWT, DC's/36" HO, and stand in derrick. Mix spud mud. Spot and rig up ROV for operation.
36	PD	RU	06:00	13:00	7.00	0	Welder secure ROV and electrician supply power. Rov personnel prepare unit for operation. Drill crew assemble Texas deck and swing under floor. Suspend on chains. Deck crew continue to unload Commander and Supporter. Strap casing.
36	PD	RU	13:00	14:00	1.00	0	Jump ROV for wet test. Survey port leg spud can. No scouring. Difficulty maintaining station due to strong current and weed choking thrusters.
36	PD	RU	14:00	14:30	.50	0	Recover ROV and clean thrusters. Check electricals.
36	PD	RU	14:30	15:00	.50	0	Jump ROV and check spud at slack water. RKB to Mud line 52.4m. Collect bottom sample and survey bottom. ROV lost control due to weed choking.
36	PD	RU	15:00	16:00	1.00	0	Recover ROV.
36	PD	D	16:00	20:30	4.50	110	Spud well. Drill 26x36" hole from mud line at 52m to 110m. Pump 35 bbl hlvie sweep every 10m.
36	PD	CIR	20:30	21:30	1.00	110	Circ hlvie to sweep hole and displace hole with unflocculated pre-hydrated gel.
36	PD	TO	21:30	22:15	.75	110	POOH to mud line. Drag on first std. Back ream with out pump to clean up.
36	PD	TI	22:15	22:30	.25	110	Run back to bottom. No fill, no drag.
36	PD	CIR	22:30	23:00	.50	110	Circ hole to fresh unflocculated pre-hydrated gel.
36	PD	TO	23:00	24:00	1.00	110	Drop totco survey and POOH to run casing. Hole good. Lay out 1x8", 1x8-1/2" DC and retrieve Totco.

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 18.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
36	PD	HT	00:00	01:30	1.50	110	Lay out hole opener and bit.
36		RU	01:30	03:00	1.50	110	Lay out bales and rig up floor to run casing. Hold prejob safety mtg and review JSA. High winds slowing down crane work.
36		RC	03:00	06:00	3.00	110	Pick up shoe jt & check. Run 5 jts X52 30" casing, SF60 couplings, 311ppf.

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 17.01.98**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
Held weekly fire and abandon drill. ROV inspected port spud can and took btm sample. Lot of weed getting tangled in thrusters. Pacific Commander dpt rig 23:00hrs for Geelong.	Held life boat embarkation instruction.

# AMITY OIL NL

## DAILY DRILLING REPORT # 2

Report Date: 17.01.98

FROM: Westman / Jackson.  
TO: M. Lanzer

BROADBILL -1

Mud Properties		MUD COST FOR TODAY: \$4,043				CUMULATIVE MUD COST TO DATE: \$4,043			
Type:	VISCOSITY (sec/qt):	0	API FLUID LOSS (cm <sup>3</sup> /30min):	0	Cl- (ppm):	0	SOLIDS (%vol):		
Gel Sweeps	PV (cpa):	1	API FILTER CAKE (32nds inch):	2	K <sup>+</sup> (ppm):	0	H <sub>2</sub> O (%vol):	0.0	
FROM:	YP (lb/100sqft):	0	HTHP FLUID LOSS (cm <sup>3</sup> /30min):	0	HARD/CA (ppm):	0	OIL (%vol):	0	
TIME:	GEL 10w/10m/30m (lb/100sqft):	0 0 0	HTHP FILTER CAKE (32nds inch):	0	MBT (ppb eq):	0.0	SAND:		
WEIGHT (ppg):	FANN 3/0/100	0 0 0			PF:	0.0	PH:	0.0	
TEMP (C):							PHPA:	0.0	

Bit Data for Bit # 1		IADC #	Wear		I	O1	D	L	B	O	O2	R
SIZE ("):	28.00		NOZZLES									
MANUFACTURER:	VA	AVE WOB (k-lbs):	1	3 x 22	Drilled over the last 24 hrs				Calculated over the bit run			
TYPE:	L3AB	AVE RPM:	70	4 x 17	FOOTAGE (m):				69			
SERIAL #:	286478	FLOW (gpm):	900	X	ON BOTTOM HRS:				CUM. FOOTAGE (m):			
DEPTH IN (m RT):	52	PUMP PRESS. (psi):	650	X	IADC DRILL. HRS:				CUM. ON BOT. HRS:			
DEPTH OUT (m RT):	110	HBI (hp/sq):		X	ROP (m/hr):				CUM. IADC KILL HRS:			

BHA #1		Length (m) : 109.4		DC(1) A.V. (mpm):		5.5 HRS ON JARS:	
HRS ON MOTOR:	STRING WT (k-lbs):	100	TROE MAX (amps):	300	DC(2) A.V. (mpm):	5.8	S/N JARS:
WT BW JAR (k-lbs):	PICK UP WT (k-lbs):	100	TROE ON (amps):	200	HWOP A.V. (mpm):	6.3	HRS ON STABS:
BHA WT (k-lbs):	BLK OFF WT (k-lbs):	100	TROE OFF (amps):	100	D.P. A.V. (mpm):	5.3	S/N STABS:
BHA DESCRIPTION: 26" Bit, 36" Motor operator (SN 7850), bit sub, 4x8-1/2" DC's X-0, 1x8" DC, X-0, 6 x HWT							

Anchor Tension (kpa)	A1:	A2:	A3:	A4:	A5:
	A6:	A7:	A8:	A9:	A10:

Workboats							Weather & Rig data @ 24:00 hrs				
Location:	Fuel (ktr)	Barite (ex)	D/wr (tbl)	P/wr (tbl)	Omt (ex)	Dent (ex)	Hall (ktr)	WIND SP. (kts):	26.0	VISIB. (nm):	VOL (klbs):
Pacific Command	Dpt Rig							WIND DIR (deg):	360	CEILING (m):	6.124.0
								PRES. (mbars):	1005	WAVES (m):	RIS.TENS:
								AIR TEMP (C):		SWELL (m):	1.2
											HEAVE (m):
											ROLL (deg):
											PITCH (deg):

Bulk Stocks		DRILL WATER (tbl):	3,862.0	FUEL (ktr):	1,540.0	GEL (ex):	363	HELI-FUEL (ktr):	0.0
		POT WATER (tbl):	623.0	BARITE (ex):	1,543	CEMENT (sx):	2,438		

Drills, Permits & Inspections						
DRILL TYPE	DATE	INSPECTIONS		DATE	SAFETY	DETAILS
TRIP DRILL		BOF TEST		9.1.98	LTI	
FIRE	17.01.98	NEXT TEST DUE DATE			MTI	
PIT DRILL		RIG INSPECTION		173	JSA	
INCIDENT		DAYS SINCE LTA			#PTW	
					Safety Meeting	Held weekly Fire & Abandon

Casing						
CSG OR (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)		
					TYPE	THREAD
					LNPTH (m)	WT (lb/ft)
					GRO	

Pump Data						
Pump Data - last 24 hrs				Slow Pump Data		
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)
1	Idoco - T1	6.50	80	100	450	650
2	Idoco - T1	6.50	80	100	450	650

Personnel : on Site =

Solids Data		sand silt clean		
MESH 1	0	HRS RUN	0.0	0.0
MESH 2	0	DISCARD RATE (ppm)	0.0	0.0
MESH 3	0	DISCARD WT (ppg)	0.00	0.00
		RETURN WT (ppg)	0.00	0.00

**AMITY OIL NL**

**DAILY DRILLING REPORT # 2**

**Report Date: 17.01.98**

**FROM: Westman / Jackson.  
TO: M. Lanzer**

**BROADBILL -1**

88			
JOB TITLE	NAME	COMPANY NAME	#
Orig Supervisor	Westman/Jack	RBT	2
Geologist	Patton	Amity	1
OIM	Freidell	Santa Fe	1
Toolpushers	Walker/Abrams	Santa Fe	2
Mud Engineer	Doust	Barold	1
Cementer	Donlon	Hibm	1
Well Head	Cheln	Kvaerner	1
ROV Operators	Eller/McNell	Contract DMng Sen	2
Mud Loggers		HML	3
Rig Crews		Santa Fe	48
Sub Contractors		Santa Fe	16
Catering		P&O	8

Survey	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Fast Tool Type :										
Magnetic Declination :										
Survey method :										
	110	110	0.60	0	0.0					totco

Fast Tool Type : totco

Magnetic Declination : 0.00

Survey method : Min Curvature



# AMITY OIL NL

## DAILY DRILLING REPORT # 3

Report Date: 18.01.98

FROM: Westman / Jackson.  
TO: M. Lanzer

BROADBILL -1

<b>Well Data</b>		DEPTH (m RT): 110	CUR. HOLE SIZE ("): 36.00	DAILY COST \$:
DRILL CO.: SANTA FE	PARAMESWARA	PROGRESS (m): 58	CSG OD ("): 30.00	CUM COST \$: \$0
RIG:	BAROID	DAYS FROM SPUD: 1.33	SHOE TVD (m RT): 108	AFE COST \$:
MUD CO:		DAYS +/- CURVE:	LEAK-OFF EMW(ppg) 0.00	AFE BASIS: UNKNOWN
RT ABOVE MBL (m): 30.7		CURRENT OP @ 0400: Fill conductor and function test diverter system.		
WATER DEPTH @MSL (m): 21.7		PLANNED OP.: Clean out shoe. Pick up extra DP for this hole section. Drill ahead.		
RT TO SEABED (m): 52.4				

**Summary of period 00:00 to 24:00 hrs:**  
Run 30" conductor casing, run inner string and cmt csg, rig down landing jts and install A section.

FORMATION TOPS - This report only	
FORMATION	TOP(mBRT)
Sandstone	

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 18.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
36	PD	HT	00:00	01:30	1.50	110	Lay out hole opener and bit.
36		RU	01:30	03:00	1.50	110	Lay out bales and rig up floor to run casing. Hold prejob safety mtg and review JSA. High winds slowing down crane work.
36	PM	RRC	03:00	11:30	8.50	110	Pick up shoe jt & check. Run 10 jts X 30" casing, SF60 couplings, 311ppf, to 108m. Run grout line from mud line to surface.
36	PM	RRC	11:30	16:45	5.25	110	Cut and L/d csg. R/u "C" plate and RIH w/ stinger on drillpipe. R/u texas deck. R/u tension ring.
36	PD	RRC	16:45	17:15	.50	110	Howco pump 10 bbls seawater and test line 2000psi.
36	PD	CMC	17:15	18:00	.75	110	Mix and pump 760sx "G" cmt using seawater w/ 2% CaCl. Av wt 15.9 ppg. Displace w/ 5 bbls seawater. Weather too rough for ROV launch. Monitor Dp / csg annulus.
36	PD	CMC	18:00	18:30	.50	110	Pull stinger from shoe. POOH 10m. Circulate 10bbls seawater to clear pipe.
36	PD	CMC	18:30	19:00	.50	110	POOH w/ cementing string.
17	PD	WH	19:00	23:30	4.50	110	Rig up and lay out 30" landing jts. Make up slings and prepare tensioner system for conductor support ring. Complete weld out on riser extension jt for diverter system.
17	PD	WH	23:30	24:00	.50	110	Install Kvaerner 30x20" A section adaptor spool.

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 19.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
17	PD	WH	00:00	02:00	2.00	110	Install 30" riser extension on A Section. Re-hang texas deck work platform for access to make up flange connection.
17	PD	BOP	02:00	04:00	2.00	110	Install diverter and overshoot pkr and nipple up
17	PD	BOP	04:00	06:00	2.00	110	Energise diverter system and function test.

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 18.01.98**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
Set 30" at 108m and cement with 760sks 15.9ppg. Too rough to jump ROV so returns not monitored. Make up riser extension jt on 21-1/4" 2k flange to space out for diverter.	

<b>Mud Properties</b>		MUD COST FOR TODAY: \$276	CUMULATIVE MUD COST TO DATE: \$4,319			
Type:	VISCOSITY (cpa / qt): 0	API FLUID LOSS (cm <sup>3</sup> /30min): 0	Cl- (ppm): 0	SCALDS (%vol):		
FROM:	PV (cpa): 1	API FILTER CAKE (32nds Inch): 2	K+ (ppm): 0	H <sub>2</sub> O (%vol):	0.0	
TIME:	YP (lb/100sq.ft): 0	HTHP FLUID LOSS (cm <sup>3</sup> /30min): 0	HARD/Ca (ppm): 0	OIL (%vol):	0	
WEIGHT (ppg):	GEL 10s/10m/30m (lb/100eqt): 0 0 0	HTHP FILTER CAKE (32nds Inch): 0	MBT (ppb eq): 0.0	SAND:		
TEMP (C):	FANN 3/6/100 0 0 0		PM: 0.0	PH: 0.0		
			PF: 0.0	PHPA: 0.0		

**AMITY OIL NL**

**DAILY DRILLING REPORT # 4**

Report Date: 19.01.98

FROM: Westman / Jackson.  
TO: M. Lanzer

**BROADBILL -1**

<b>Well Data</b>		DEPTH (m RT):	110	CUR. HOLE SIZE ("): 17.50	DAILY COST \$:	
DRILL CO.:	SANTA FE	PROGRESS (m):		CSG OD ("): 30.00	CUM COST \$:	\$0
RIG:	PARAMESWARA	DAYS FROM SPUD:	2.33	SHOE TVD (m RT): 108	AFE COST \$:	
MUD CO:	BAROID	DAYS +/- CURVE:		LEAK-OFF EMV (ppg) 0.00	AFE BASIS:	UNKNOWN
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: RIH to drill ahead.				
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: RIH with 12-1/4" drilling Assy and drill ahead.				
RT TO SEALED (m):	82.4					

**Summary of period 00:00 to 24:00 hrs:**

Rig up diverter system and test, cmt top up on 30" annulas, pick up DP for hole section, drill out cmt and shoe, displace hole to mud, pick up 12-1/4" drlg Assy.

**Formation Tops - This report only**

FORMATION TOP(inBRT)

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 19.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
17	PD	BOP	00:00	05:00	5.00	110	Land 30" riser extension on A section. Re-hang Texas deck work platform for access to make up flango connection. Install diverter and overshot pkr and nipple up.
17	TD	RR	05:00	07:00	2.00	110	Energise diverter and attempt to function test. Found in line test guage blocking pressure to flow line seals.
17	PD	BOP	07:00	07:30	.50	110	Function test diverter - flowline seals, overshot & overboard lines.
17	PD	WH	07:30	08:30	1.00	110	Run and set wear hushing.
17		TU	08:30	09:30	1.00	110	Rig up to do top up cement job on 30" casing annulas thru 2-7/8" grout string.
17	PD	LDP	09:30	14:00	4.50	110	Rig to and pick up 5" drill pipe to drill 12-1/4" hole section and stand back in drk.
17		TU	14:00	15:00	1.00	110	Rig down from cement top up job
17	PD	BOP	15:00	16:00	1.00	110	Install diverter pkr and test diverter, A section and risers against csg and cmt plug to 250psi - Ok.
17	PD	TI	16:00	17:30	1.50	110	Make up 17-1/2" drlg Assy. RIH. Tag cmt @ 63m.
17	PD	DC	17:30	19:00	1.50	110	Drill cmt from 63m to shoe at 108m. Clean out rat hole to 110m. Harder cmt below 90m.
17	PD	CIR	19:00	19:30	.50	110	Circ and displace hole with S-W/Gel mud.
17	PD	CIR	19:30	20:00	.50	110	Loosing mud at shakers on time up. Clear shakers and transfer mud.
17	PD	CIR	20:00	20:30	.50	110	Circulate cmt cuttings clean.
17	PD	LDP	20:30	22:00	1.50	110	POOH. Lay out 8-1/2" DC's and bit.
12	PD	TI	22:00	24:00	2.00	110	Make up 12-1/4" drilling Assy.

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 20.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
12	PD	TI	00:00	01:30	1.50	110	Continue pick up DC's to 108m.
12	PD	D	01:30	02:00	.50	117	Drill down to 117m.
12	PD	TI	02:00	03:30	1.50	117	Std back 1 std HWT and pick up 1 std jars & DC's. Make up TDS to drill and found bit plugged. Unable to clear.
12	TD	TO	03:30	06:00	2.50	117	POOH wet to clear bit. Found formation cuttings packed on top of DP float - bit nozzles clear. Float & seals in good condition. Replace and RIH.

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 19.01.98**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
Jump ROV on slack water. Can see open hole around 30" conductor. Rig up and grout 30 annulas thru 2-7/8" tbg with 40 hbis 15.8ppg slurry. ROV confirm hole full and take sample.	

**AMITY OIL NL**

**DAILY DRILLING REPORT # 4**

Report Date: 19.01.98

FROM: Westman / Jackson.  
TO: M. Lanzer

**BROADBILL -1**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
ROV carry out spud can survey and btm inspection. Found 2 sections of ladder cage and hose pce for removal.	

Mud Properties	MUD COST FOR TODAY: \$9,006	CUMULATIVE MUD COST TO DATE: \$14,124
Type: S-WGEL/PAC	VISCOSITY (sec/qt): 38	API FLUID LOSS (cm <sup>3</sup> /30min): 12
FROM: 20:45	PV (cpe): 1	API FILTER CAKE (32ndc inch): 1
TIME: 8.00	YP (lb/100sqft): 8	HHP FLUID LOSS (cm <sup>3</sup> /30min): 0
WEIGHT (ppg): 8.00	GEL 10s/10m/30m (lb/100sqft): 3 4 0	HHP FILTER CAKE (32ndc inch): 0
TEMP (C): 0	FANN 3/8/100: 2 3 7	Cl- (ppm): 0
		K+ (ppm): 0
		HARD/Ca (ppm): 0
		MBT (ppb eq): 0.0
		PM: 0.0
		PF: 0.0
		SOLIDS (%vol): 0
		H <sub>2</sub> O (%vol): 100.0
		OIL (%vol): 0
		SAND: 0.0
		PH: 0.0
		PHPA: 0.0

Bit Data for Bit # 2	IADC #	Wear	I	O1	D	L	B	G	O2	R
SIZE ("): 17.80		NOZZLES: 3 x 20	1	1	NO	A	1	1	NO	BHA
MANUFACTURER: SM	AVE WOB (k-lbs): 10		Drilled over the last 24 hrs				Calculated over the bit run			
TYPE: R-1	AVE RPM: 86	X	FOOTAGE (m): 47				CUM. FOOTAGE (m): 47			
SERIAL #: W52CK	FLOW (gpm): 800	X	ON BOTTOM HRS: 2.0				CUM. ON BOT. HRS: 2.0			
DEPTH IN (m RT): 63	PUMP PRESS. (psl): 1,150	X	IADC DRILL. HRS: 1.0				CUM. IADC DRILL HRS: 1.0			
DEPTH OUT (m RT): 110	HSI (hp/eq):	X	ROP (m/hr): 47.0				ROP (m/hr): 47.0			

Bit Data for Bit # 3	IADC #	Wear	I	O1	D	L	B	G	O2	R
SIZE ("): 12.28		NOZZLES: 3 x 18								
MANUFACTURER: HU	AVE WOB (k-lbs):	X	Drilled over the last 24 hrs				Calculated over the bit run			
TYPE: MAX GT-1	AVE RPM:	X	FOOTAGE (m): 0				CUM. FOOTAGE (m): 0			
SERIAL #: G25CK	FLOW (gpm):	X	ON BOTTOM HRS: 0.0				CUM. ON BOT. HRS: 0.0			
DEPTH IN (m RT): 110	PUMP PRESS. (psl):	X	IADC DRILL. HRS: 0.0				CUM. IADC DRILL HRS: 0.0			
DEPTH OUT (m RT):	HSI (hp/eq):	X	ROP (m/hr):				ROP (m/hr):			

BHA #1	Length (m): 110.0	DC(1) A.V. (mpm): 0.0	HRS ON JARS: 0.0
HRS ON MOTOR:	STRING WT (k-lbs): 90	TRQE MAX (amps): 200	DC(2) A.V. (mpm): 31.1
WT BW JAR (k-lbs):	PICK UP WT (k-lbs): 90	TRQE ON (amps): 175	HWDP A.V. (mpm): 23.9
BHA WT (k-lbs): 90	SLK OFF WT (k-lbs): 90	TRQE OFF (amps): 125	D.P. A.V. (mpm): 23.9
BHA DESCRIPTION: 17 1/2" Bit, bit sub, 3x3-1/2" DC's X-O-X-O 8 x HWT		S/N JARS: 0.0	
		S/N STABS: 0.0	

BHA #2	Length (m): 230.8	DC(1) A.V. (mpm): 68.4	HRS ON JARS: 0.0
HRS ON MOTOR:	STRING WT (k-lbs):	TRQE MAX (amps):	DC(2) A.V. (mpm): 0.0
WT BW JAR (k-lbs):	PICK UP WT (k-lbs):	TRQE ON (amps):	HWDP A.V. (mpm): 38.8
BHA WT (k-lbs):	SLK OFF WT (k-lbs):	TRQE OFF (amps):	D.P. A.V. (mpm): 38.8
BHA DESCRIPTION: 12-1/4" Bit, bit sub(float), monel(#n84002), 12-1/4" stab, 8" DC, 12-1/4" stab, 7x8" DC's, 8" Jars, 2x8" DC's, X/O, 12xHWT		S/N JARS: D4H 01103	
		S/N STABS: 0.0	

Anchor Tension (kips)	A1:	A2:	A3:	A4:	A5:
	A6:	A7:	A8:	A9:	A10:

Workboats	Location	Fuel (ktr)	Barite (ex)	DWtr (bb)	PWtr (bb)	Cmt (sx)	Sent (sx)	Hell (ktr)	Weather & Rig data @ 24:00 hr
Pacific Command Rig									WIND SP. (kts): 20.0
									VSI (nm):
									WIND DIR (deg): 180
									CILING (m):
									PRES. (mbar): 1013
									WAVES (m):
									AIR TEMP (C):
									SWELL (m): 1.5
									VDL (kips): 5,052.0
									RIS.TENS:
									HEAVE (m):
									ROLL (deg):
									PITCH (deg):

COMMENTS: 1 flight, 7 pax on, 10 off			
Bulk Stocks DRILL WATER (bb): 3,564.0	FUEL (ktr): 1,493.0	GEL (ex): 363	HELI-FUEL (ktr): 0.0
POT WATER (bb): 797.0	BARITE (ex): 1,543	CEMENT (ex): 1,688	



**AMITY OIL NL**

**DAILY DRILLING REPORT # 4**

Report Date: 19.01.98

FROM: Westman / Jackson.  
TO: M. Lanzer

**BROADBILL -1**

Drills, Permits & Inspections					
DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	17.01.98	BOP TEST	6.1.98	LTI	Pre tour mtgs
FIRE		NEXT TEST DUE DATE	1-1-90	MTI	
PIT DRILL		RIG INSPECTION	175	JSA	
INCIDENT		DAYS SINCE LTA		#PTW Safety Meeting	

Casing					
CSG OD (")	LOT	PHASE	CSG SHOE MD	OBG SHOE TVD (mBRT)	
30.00			105	105	
TYPE	LNQTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.4	28.0	311.0	X-52	SF80
Casing Jt #2	11.8	28.0	311.0	X-52	SF80
Casing Jt #3	11.6	28.0	311.0	X-52	SF80
Casing Jt #4	9.3	28.0	311.0	X-52	SF80
Casing Jt #5 (MLS)	12.1	28.0	311.0	X-52	SF80
Casing Jt #6	11.8	28.0	311.0	X-52	SF80
Casing Jt #7	11.8	28.0	311.0	X-52	SF80
Casing Jt #8	11.5	28.0	311.0	X-52	SF80
30"x 20" A section	1.4	21.0			21-1/4" 2k
RKB to A Section	12.4				

Pump Data										
Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNK (?)	GPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Idaco - T1	6.50	80	100	460	1150				
2	Idaco - T1	6.50	90	100	460	1150				

Solids Data				sand	silt	clean
MESH	HRB RUN	DISCARD RATE (gpm)	DISCARD WT (ppg)	0.0	0.0	0.0
MESH 1	150			0.00	0.00	0.00
MESH 2	160			0.00	0.00	0.00
MESH 3	160			0.00	0.00	0.00

Personnel : on Site = 83			
JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisor	Westman/Jack	RBT	2
Geologist	Paron	Amity	1
OIM	Friedell	Santa Fe	1
Toolpushers	Walker/Abrams	Santa Fe	2
Mud Engineer	Dougl	Barold	1
Cementer	Danlon	Hibm	1
Well Head	Chah	Kvaerner	1
ROV Operators	Bier/MoNell	Contract Diving Ser	2
Surveyor	Hartmaler	HOP	1
Mud Loggers		HML	4
Electric Line		Schlum	8
Rig Crews		Santa Fe	48
Sub Contractors		Santa Fe	8
Catering		P&O	7

Survey		MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	EW (m)	TOOL TYPE
Last Tool Type :	totco										
Magnetic Declination :	0.00	110	110	0.80	0	0.0					totco
Survey method :	Min Curvature										

# AMITY OIL NL

## DAILY DRILLING REPORT # 5

Report Date: 20.01.98

FROM: Westman / Jackson.  
 TO: M. Lanza

**BROADBILL -1**

<b>Well Data</b>		DEPTH (m RT):	546	CUR. HOLE SIZE ("): 12.25	DAILY COST \$:	
DRILL CO.:	SANTA FE	PROGRESS (m):	435	CBG OD ("): 30.00	CUM COST \$:	50
RIG:	PARAMESWARA	DAYS FROM BPUD:	3.33	SHOE TVD (m RT): 108	AFE COST \$:	
MUD CO:	BAROID	DAYS +/- CURVE:		LEAK-OFF EMW(ppg) 0.00	AFE BASIS:	UNKNOWN
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Circulate prior to running sgle shot survey.				
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Drill to 700m, Wiper trip, POOH, Log, Run 9-5/8" casing.				
RT TO SEABED (m):	62.4					

**Summary of period 00:00 to 24:00 hrs:**

Pick up BHA, POOH to clear float blockage, Drill ahead to 545m.

**Formation Tops - This report only**

FORMATION	TOP(mBRT)
Limestone	255

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 20.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
2	PD	TI	00:00	01:30	1.50	110	Continue pick up DC's to 106m.
12	PD	D	01:30	02:00	.50	117	Drill down to 117m.
12	PD	TI	02:00	03:30	1.50	117	Std back 1 std HWT and pick up 1 std Jars & DC's. Make up TDS to drill and found bit plugged. Unable to clear.
12	TD	TO	03:30	06:30	3.00	117	POOH wet to clear bit. Found formation cuttings packed on top of DP float - bit nozzles clear. Float & seals in good condition. Replace and RIH.
12	PD	D	06:30	09:00	2.50	117	Drill 12-1/4" hole from 117m to 230m. Losses increased to 70 bbls/hr.
12	TD	LC	09:00	10:45	1.75	117	Pump 25 bbl HI-vis pill w/ LCM. Work pipe and circulate out at reduced pump rate.
12	PD	D	10:45	19:00	8.25	413	Drill 12-1/4 hole // 230m to 413m.
12	PD	CIR	19:00	19:30	.50	413	Circ btm up. Spot 100 bbls LCM pill across open hole.
12	PD	S	19:30	20:00	.50	413	Run sgle shot survey on slick line to 398m.
12	PD	S	20:00	24:00	4.00	413	Continue drill from 413m to 545m

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 21.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
12	PD	D	00:00	05:30	5.50	413	Continue drill 12-1/4" hole from 545m to 701m.
12	PD	CIR	05:30	06:00	.50	701	Circulate for survey.

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 20.01.98**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
ROV recover ladder cage from bow leg. Hole taking mud thru coarse sands. At 230m pump 50 bbl LCM pill (Baracarb 25 & 100, Barofibra, Gel) and losses reduced. At 398m spotted LCM pill in open hole while running survey and let soak.	

<b>Mud Properties</b>		MUD COST FOR TODAY: \$12,206	CUMULATIVE MUD COST TO DATE: \$26,420						
Type:	S-W/Gel/Poly	VISCOSITY( sec / qt):	44	API FLUID LOSS (cm <sup>3</sup> /30min)	8	Cl- (ppm):	21,000	SOLIDS (%vol):	4.1
FROM:	FL	PV (cpe):	17	API FILTER CAKE (32nds Inch)	1	K+ (ppm):	0	H2O (%vol):	84.7
TIME:	20:00	YP (lb/100sq.ft):	26	MHP FLUID LOSS (cm <sup>3</sup> /30min)	0	HARD/Ca (ppm):	620	OIL (%vol):	0
WEIGHT (ppg):	8.00	GEL 10s/10m/30m (lb/100sq.ft):	15 21 0	MBT (ppb eq):	4.2	PM:	.4	SAND:	0.6
TEMP (C):	44	FANN 3/6/100	16 16 28	HHP FILTER CAKE (32nds Inch)	0	PF:	.1	PH:	8.6
								PHPA:	0.0

**AMITY OIL NL**

**DAILY DRILLING REPORT # 5**

Report Date: 20.01.98

FROM: Westman / Jackson  
TO: M. Lanzer

**BROADBILL -1**

Bit Data for Bit # 3		IADC #	Wear		I	O	D	L	S	G	O2	R
SIZE ("): 12.25			NOZZLES									
MANUFACTURER: HU	AVE WOB (k-lbs): 10		3 x 16		Drilled over the last 24 hrs		Calculated over the bit run					
TYPE: MAX GT-1	AVE RPM: 130		X		FOOTAGE (m): 436		CUM. FOOTAGE (m): 436					
SERIAL #: G23CX	FLOW (gpm): 800		X		ON BOTTOM HRS: 12.8		CUM. ON BOT. HRS: 12.8					
DEPTH IN (m RT): 110	PUMP PRESS. (psi): 2,400		X		IADC DRILL HRS: 14.0		CUM. IADC DRILL HRS: 14.0					
DEPTH OUT (m RT):	HSI (m/sec):		X		ROP (m/hr): 31.1		ROP (m/hr): 31.1					

BHA #2 Length (m):		HRS ON MOTOR:		DC(1) A.V. (mpm):	
WT BW JAR(k-lbs):	STRING WT(k-lbs):	TRQE MAX (amps):	DC(2) A.V. (mpm):	HRS ON JARS:	
BHA WT(k-lbs):	PICK UP WT(k-lbs):	TRQE ON (amps):	HWDF A.V. (mpm):		HRS ON BTABS:
	SLK OFF WT(k-lbs):	TRQE OFF (amps):	D.P. A.V. (mpm):		HRS ON STABS:
BHA DESCRIPTION:					

BHA #2 Length (m): 230.8		HRS ON MOTOR:		DC(1) A.V. (mpm):	
WT BW JAR(k-lbs): 37	STRING WT(k-lbs): 135	TRQE MAX (amps): 276	DC(2) A.V. (mpm): 0.0	HRS ON JARS: 14.0	
BHA WT(k-lbs): 60	PICK UP WT(k-lbs): 135	TRQE ON (amps): 175	HWDF A.V. (mpm): 47.8		HRS ON STABS: 14.0
	SLK OFF WT(k-lbs): 135	TRQE OFF (amps): 125	D.P. A.V. (mpm): 47.8		HRS ON STABS: 14.0
BHA DESCRIPTION: 12-1/4" Bit, bit sub (float), mono (w/ #4002), 12-1/4" stab, 6" DC, 12-1/4" stab, 7.5" DC, 6" jar, 2.5" DC, X/O, 12xHWT					

Anchor Tension (kips)	A1:	A2:	A3:	A4:	A5:
	A6:	A7:	A8:	A9:	A10:

Workboats	Location	Fuel (kg)	Barite (ex)	D/Wr (bb)	P/Wr (bb)	Cmt (ex)	Bent (ex)	Head (KIT)	Weather & Rig data @ 24:00 hrs		
Pacific Command To Gee									WIND SP. (km): 20.0	VIB (nm):	VDL (kips): 8,921.0
									WIND DIR (deg): 80	CEILING (m):	RIB. TENS:
									PRES. (mbars): 1013	WAVES (m): .5	HEAVE (m):
									AIR TEMP (C):	SWELL (m): 1.7	ROLL (deg):
COMMENTS: 1 Flight - 2 pax in 8 pax out											

Bulk Stocks	DRILL WATER (bb):	FUEL (kg):	GEL (ex):	HELL-FUEL (kg):
	1,883.0	1,466.0	639	0.0
	POT WATER (bb): 823.0	BARITE (sd): 2,072	CEMENT (ex): 1,868	

**Drills, Permits & Inspections**

DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL		BOP TEST	9-1-98	LT1	
FIRE	17-01-98	NEXT TEST DUE DATE		MTI	
FIT DRILL		RIG INSPECTION	1-1-98	JBA	
INCIDENT		DAYS SINCE LTA	176	4PTW	
				Safety Meeting	Pre tour mtg

**Casing**

CSG ODI (m)	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)	
30.00			106	106	
TYPE	LNQTH (m)	CSG ID (")	WT (lb/ft)	GRD	THREAD
Shoe Jt	12.4	28.0	311.0	X-62	SP80
Casing Jt #2	11.8	28.0	311.0	X-62	SP80
Casing Jt #3	11.8	28.0	311.0	X-62	SP80
Casing Jt #4	9.3	28.0	311.0	X-62	SP80
Casing Jt #5 (MLS)	12.1	28.0	311.0	X-62	SP80
Casing Jt #6	11.6	28.0	311.0	X-62	SP80
Casing Jt #7	11.9	28.0	311.0	X-62	SP80
Casing Jt #8	11.5	28.0	311.0	X-62	SP80
30"x 20" A section	1.4	21.0			21-1/4" 2k
RKB to A Section	12.4				

**Pump Data**

Pump Data - last 24 hrs						Flow Pump Data				
#	TYPE	LNR (%)	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	10000 - T1	6.90	80	100	400	2360				
2	10000 - T1	6.50	80	100	400	2360				

**Solids Data**

MESH	HRB RUN	DISCARD RATE (gpm)	DISCARD WT (ppg)	RETURN WT (ppg)	send	silt	clean
MESH 1	160	0.0	0.0	0.0	17.0	17.0	0.0
MESH 2	160	0.0	0.0	0.0	0.0	0.0	0.0
MESH 3	160	0.0	0.0	0.0	0.0	0.0	0.0

Personnel : on Site \*

Page Number : 2

ppb	29.30	Whole Mud	0	Press Drop, DP	3319	WATE	v.v.v
High Grav, vol %	0.0	Barite	0	Press Drop, BIT	6049	BACK REAM	0.00
ppb	0.00	Chemicals	39	Press Drop, AMH	31	REAMING	0.00
ASC	2.58	LOGSSES	bb1	Actual Circ. Press	2420	TESTING	0.00
Drill Cuttings	12	Dumped	40	AV, DP	u/min	OTHER	0.75
Dilution Rate	16.83	Lost	1244	AV, DC	u/min	AVERAGE ROP	0.00
Slids Control Eff	0.00	VOL GAIN/LOSS	-203	AV, Riser	u/min		
BLERD REPRESENTATIVE	TOPPIC/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST	
Nicholas Boust	WAREHOUSE	Melbourne	TELEPHONE	(03) 56 881 416	SA	12296.82	SA 26420.96

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
The recommendations made herein shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BEROLD DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

**AMITY OIL NL**

**DAILY DRILLING REPORT # 6**

Report Date: 21.01.98

FROM: Westman / Jackson / Rootal  
TO: Lanzer / Searles

**BROADBILL -1**

Bit Data for Bit # 3		IADC #	Wear								
SIZE (") :	12.25		1	01	0	L	B	G	O2	R	
MANUFACTURER :	HU		1	2	09	2	1	no	TD		
TYPE :	MAX GT-1	AVE WOB (k-lbs) :	15	NOZZLES				3 x 18			
SERIAL # :	G25CX	AVE RPM :	130	Drilled over the last 24 hrs				Calculated over the bit run			
DEPTH IN (m RT) :	110	FLOW (gpm) :	650	FOOTAGE (m) :				240			
DEPTH OUT (m RT) :	785	PUMP PRESS. (psi) :	1,700	ON BOTTOM HRS :				9.0			
		HSI (hp/sq) :	8	IADC DRILL HRS :				11.0			
				ROP (m/hr) :				21.8			
				CUM. FOOTAGE (m) :				675			
				CUM. ON BOT. HRS :				21.8			
				CUM. IADC DRILL HRS :				25.0			
				ROP (m/hr) :				27.0			

**BHA #2 Length (m) : 230.8**

HRS ON MOTOR :	STRING WT (k-lbs) :	159	TRQE MAX (amps) :	300	DC(1) A.V. (mpm) :	68.4	HRS ON JARS :	26.6
WT BW JAR (k-lbs) :	PICK UP WT (k-lbs) :	159	TRQE ON (amps) :	200	DC(2) A.V. (mpm) :	0.0	S/N JARS :	DAH 01183
BHA WT (k-lbs) :	SLK OFF WT (k-lbs) :	155	TRQE OFF (amps) :	130	HWDP A.V. (mpm) :	38.8	HRS ON STABS :	28.8
					D.P. A.V. (mpm) :	38.8	S/N STABS 7390167/AIB1120	

**PH4 DESCRIPTION :** 12-1/4" Bit, bit sub(floor), mono (w/n 4002), 12-1/4" stab, 8" DC, 12-1/4" stab, 7x8" DC's, 8" jars, 2x8" DC's, X/O, 12ft WT

**Anchor Tension (kips)**

A1 :	A2 :	A3 :	A4 :	A5 :
A6 :	A7 :	A8 :	A9 :	A10 :

**Workboats**

Location: Pacific Command To Rig

Location	Fuel (ktr)	Barite (ex)	D/wr (bbl)	P/wr (bbl)	Cmt (ex)	Bent (ex)	Hell (ktr)
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**Weather & Rig data @ 24:00 hrs**

WIND SP. (kts) :	20.0	VISIB. (nm) :		VDL (kips) :	5,663.0
WIND DIR (deg) :	360	CEILING (m) :		RIS. TENS. :	
PREB. (mbars) :	1013	WAVES (m) :		HEAVE (m) :	
AIR TEMP (C) :		SWELL (m) :	1.5	ROLL (deg) :	
				PITCH (deg) :	

COMMENTS : 1 flight - 2 pax in 4 pax out

<b>Bulk Stacks</b>	DRILL WATER (bbl) :	2,803.0	FUEL (ktr) :	1,400.0	GEL (ex) :	573	HELI-FUEL (ktr) :	0.0
	POT WATER (bbl) :	900.0	BARITE (ex) :	2,025	CEMENT (ex) :	1,685		

**Drills, Permits & Inspections**

DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL		BOP TEST	9.1.98	LTI	
FIRE	17.01.98	NEXT TEST DUE DATE		MTI	
PIT DRILL		RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	177	#PTW	
				Safety Meeting	Pre tour mtgs

**Casing**

OSG OD (")	LOT	PHASE	OSG BHOE MD	OSG SHOE TVD (mBRT)
30.00			106	106

TYPE	LNTH (m)	OSG ID (")	WT (lbs/ft)	GRD	THREAD
Shoe Jt	12.4	29.0	311.0	X52	SF60
Casing Jt #2	11.8	28.0	311.0	X-52	SF60
Casing Jt #3	11.8	28.0	311.0	X-52	SF60
Casing Jt #4	9.3	28.0	311.0	X-52	SF60
Casing Jt #5 (MLB)	12.1	28.0	311.0	X-52	SF60
Casing Jt #6	11.8	28.0	311.0	X-52	SF60
Casing Jt #7	11.8	28.0	311.0	X-52	SF60
Casing Jt #8	11.5	28.0	311.0	X-52	SF60
30' x 20" A section	1.4	21.0			
RKB to A Section	12.4				21-1/4" 2K

**Pump Data**

Pump Data - last 24 hrs						Slow Pump Data				
#	TYPE	LNH (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Idco - T1	6.50	65	100	325	1700				
2	Idco - T1	6.50	65	100	325	1700				

**Solids Data**

MESH	HRS RUN	DISCARD RATE (gpm)	sand	silt	clean
MESH 1	150	0.0	20.0	20.0	0.0
MESH 2	150	0.00	0.00	0.00	0.00
MESH 3	150	0.00	0.00	0.00	0.00

Personnel : on Site =

**AMITY OIL NL**

**DAILY DRILLING REPORT # 6**

Report Date: 21.01.98

FROM: Westman / Jackson / Roots  
TO: Lanzer / Soares

**BROADBILL -1**

<b>Well Data</b>		DEPTH (m RT): 785	CUR. HOLE SIZE ("): 12.25	DAILY COST \$:
DRILL CO.:	SANTA PE	PROGRESS (m): 240	CSG OD ("): 30.00	CUM COST \$: 30
RIG:	PARAMESWARA	DAYS FROM 8PUD: 4.33	SHOE TVD (m RT): 106	AFE COST \$:
MUD CO:	BAROID	DAYS +/- CURVE:	LEAK-OFF EMW(ppg) 0.00	AFE BASIS: UNKNOWN
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Rig down Logging Tools.		
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Retrieve Wear bushing, Rig up & run 9.625 csg		
RT TO SEABED (m):	62.4			

**Summary of period 00:00 to 24:00 hrs:**

Drill from 545m to 786m. Circ, drop MSS and make wiper trip to shoe. RIH, circ clean and POOH for logging.

**Formation Tops - This report only**

FORMATION	TOP(mBRT)
Sandstone	385
Limestone	420
Limestone	760
Lakes Entrance	775

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 21.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
12	PD	D	00:00	05:30	5.60	701	Continue drill 12-1/4" hole from 545m to 701m.
12	PD	CIR	05:30	06:15	.75	701	Circulate for survey.
12	PD	S	06:15	07:00	.75	701	Run survey on slickline @ 686.62m.
12	PD	D	07:00	12:30	5.60	785	Drill from 701m to 785m
12	PD	CIR	12:30	13:00	.50	785	Circ btms up.
12	PD	TO	13:00	15:30	2.50	785	Drop multi shot, pump slug & POOH to shoe. Retrieve MSS. Drag to 30k and trying to swab first 5 stds then pulled clean.
12	PD	RS	15:30	16:00	.50	785	Rig service.
12	PD	TI	16:00	18:00	2.00	785	RIH to btm. Hole good no fill.
12	PD	CIR	18:00	19:30	1.50	785	Circ hole clean.
12	PD	TO	19:30	22:30	3.00	785	Pump slug and POOH. No drag. Stand back DC's & lay dn bit.
12	PD	LOG	22:30	24:00	1.50	785	Rig up Schlumb. Hold pre-job mtg and review JSA procedure. Rig up tools.

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 22.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
12	PD	LOG	00:00	01:15	1.25	785	Schlumb continue pick up tools and load source.
12	PD	LOG	01:15	04:15	3.00	785	Schlumb RIH with BHC-LDL-CNL-DLL-MSFL-GR-CALI. Tag btm @783m and log out.
12	PD	LOG	04:15	06:00	1.75	785	Remove source, lay out tools and end rig down.

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 21.01.98**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
Ran multi shot survey from 785m to surface.	

<b>Mud Properties</b>		MUD COST FOR TODAY: \$4,716		CUMULATIVE MUD COST TO DATE: \$31,135	
Type:	S-W/Gel/Pac	VISCOSITY (sec / qt):	70	API FLUID LOSS (cm3/30min)	8
FROM:	FL 13:00	PV (cpa):	15	API FILTER CAKE (32nds inch)	1
TIME:		YP (lb/100sqft):	21	HTHP FLUID LOSS (cm3/30min)	21
WEIGHT (ppg):	9.20	GEL 10a/10m/30m (lb/100sqft):	17 29 0	HTHP FILTER CAKE (32nds inch)	0
TEMP (C):	46	FANN 3/10/100	13 15 25	Cl- (ppm):	21,000
				K+ (ppm):	0
				HARD/Cs (ppm):	600
				MBT (ppb eq):	5.5
				PM:	.5
				PF:	.0
				SOLIDS (%vol):	4.4
				H2O (%vol):	93.4
				OIL (%vol):	0
				SAND:	tr
				PH:	8.2
				PHPA:	0.0

**AMITY OIL NL**

**DAILY DRILLING REPORT # 6**

**Report Date: 21.01.98**

**FROM: Westman / Jackson / Rootal  
TO: Lanzer / Searles**

**BROADBILL -1**

77			
JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisors	Westman/Jack	RBT	3
Geologist	Patton	Amity	1
OIM	Froldell	Santa Fe	1
Toolpushers	Walker/Abrams	Santa Fe	2
Mud Engineer	Doumt	Berold	1
Cementter	Donlon	Hibtn	1
Well Head	Chain	Kvaerner	1
British Aaro	Fisher	BAE	1
Surveyor	Hoffmeler	HOF	1
Mud Loggers		HML	4
Electric Line		Schlum	7
Rig Crews		Santa Fe	48
Sub Contractors		Santa Fe	
Catering		P&O	8

Survey	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Test Tool Type :      egle shot										
Magnetic Declination :      13.00										
Survey method :      Min Curvature										
	110	110	0.50	0	0.0					tatao
	389	388	0.18	354	7.0					egle shot
	687	685	0.30	53	65.0					egle shot

# AMITY OIL NL

## DAILY DRILLING REPORT # 7

Report Date: 22.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

### BROADBILL -1

<b>Well Data</b>		DEPTH (m RT):	785	CUR. HOLE SIZE ("):	12.25	DAILY COST \$:	
DRILL CO.:	SANTA FE	PROGRESS (m):	0	CSG OD ("):	9.63	CUM COST \$:	\$2,473,328
RIG:	PARAMESWARA	DAYS FROM SPUD:	5.33	SHOE TVD (m RT):	779	AFE COST \$:	
MUD CO.:	BAROID	DAYS +/- CURVE:		LEAK-OFF EMW(ppg)	0.00	AFE BASIS:	UNKNOWN
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Nipple up well head					
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Nipple up BOP, Pick up drill pipe, M/up 8.5" BHA, Drill 8.5" hole					
RT TO SEABED (m):	52.4						

**Summary of period 00:00 to 24:00 hrs:**

Run 9.63 casing

**Formation Tops - This report only**

FORMATION	TOP(mBRT)

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 22.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
12	PD	LOG	00:00	01:15	1.25	785	Schlumb contine pick up tools and load source.
12	PD	LOG	01:15	04:15	3.00	785	Schlum RIH with BHC-LDL-CNL-DLL-MSFL-GR-CALI. Tag btm @783m and log out.
12	PD	LOG	04:15	06:30	2.25	785	Remove source, lay out tools and and rig down.
12	PD	LOG	06:30	07:30	1.00	785	Pull diverter bag, retrieve wear bushing, and lay down running tool.
12	PD	RRC	07:30	09:00	1.50	785	R/u to run to run 9-5/8" csg. Hold Job Safety Analysis.
12	PD	RRC	09:00	16:00	7.00	785	M/u shoe track. Run casing. Tag Mud Line Hanger.
12	PD	CIC	16:00	18:45	2.75	785	Circulate casing. Prepare Gel water for cementing.
12	PD	CMC	18:45	19:00	.25	785	Pre-job meeting. Line up Howco.
12	PD	CMC	19:00	19:45	.75	785	Pump 40 bbls seawater 20 bbls freshwater, preflush.
12	PD	CMC	19:45	22:30	2.75	785	Mix & Pump Lead: 800 sk @ 12.5 ppg, w/ 2.5% bentonite BWOW, Tail: 200 sk & 15.8 ppg, w/ 1% CaCl, Release plug, HCS Displace 20 bbl
12	PD	CMC	22:30	24:00	1.50	785	Rig pumps displace cement w/ 9.2 ppg mud, Bump plug w/1500 psi @ 1390 stk, Maintain pressure f/ 10 min, Bleed off 2.5 bbl (0 psi) Float holding, Flush surface equipment, Nipple down cement head, Remove insert packer.

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 23.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
12	PD	CMC	00:00	03:30	3.50	785	Flush surface equipment, Nipple down cement head, Remove insert packer, Lift riser, Install well head spider, Set slips w,40k o/pull, Rough cut casing & L/out excess
12	PD	CMC	05:00	06:00	1.00	785	Final cut & Dress casing, Install seals, Nipple up "B" section

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 22.01.98**

<b>Mud Properties</b>		MUD COST FOR TODAY: \$717				CUMULATIVE MUD COST TO DATE: \$31,852			
Type :		VISCOSITY( sec / qt ):	44	API FLUID LOSS (cm3/30min)	8	Cl - (ppm) :	21,000	SOLIDS (%vol) :	5.4
S-W/Gel/Pac		PV (cps) :	14	API FILTER CAKE (32nds inch)	0	K+ (ppm) :	0	H2O (%vol) :	93.4
FROM :	FL	YP (lb/100sq.ft)	20	HTHP FLUID LOSS (cm3/30min)	22	HARD/Ca (ppm) :	560	OIL (%vol) :	0
TIME :	15:30	GEL 10s/10m/30m (lb/100sqft) :	15 23 0	HTHP FILTER CAKE (32nds inch)	0	MBT (ppb eq) :	5.5	SAND :	tr
WEIGHT (ppg):	9.20	FANN 3/6/100	12 14 25			PM:	.3	PH :	8.2
TEMP (C) :	46					PF:	.0	PHPA :	0.0

<b>Bit Data for Bit # 3</b>		IADC #	<b>Wear</b>								
SIZE (") :	0.00		I	O1	D	L	B	G	O2	R	
MANUFACTURER :	OT	AVE WOB (k-lbs) :	0	0 X 0	Drilled over the last 24 hrs				Calculated over the bit run		
TYPE :		AVE RPM :	0	0 X	FOOTAGE (m) :	0	CUM.FOOTAGE (m) :				675
SERIAL # :		FLOW (gpm) :	0	X	ON BOTTOM HRS :	0.0	CUM. ON BOT. HRS :				21.6
DEPTH IN (m RT) :	785	PUMP PRESS. (psi):	0	X	IADC DRILL. HRS :	0.0	CUM.IADC DRILL HRS:				0.0
DEPTH OUT (m RT) :	0	HSI (hp/sqi) :	0	X	ROP (m/hr):		ROP (m/hr):				

# AMITY OIL NL

## DAILY DRILLING REPORT # 7

Report Date: 22.01.98

FROM : Westman / Roots  
TO : Lanzer / Searles

**BROADBILL -1**

<b>Anchor Tension (kips)</b>	A1 :	A2 :	A3 :	A4 :	A5 :						
	A6 :	A7 :	A8 :	A9 :	A10 :						
<b>Workboats</b>	Location:	Fuel (kltr)	Barite (sx)	D/wtr (bbl)	P/wtr (bbl)	Cmt (sx)	Bent (sx)	Hell (kltr)	<b>Weather &amp; Rig data @ 24:00 hrs</b>		
Pacific Command	@ Rig		1,696						WIND SP. (kts) : 25.0	VISIB. (nm) : good	VDL (kips) 6,162.0
									WIND DIR (deg) : 45	CEILING (m) :	RIS.TENS:
									PRES.(mbars): 1009	WAVES (m) :	HEAVE (m) :
									AIR TEMP (C) :	SWELL (m) : 1.5	ROLL (deg) :
											PITCH (deg) :
<b>COMMENTS:</b> 1 Flight - 8 pax in 9 pax out											

<b>Bulk Stocks</b>	DRILL WATER (bbl) : 4,493.0	FUEL (kltr) : 1,363.0	GEL (sx) : 573	HELI-FUEL (kltr) : 0.0
	POT WATER (bbl) : 823.0	BARITE (sx) : 2,028	CEMENT (sx) : 703	

### Drills, Permits & Inspections

DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	17.01.9	BOP TEST	9.1.98	LTI	Pre tour mtgs
FIRE		NEXT TEST DUE DATE	1-1-98	MTI	
PIT DRILL		RIG INSPECTION	177	JSA	
INCIDENT		DAYS SINCE LTA		#PTW Safety Meeting	

### Casing

CSG OD (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)
30.00			106	106
9.63			779	779

TYPE	LNGLH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.4	28.0		X-52	SF60
Shoe Jt	12.4	28.0		X-52	SF60
Casing jt #2	11.8	28.0		X-52	SF60
Casing jt #2	11.8	28.0		X-52	SF60
Casing jt #3	11.6	28.0		X-52	SF60
Casing jt #3	11.6	28.0		X-52	SF60
Casing jt #4	9.3	28.0	311.0	X-52	SF60
Casing jt #4	9.3	28.0	311.0	X-52	SF60
Casing jt #5 (MLS)	12.1	28.0	311.0	X-52	SF60
Casing jt #5 (MLS)	12.1	28.0	311.0	X-52	SF60
Casing jt #6	11.6	28.0	311.0	X-52	SF60
Casing jt #6	11.6	28.0	311.0	X-52	SF60
Casing jt #7	11.9	28.0	311.0	X-52	SF60
Casing jt #7	11.9	28.0	311.0	X-52	SF60
Casing jt #8	11.5	28.0	311.0	X-52	SF60
Casing jt #8	11.5	28.0	311.0	X-52	SF60
30"x 20" A section	1.4	21.0			21-1/4"2k
30"x 20" A section	1.4	21.0			21-1/4"2k
RKB to A Section	12.4				
RKB to A Section	12.4				
Stump	6.0	8.7	47.0	L-80	LTC
Stump	6.0	8.7	47.0	L-80	LTC
Top of "B" Section	.7				
Top of "B" Section	.7				

### Pump Data

Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPP (psi)	DEPTH (m RT)	MW (ppg)	
1	Ideco - T	6.50	60	100	325	900				
2	Ideco - T	6.50	60	100	325	900				

### Solids Data

		HRS RUN	sand	silt	clean
MESH 1	0	DISCARD RATE (gpm)	0.0	0.0	0.0
MESH 2	0	DISCARD WT (ppg)	0.00	0.00	0.00
MESH 3	0	RETURN WT (ppg)	0.00	0.00	0.00

### Personnel : on Site = 76

JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisor	Westman/Root	RBT	2
Geologist	Patton	Amity	1
OIM	Reece	Santa Fe	1
Toolpushers	Walker/Wilkie	Santa Fe	2
Mud Engineer	Doust	Baroid	1
Cementer	Donlon	Hibtn	1
Well Head	Chain	Kvaerner	1
Casing	Winter/Pendelb	Weatherford	2
Mud Loggers		HML	4
Electric Line		Schlum	7
Rig Crews		Santa Fe	46
Sub Contractors		Santa Fe	
Catering		P&O	8



# AMITY OIL NL

## DAILY DRILLING REPORT # 7

Report Date: 22.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

### BROADBILL -1

Survey	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	'V' SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Last Tool Type :      sgle shot										
Magnetic Declination :      13.00										
Survey method :      Min Curvature	110	110	0.50	0	0.0					totco
	399	398	0.15	354	7.0					sgle shot
	687	686	0.30	53	66.0					sgle shot

# AMITY OIL NL

DAILY DRILLING REPORT # 8

Report Date: 23.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

BROADBILL -1

<b>Well Data</b>		DEPTH (m RT): 785	CUR. HOLE SIZE ("): 12.25	DAILY COST \$:
DRILL CO.:	SANTA FE	PROGRESS (m): 0	CSG OD ("): 9.83	CUM COST \$: \$0
RIG:	PARAMESWARA	DAYS FROM SPUD: 6.33	SHOE TVD (m RT): 779	AFE COST \$:
MUD CO:	BAROID	DAYS +/- CURVE:	LEAK-OFF EMW(ppg) 0.00	AFE BASIS: UNKNOWN
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Pick up 8.5" Drilling assembly		
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Pick up 5" DP req,d to TD,Drill float equipment, Perform FIT,Drill 8.5" hole		
RT TO SEABED (m):	52.4			

<b>Summary of period 00:00 to 24:00 hrs:</b>		<b>Formation Tops - This report only</b>	
Set 9.63 Casing, Nipple up BOP & Test same		FORMATION	TOP(mBRT)

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 23.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
12	PD	CMC	00:00	05:00	5.00	785	Flush surface equipment, Nipple down cement head, Remove insert packer, Lift riser, Install well head spider, Set slips w,40k o/pull, Rough cut casing & L/out excess, Lay down Overshot packer & Riser
12	PD	CMC	05:00	06:00	1.00	785	Final cut & Dress casing, Install seals, Nipple up "B" section
12	PD	BOP	06:00	09:00	3.00	785	Continue to nipple up "B" section, Pressure test seals to 2000 psi/15 min, Install Adapter
12	PD	BOP	09:00	11:30	2.50	785	Prepare Texas Deck work platform to nipple up BOP
8	PD	BOP	11:30	18:00	6.50	785	Nipple up BOP & Riser
8	PD	BOP	18:00	19:00	1.00	785	Lay down handling equipment
8	PD	BOP	19:00	23:00	4.00	785	Pressure test BOP : All Rams 500/3500 psi 5/10 min, Annular : 500/2000 psi 5/10 min
8	PD	O	23:00	23:30	.50	785	Set Wear Bushing
8	PD	LDP	23:30	24:00	.50	785	Lay down excess 8" Drill Collars

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 24.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	TD	LDP	00:00	02:00	2.00	785	Continue to lay down excess 8" DC & Stabilisers
8	PD	O	02:00	06:00	4.00	785	Pick up 8.5" Drilling assembly

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 23.01.98**

<b>Mud Properties</b>		MUD COST FOR TODAY: \$24,484		CUMULATIVE MUD COST TO DATE: \$56,336	
Type:	VL/Ezy Mud/Poly	VISCOSITY( sec / qt):	55	API FLUID LOSS (cm3/30min)	5
FROM:	FL	PV (cps):	10	API FILTER CAKE (32nds inch)	1
TIME:	20:00	YP (lb/100sq.ft):	15	HTHP FLUID LOSS (cm3/30min)	30
WEIGHT (ppg):	8.90	GEL 10s/10m/30m (lb/100sqft):	4 8 0	HTHP FILTER CAKE (32nds inch)	1
TEMP (C):	0	FANN 3/6/100	3 6 14	Cl - (ppm):	43,000
				K+ (ppm):	0
				HARD/Ca (ppm):	380
				MBT (ppb eq):	0.0
				PM:	.2
				PF:	.1
				SOLIDS (%vol):	1.7
				H2O (%vol):	95.8
				OIL (%vol):	0
				SAND:	
				PH:	8.2
				PHPA:	0.0

<b>Bit Data for Bit # 4</b>		IADC # 4 4 7		<b>Wear</b>								
SIZE ("):	8.50	MANUFACTURER:	HU	NOZZLES	I	O1	D	L	B	G	O2	R
TYPE:	ATMGT	AVE WOB (k-lbs):		2 X16	Drilled over the last 24 hrs				Calculated over the bit run			
SERIAL #:	L8418D65	AVE RPM:		1 X14	FOOTAGE (m):				CUM.FOOTAGE (m):			
DEPTH IN (m RT):	785	FLOW (gpm):		X	ON BOTTOM HRS:				CUM. ON BOT. HRS:			
DEPTH OUT (m RT):		PUMP PRESS. (psi):		X	IADC DRILL. HRS:				CUM.IADC DRILL HRS:			
		HSI (hp/sq):		X	ROP (m/hr):				ROP (m/hr):			

<b>BHA #4</b>		Length (m) :258.9		DC(1) A.V. (mpm): 0.0		HRS ON JARS:	
HRS ON MOTOR:		STRING WT(k-lbs):		DC(2) A.V. (mpm): 0.0	S/N JARS:		DAH 103309
WT BW JAR(k-lbs):	23	PICK UP WT(k-lbs):		HWDP A.V. (mpm): 0.0	HRS ON STABS:		
BHA WT(k-lbs):	42	SLK OFF WT(k-lbs):		D.P. A.V. (mpm): 0.0	S/N STABS:		D-8-89-13, 4811
BHA DESCRIPTION:		Bit, NB Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DC, HWDP					

# AMITY OIL NL

DAILY DRILLING REPORT # 8

Report Date: 23.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

BROADBILL -1

<b>Anchor Tension (kips)</b>	A1:	A2:	A3:	A4:	A5:				
	A6:	A7:	A8:	A9:	A10:				
<b>Workboats</b>	Location:	Fuel (ktr)	Barite (sx)	D/wtr (bb)	P/wtr (bb)	Cmt (sx)	Bent (sx)	Heli (ktr)	<b>Weather &amp; Rig data @ 24:00 hrs</b>
Pacific Command Rig									WIND SP. (kts) : 20.0 WIND DIR (deg) : 210 PRES.(mbars): 1010 AIR TEMP (C) :
									VISIB.(nm) : good CEILING (m) : WAVES (m) : 1.0 SWELL (m) : 1.8
									VDL (kips: 6,194.0 RIS.TENS: HEAVE (m) : ROLL (deg) : PITCH (deg) :
<b>COMMENTS :</b> Helicopter Movements:3 on & 5 off P/Commander:Standby									

<b>Bulk Stocks</b>	DRILL WATER (bb): 4,033.0	FUEL ( ktr) : 1,344.0	GEL (sx) : 882	HELI-FUEL (ktr) : 0.0
	POT WATER (bb) : 844.0	BARITE (sx) : 2,028	CEMENT (sx) : 1,524	

Drills, Permits & Inspections					
DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL		BOP TEST	23-1-98	LTI	
FIRE	17.01.98	NEXT TEST DUE DATE	06-2-98	MTI	
PIT DRILL		RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	135	#PTW	
				Safety Meeting	Held weekly meeting

Casing						
CSG OD(")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)		
9.63			779	779		
TYPE	LNTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD	
Shoe Jt	12.0	8.7	47.0	L-80	LTC	
Casing jt #2	12.0	8.7	47.0	L-80	LTC	
Float jt	11.9	8.7	47.0	L-80	LTC	
57 jt csg	681.9	8.7	47.0	L-80	LTC	
Pup (MSL)	6.1	8.7	47.0	L-80	LTC	
Pup (MSL)	6.6	8.7	47.0	L-80	LTC	
1 jt csg	11.9	8.7	47.0	L-80	LTC	
Pup	3.0	8.7	47.0	L-80	LTC	
Pup	3.6	8.7	47.0	L-80	LTC	
1 jt csg	12.0	8.7	47.0	L-80	LTC	
Yump	6.0	8.7	47.0	L-80	LTC	
Top of "B" Section	.7					

Pump Data										
Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T1	6.50		100						
2	Ideco - T1	6.50		100						

Solids Data			sand silt clean		
MESH 1	150	HRS RUN	0.0	0.0	0.0
MESH 2	80	DISCARD RATE (gpm)	0.0	0.0	0.0
MESH 3	80	DISCARD WT (ppg)	0.00	0.00	0.00
		RETURN WT (ppg)	0.00	0.00	0.00

Personnel : on Site = 74			
JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisors	Westman/Root	RBT	2
Geologist	Patton	Amity	1
OIM	Reece	Santa Fe	1
Toolpushers	Walker/Wilkie	Santa Fe	2
Mud Engineer	Doust	Baroid	1
Cementer	Dorlon	Hibt	1
Well Head	Chain	Kvaerner	1
Mud Loggers		HML	4
Electric Line		Schlum	4
Rig Crews		Santa Fe	46
Sub Contractors		Santa Fe	
Catering		P&O	8
Well Test	Kassim/farley	Expo	2
Managing Direct	Allchurch	Amity	1

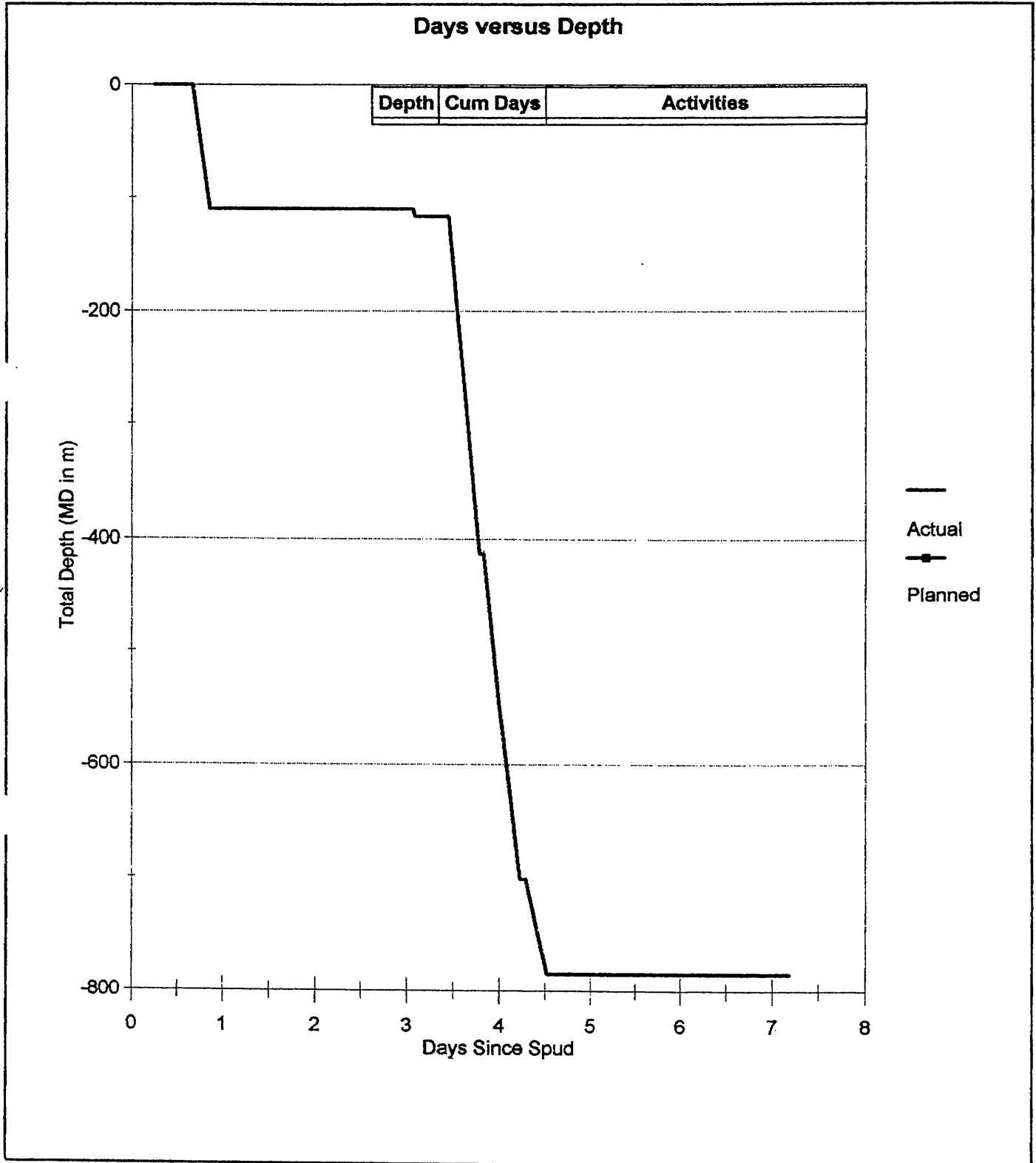
Survey											
Last Tool Type :	sgle shot	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Magnetic Declination :	13.00	110	110	0.50	0	0.0					totco
Survey method :	Min Curvature	399	398	0.15	354	7.0					sgle shot
		687	686	0.30	53	66.0					safe shot

Report Date: 23.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

BROADBILL -1

DEPTH @ 24:00 = 785.0 m after 6.33 days since spud



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Report Date: 24.01.98

FROM : Westman/Roots  
TO : Lanzer/Searles

BROADBILL -1

<b>Well Data</b>		DEPTH (m RT) :	1,070	CUR. HOLE SIZE (") :	8.50	DAILY COST \$ :	
DRILL CO. :	SANTA FE	PROGRESS (m) :	285	CSG OD (") :	9.63	CUM COST \$ :	\$2,473,328
RIG :	PARAMESWARA	DAYS FROM SPUD :	7.33	SHOE TVD (m RT) :	779	AFE COST \$ :	
MUD CO. :	BAROID	DAYS +/- CURVE :		LEAK-OFF EMW(ppg) :	0.00	AFE BASIS :	
RT ABOVE MSL (m) :	30.7	CURRENT OP @ 0400 : Partial returns; Re-establish returns and clean hole. raise mud weight to 9.2+ whilst drilling ahead					
WATER DEPTH @MSL (m) :	21.7	PLANNED OP. : Drill 8.5" hole					
RT TO SEABED (m) :	52.4						

<b>Summary of period 00:00 to 24:00 hrs:</b>		<b>Formation Tops - This report only</b>	
Drill 8.5" hole, Wiper trip.		FORMATION	TOP(mBRT)

ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 24.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	TD	LDP	00:00	02:00	2.00	785	Continue to lay down excess 8" DC & Stabilisers
8	PD	HT	02:00	05:30	3.50	785	Pick up 8.5" Drilling assembly
8	PD	TI	05:30	08:00	2.50	785	P/u 50 jts of drill pipe.
8	PD	TI	08:00	08:30	.50	785	POOH w/ 11 stds drill pipe. Stand in derrick.
8	PD	TI	08:30	10:15	1.75	785	RIH w/ 34 jts drill pipe.
8	PD	RW	10:15	11:15	1.00	785	Tag cmt at 745m. Drill out cmt, float, and shoe track to 775m.
8	PD	CIC	11:15	12:00	.75	785	Pump 100 bbl sweep of old mud. Displace hole w/ KCL/PHPA mud.
8	PD	D	12:00	12:15	.25	788	Drill Shoe, Clean rathole & Drill new formation F/778 to 788mt
8	PD	CIR	12:15	12:45	.50	788	Circulate prior to FIT
8	PD	LOT	12:45	13:15	.50	788	Perform FIT @ 788mt w/ 8.8 ppg, Leak off @ 564 psi, EMW : 13 ppg
8	PD	D	13:15	24:00	10.75	1,070	Drill 8.5" hole f/788 to 1070 mt

ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 25.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PD	D	00:00	01:15	1.25	1,095	Continue to drill 8.5" hole f/ 1070 to 1095 mt
8	PD	CIR	01:15	01:30	.25	1,095	Circulate bottoms up
8	PD	S	01:30	01:45	.25	1,095	Drop MSS survey & pump slug
8	PD	WT	01:45	03:30	1.75	1,095	Pull back to shoe to recover survey: 30/50k over pull f/ 1079 to 1008 mt, 75k over pull f/1008 to 979 mt, work thru came good. 30/40k f/ 979 to 893, no drag f/ 893 to shoe.
8	PD	S	03:30	04:00	.50	1,095	Retrieve survey @ shoe: inclination 2.25 deg, azimuth 32
8	PD	RS	04:00	05:00	1.00	1,095	Service TDS & change pipe handler dies
8	PD	WT	05:00	05:45	.75	1,095	RIH to 1095, No drag
8	TD	WT	05:45	06:00	.25	1,095	Attempt to wash last stand to bottom, f/ 1065 to 1095 mt, Hole packing off, Zero to partial returns, work pipe w/ 150 rpm, reduced pump rate 200 gpm f/ 1065 to 1075, Establish partial returns.

ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 24.01.98

<b>Mud Properties</b>		MUD COST FOR TODAY: \$7,160		CUMULATIVE MUD COST TO DATE: \$63,496					
<b>Type :</b>	KCL/Ezy Mud/Poly	VISCOSITY( sec / qt) :	40	API FLUID LOSS (cm3/30min)	4	Cl - (ppm) :	23,000	SOLIDS (%vol) :	3.2
<b>FROM :</b>	FL	PV (cpe) :	14	API FILTER CAKE (32nds inch)	1	K+ (ppm) :	0	H2O (%vol) :	95.5
<b>TIME :</b>	22:30	YP (lb/100sq.ft)	22	HTHP FLUID LOSS (cm3/30min)	11	HARD/Ca (ppm) :	225	OIL (%vol) :	0
<b>WEIGHT (ppg) :</b>	9.10	GEL 10s/10m/30m (lb/100sqft) :	4 7 11	HTHP FILTER CAKE (32nds inch)	2	MBT (ppb eq) :	.2	SAND :	.5
<b>TEMP (C) :</b>	40	FANN 3/6/100	4 6 20			PM:	.3	PH :	9.2
						PF:	.1	PHPA :	11.0

Report Date: 24.01.98

FROM : Westman/Roots  
TO : Lanzer/Searles

BROADBILL -1

<b>Bit Data for Bit # 4</b>			IADC # 4 4 7	<b>Wear</b>								
SIZE ("):	8.50											
MANUFACTURER:	HU	AVE WOB (k-lbs):	15	<b>NOZZLES</b>				Drilled over the last 24 hrs				
TYPE:	ATMGT	AVE RPM:	130	2 X16	FOOTAGE (m):				317			
SERIAL #:	L8418D65	FLOW (gpm):	500	1 X14	ON BOTTOM HRS:				9.0			
DEPTH IN (m RT):	785	PUMP PRESS. (psi):	1,240	X	IADC DRILL. HRS:				12.5			
DEPTH OUT (m RT):		HSI (tp/sq):	5	X	ROP (m/hr):				25.4			
					Calculated over the bit run				CUM. FOOTAGE (m): 317			
					CUM. ON BOT. HRS:				9.0			
					CUM. IADC DRILL HRS:				12.5			
					ROP (m/hr):				25.4			

<b>BHA #4</b>		<b>Length (m) :258.9</b>		DC(1) A.V. (mpm):	0.0	HRS ON JARS:	13.5
HRS ON MOTOR:		STRING WT(k-lbs):	150	TRQE MAX (amps):	250	DC(2) A.V. (mpm):	0.0
WT BW JAR(k-lbs):	23	PICK UP WT(k-lbs):	155	TRQE ON (amps):	220	HWDP A.V. (mpm):	0.0
BHA WT(k-lbs):	42	SLK OFF WT(k-lbs):	150	TRQE OFF (amps):	200	D.P. A.V. (mpm):	0.0
<b>BHA DESCRIPTION:</b>				Bit, NB Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DC, HWDP			

<b>Anchor Tension (klps)</b>		A1:	A2:	A3:	A4:	A5:		
		A6:	A7:	A8:	A9:	A10:		
<b>Workboats</b>	Location:	Fuel (kltr)	Barite (sx)	D/wtr (bbl)	P/wtr (bbl)	Cmt (sx)	Bent (sx)	Hell (kltr)
Pacific Command	Rig							
<b>Weather &amp; Rig data @ 24:00 hrs</b>								VDL (klps 5,920.0)
WIND SP. (kts): 12.0				VISIB.(nm): good		RIS.TENS:		
WIND DIR (deg): 110				CEILING (m):		HEAVE (m):		
PRES.(mbars): 1010				WAVES (m): .5		ROLL (deg):		
AIR TEMP (C):				SWELL (m): 1.0		PITCH (deg):		
<b>COMMENTS:</b> Helicopter Movements:0 on & 3 off P/Commander:Standby								

<b>Bulk Stocks</b>	DRILL WATER (bbl):	3,924.0	FUEL ( kltr):	1,939.0	GEL (sx):	882	HELI-FUEL (kltr):	0.0
	POT WATER (bbl):	792.0	BARITE (sx):	1,851	CEMENT (sx):	1,524		

<b>Drills, Permits &amp; Inspections</b>					
DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	25-1-98	BOP TEST	23-1-98	LTI	Survey
FIRE	17.01.9	NEXT TEST DUE DATE	06-2-98	MTI	
PIT DRILL	24-1-98	RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	136	#PTW Safety Meeting	

<b>Pump Data - last 24 hrs</b>							<b>Slow Pump Data</b>			
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T	6.50	50	100	250	1240	40	290	950	9.1
2	Ideco - T	6.50	50	100	250	1240	50	430	950	9.1

<b>Solids Data</b>			sand	silt	clean
MESH 1	150	HRS RUN	0.0	13.0	0.0
MESH 2	150	DISCARD RATE (gpm)	0.0	0.0	0.0
MESH 3	80	DISCARD WT (ppg)	0.00	13.50	0.00
		RETURN WT (ppg)	0.00	0.00	0.00

Report Date: 24.01.98

FROM : Westman/Roots  
TO : Lanzer/Searles

BROADBILL -1

Casing					
CSG OD(")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)	
30.00			106	106	
9.63			779	779	
TYPE	LNGTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.4	28.0		X52	SF60
Shoe Jt	12.4	28.0		X52	SF60
Casing Jt #2	11.8	28.0		X-52	SF60
Casing Jt #2	11.8	28.0		X-52	SF60
Casing Jt #3	11.6	28.0		X-52	SF60
Casing Jt #3	11.6	28.0		X-52	SF60
Casing Jt #4	9.3	28.0		X-52	SF60
Casing Jt #4	9.3	28.0		X-52	SF60
Casing Jt #5 (MLS)	12.1	28.0		X-52	SF60
Casing Jt #5 (MLS)	12.1	28.0		X-52	SF60
Casing Jt #6	11.6	28.0		X-52	SF60
Casing Jt #6	11.6	28.0		X-52	SF60
Casing Jt #7	11.9	28.0		X-52	SF60
Casing Jt #7	11.9	28.0		X-52	SF60
Casing Jt #8	11.5	28.0		X-52	SF60
Casing Jt #8	11.5	28.0		X-52	SF60
30"x 20" A sectic	1.4	21.0			21-1/4"2k
30"x 20" A sectic	1.4	21.0			21-1/4"2k
RKB to A Section	12.4				
to A Section	12.4				
mp	6.0	8.7	47.0	L-80	LTC
Scump	6.0	8.7	47.0	L-80	LTC
Top of "B" Sectic	.7				
Top of "B" Sectic	.7				

Personnel : on Site = 71

JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisor	Westman/Root	RBT	2
Geologist	Patton	Amity	1
OIM	Reece	Santa Fe	1
Toolpushers	Walker/Wikle	Santa Fe	2
Mud Engineer	Doust	Barold	1
Cementer	Donlon	Hlbtm	1
Well Head	Chain	Kvaerner	1
Mud Loggers		HML	4
Electric Line		Schlum	4
Rig Crews		Santa Fe	45
Sub Contractors		Santa Fe	
Catering		P&O	8
Managing Dired	Allchurch	Amity	1

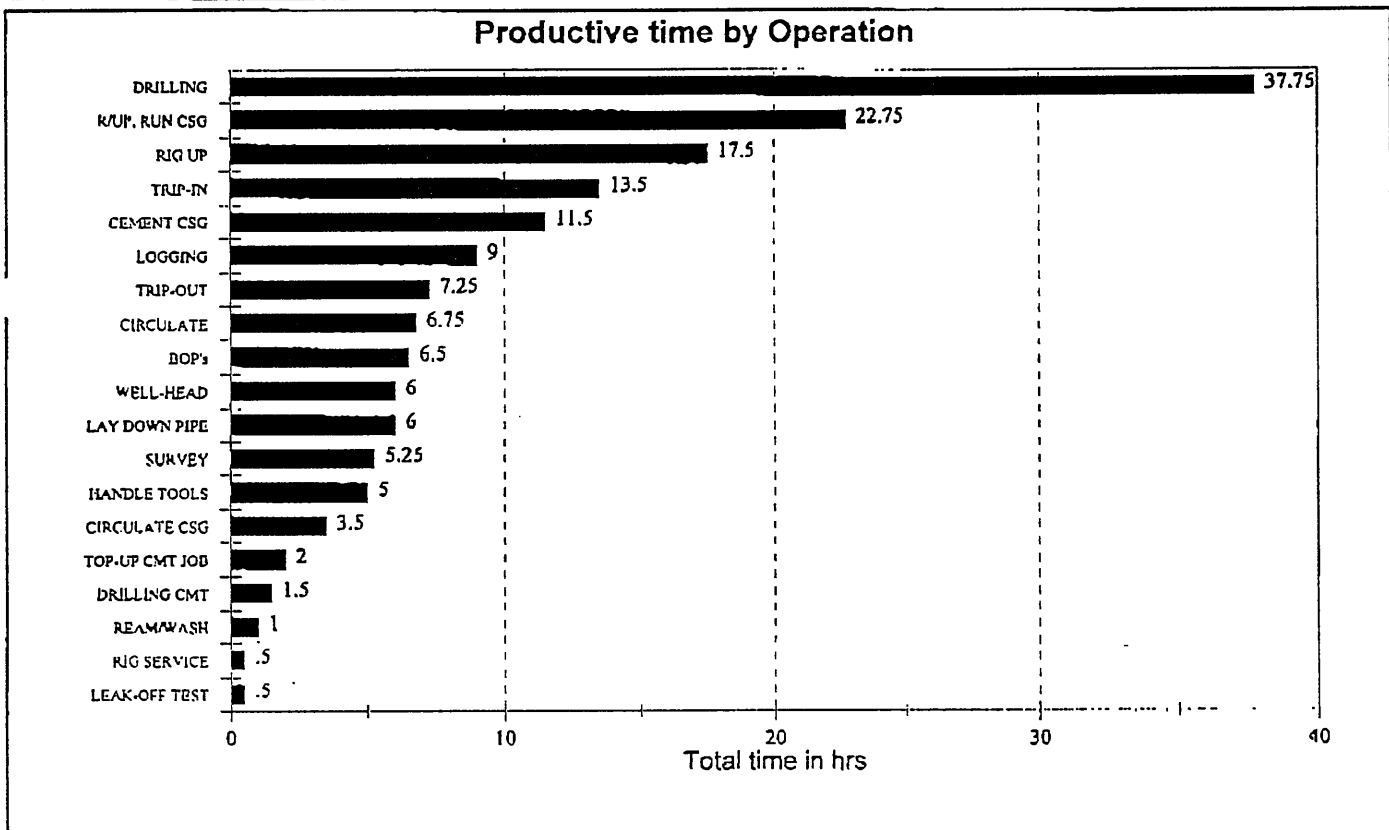
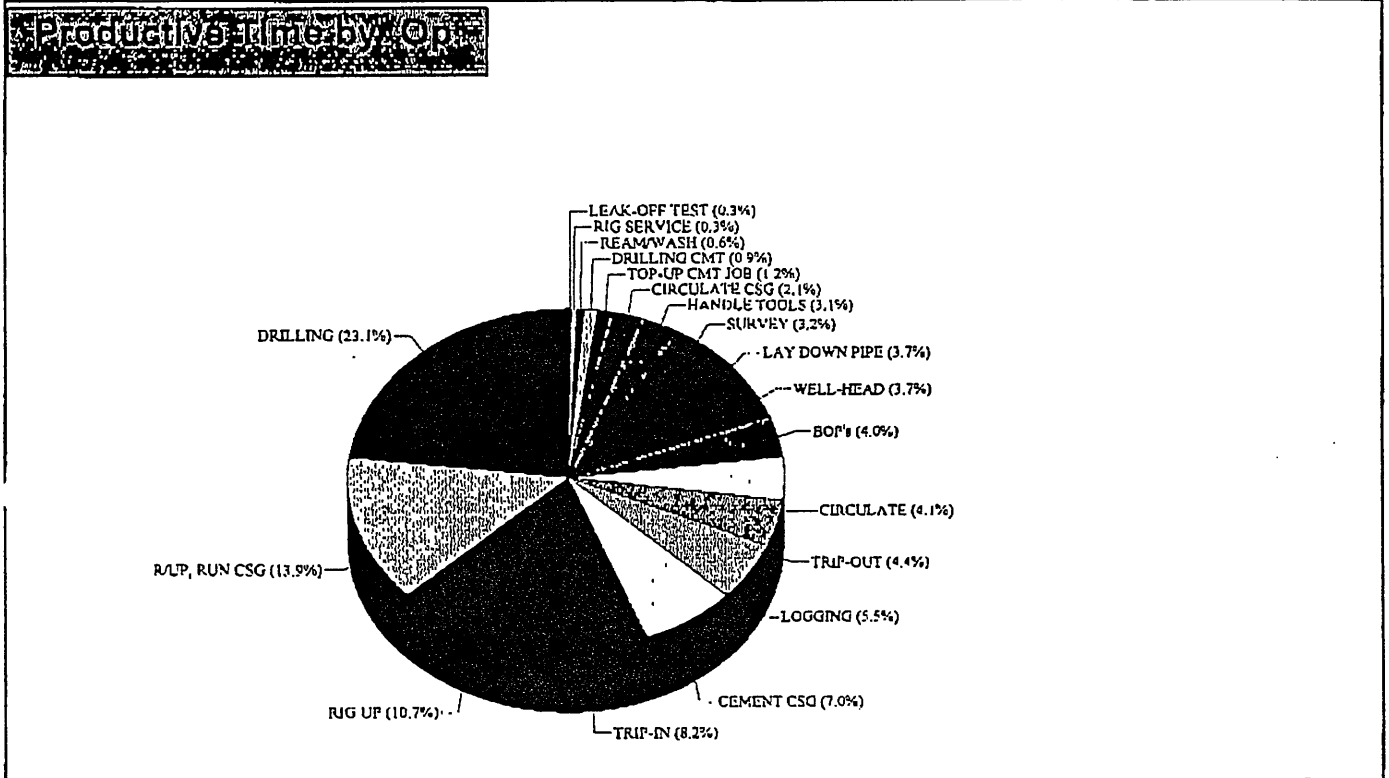
Key	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Last Tool Type : MSS	110	110	0.50	0	0.0					totco
Magnetic Declination : 13.00	399	398	0.15	354	7.0					ngle shot
Survey method : Min Curvature	687	686	0.30	53	66.0					ngle shot
	780	780	0.25	320	333.0					MMS
	1,074	1,074	2.25	32	45.0					MSS

Report Date: 24.01.98

FROM: Westman/Roots  
TO: Lanzer/Searles

BROADBILL -1

Total move time (hrs)	0.00	Total prod. time since spud (hrs)	163.75
Total time on well excluding move (hrs)	172.50	Total Trouble time since spud (hrs)	8.75
		% Trouble time	5.07



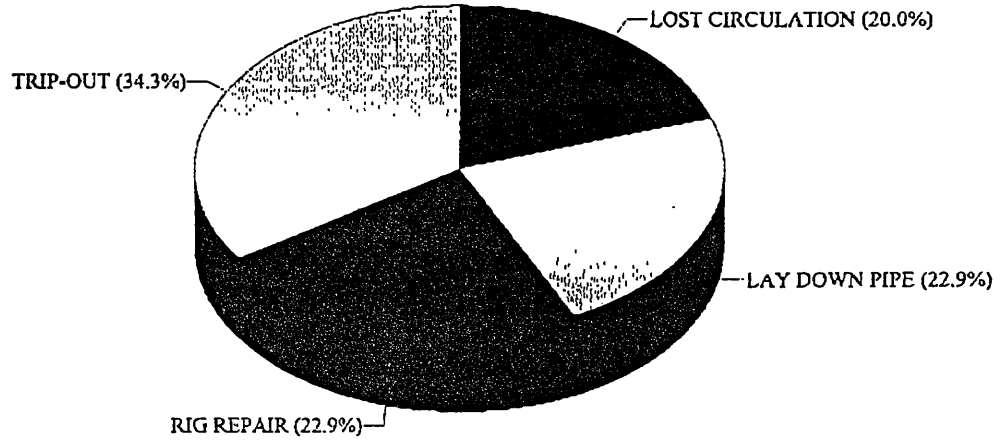


Report Date: 24.01.98

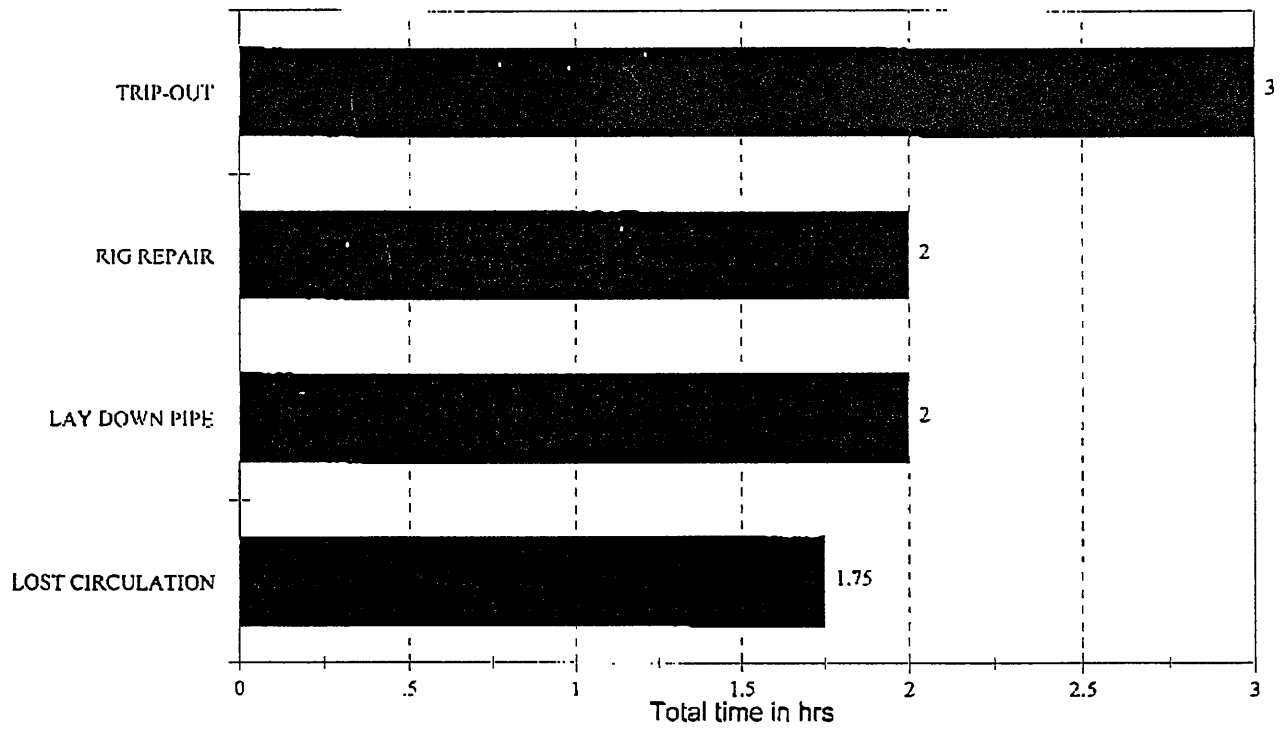
FROM : Westman/Roots  
TO : Lanzer/Searles

BROADBILL -1

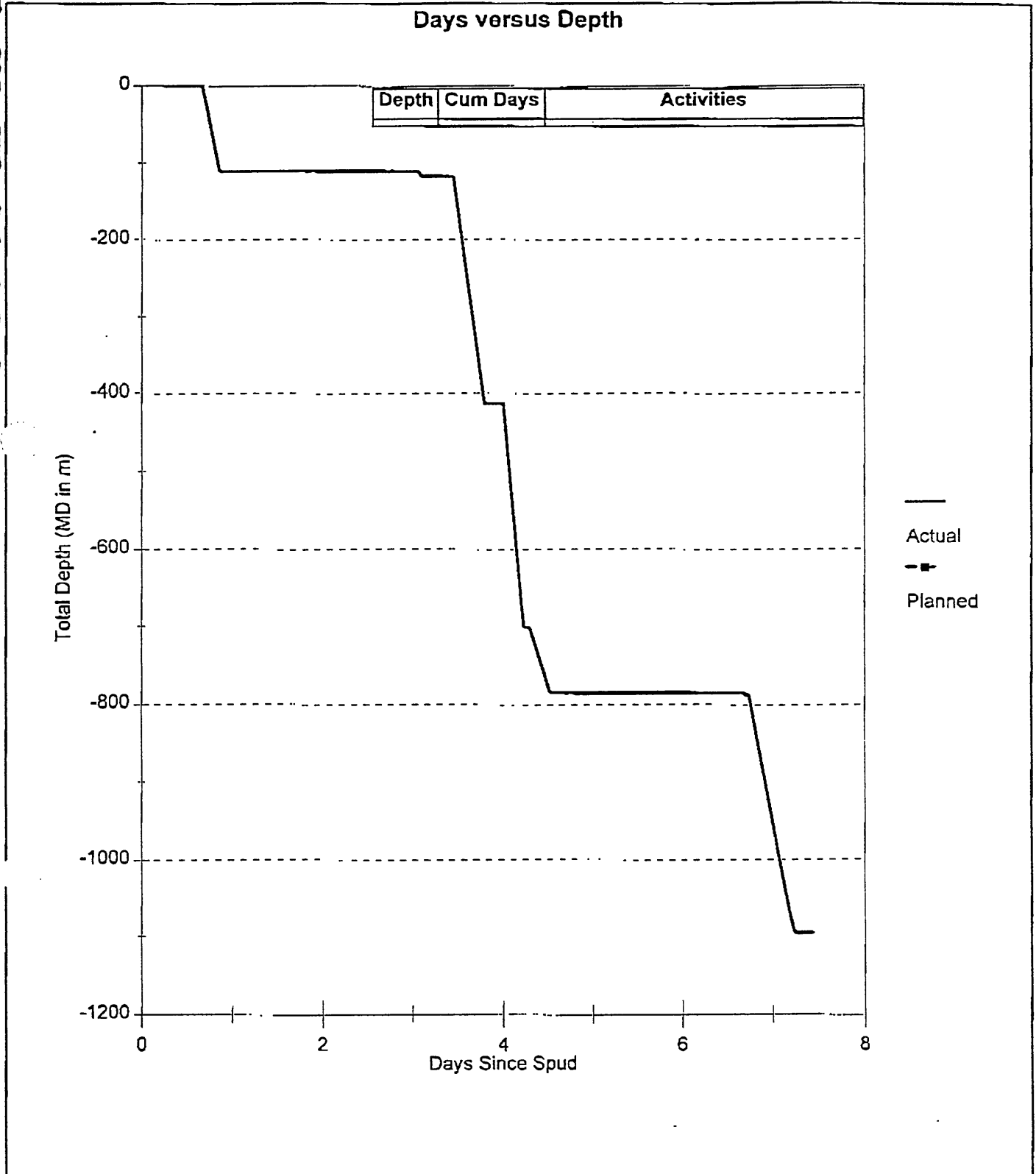
Trouble Time by Op.



NPT by Operation



DEPTH @ 24:00 = 1,070.0 m after 7.33 days since spud



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**AMITY OIL NL**

**DAILY DRILLING REPORT # 10**

Report Date: 25.01.98

FROM: Westman/Roots  
TO: Lanzer/Searles

**BROADBILL -1**

<b>Well Data</b>		DEPTH (m RT): 1,435	CUR. HOLE SIZE ("): 8.50	DAILY COST \$:
DRILL CO.:	SANTA FE	PROGRESS (m): 366	CSG OD (") : 6.63	CUM COST \$: 50
RIG:	PARAMBWARA	DAYS FROM SPUD: 8.33	SHOE TVD (m RT): 779	AFE COST \$:
MUD CO.:	BAROID	DAYS +/- CURVE:	LEAK OFF BMW(ppg) 13.00	AFE BASIS:
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400 : Back ream out of hole. Hole packing off, Losses to hole @ 06:00 hrs = 80 bbl		
WATER DEPTH @ MSL (m):	21.7	PLANNED OP.: Pull to shoe, Retrieve survey, Mixing reserve mud & weighted HI-Vic sweep, RIH, PUGH to Log		
RT TO SEABED (m):	52.4			

Summary of period 00:00 to 24:00 hrs: Drill 8.5" hole	<b>Formation Tops - This report only</b>
	FORMATION TOP(mBRT)

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 25.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PD	D	00:00	01:15	1.26	1,095	Continue to drill 8.5" hole f/ 1070 to 1095 mt
8	PD	CIR	01:15	01:30	.25	1,095	Circulate bottoms up
8	PD	S	01:30	01:45	.25	1,095	Drop MSS survey & pump slug
8	PD	WT	01:45	03:30	1.75	1,095	Pull back to shoe to recover survey: 30/50k over pull f/ 1079 to 1008 mt, /5k over pull f/1008 to 979 mt, work thru came good, 30/40k f/ 079 to 893, no drag f/ 893 to shoe.
8	PD	S	03:30	04:00	.50	1,095	Retrieve survey @ shoe: inclination 2.25 deg, azimuth 32 deg
8	PD	RS	04:00	05:00	1.00	1,095	Service TDS & change pipe handler dies
8	PD	WT	05:00	05:45	.75	1,095	RIH to 1095, No drag
8	TD	WT	05:45	07:00	1.25	1,095	Attempt to wash last stand to bottom, f/ 1066 to 1095 mt, Hole packing off, Zero to partial returns, work pipe w/ 150 rpm, reduced pump rate 200 gpm f/ 1065 to 1075, Establish partial returns. Lost 45 bbls. Regained full returns. Coal over shakers
8	PD	D	07:00	24:00	17.00	1,005	Drill 8-1/2" Hole f/ 1095m - 1335 mt

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 26.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PD	D	00:00	02:00	2.00	1,345	Continue to drill 8.5" hole f/ 1335 to 1345 mt TD
8	PD	CIR	02:00	02:30	.50	1,345	Circulate bottoms up
8	PD	S	02:30	03:00	.50	1,345	Drop MSS survey, Flow check, Pump slug
8	TD	WT	03:00	06:00	3.00	1,345	PUGH, 50k over pull (not free) Attempt to pump out of hole 50k o/pull & packing off, Back ream out of hole, Slow progress f/ 1288 to 1248 mt with hole packing off, Partial to zero returns, Losses to hole = 80 bbl, Depth @ 06:00 1153 mt

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 25.01.98**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
Port burner boom, aft stay wire came loose. Bulldog clips apparently not tight, as cable slipped through clip. Bumer boom swung along side of rig at an angle of approximately 25 deg. Arrested by guy wire from King post to boom, contacting hand rail of port leg, jacking gear work platform. No apparent damage, further investigation to follow when weather abates. at present Boom secured.	Change out Guy wires to .025 (min) presently .430 (approx)

# AMITY OIL NL

## DAILY DRILLING REPORT # 10

Report Date: 25.01.98

FROM: Westman/Roots  
TO: Lanza/Searles

BROADBILL -1

Mud Properties		MUD COST FOR 1 DAY: \$7,426				CUMULATIVE MUD COST TO DATE: \$70,921			
Type:	KCL/Ezy Mud/Poly	VISCOSITY (sec / qt):	42	API FLUID LOSS (cm <sup>3</sup> /30min)	4	Cl- (ppm):	22,000	SOLIDS (%vol):	4.3
FROM:	FL	PV (cps):	14	API FILTER CAKE (32nds inch)	1	K+ (ppm):	0	H <sub>2</sub> O (%vol):	94.4
TIME:	22:00	YP (lb/100sq.ft):	23	HTHP FLUID LOSS (cm <sup>3</sup> /30min)	11	HARD/G <sub>2</sub> (ppm):	300	OIL (%vol):	0
WEIGHT (ppg):	8.30	GEL 10s/10mm/30m (lb/100sq.ft):	5 8 1	HTHP FILTER CAKE (32nds inch)	2	MBT (ppb eq):	.8	SAND:	.25
TEMP (C):	42	FANN 3/8/100	4 8 21			PM:	.2	PH:	8.5
						PF:	.0	PHPA:	1.0

Bit Data for Bit # 4		IADC # 4 4 7			Wear								
SIZE ("):	5.50	AVE WOB (k-lbs):	20	NOZZLES									
MANUFACTURER:	HU	AVE RPM:	130	2 x 15	Drilled over the last 24 hrs				Calculated over the bit run				
TYPE:	ATMGT	FLOW (gpm):	500	1 x 14	FOOTAGE (m):	250	CUM.FOOTAGE (m):	567	ON BOTTOM HRS:	16.3	CUM. ON BOT. HRS:	26.3	
SERIAL #:	L8418D65	PUMP PRESS. (psi):	1,375	x	IADC DRILL. HRS:	17.0	CUM.IADC DRILL HRS:	29.5	ROP (m/hr):	14.7	ROP (m/hr):	19.2	
DEPTH IN (m RT):	795	H <sub>2</sub> O (mp/sq):	8	x									
DEPTH OUT (m RT):													

BHA # 4 Length (m) : 266.9		DC(1) A.V. (mpm): 0.0 HRS ON JARS - 30.5							
HRS ON MOTOR:		STRING WT(k-lbs):	172	TRQE MAX (amps):	250	DC(2) A.V. (mpm):	0.0	S/N JARS:	DAH 103309
WT BW JAR(k-lbs):	23	PICK UP WT(k-lbs):	176	TRQE ON (amps):	200	HWDF A.V. (mpm):	0.0	HRS ON S/FABS:	29.5
BHA WT(k-lbs):	42	BLK OFF WT(k-lbs):	170	TRQE OFF (amps):	190	D.P. A.V. (mpm):	0.0	S/N STABS: D-9-89-13, 4811	
BHA DESCRIPTION: BR, N8 Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DO, HWDF									

Anchor Tension (kips)	A1:	A2:	A3:	A4:	A5:
	A6:	A7:	A8:	A9:	A10:

Workboats	Location	Fuel (ktr)	Batts (ex)	D/Wr (bb)	P/Wr (bb)	Cmt (ex)	Bent (ex)	Hell (ktr)	Weather & Rig data @ 24:00 hrs					
Pacific Command Rig									WIND SP (kts):	35.0	VISIB.(nm):	Fair	VDL (kps):	5,699.0
									WIND DIR (deg):	110	CEILING (m):	1,500	RIS.TENS:	
									PRES.(mbars):	1010	WAVES (m):	2.0	HEAVE (m):	
									AIR TEMP (C):	16.0	SWELL (m):	3.0	ROLL (deg):	
													PITCH (deg):	
COMMENTS: Helicopter Movements: 7 on & 3 off P/Commander:Standby														

Bulk Stocks	DRILL WATER (bb)	3,855.0	FUEL (ktr):	1,896.0	GEL (ex):	882	HELI-FUEL (ktr):	0.0
	POT WATER (bb):	792.0	BARITE (ex):	1,674	CEMENT (ex):	1,524		

Drills, Permits & Inspections:						
DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS	
TRIP DRILL	25-1-98	BOP TEST	23-1-98	LTI		
FIRE	17.01.98	NEXT TEST DUE DATE	06-2-98	MTI		
PIT DRILL	24-1-98	RIG INSPECTION	1-1-98	JSA	Survey	
INCIDENT		DAYS SINCE LTA	137	#PTW		
				Safety Meeting		

Pump Data										
Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T1	6.50	50	100	250	1375	40	240	1181	9.3
2	Ideco - T1	6.50	50	100	250	1375	50	380	1181	9.3

Solids Data		sand silt clean			
MESH		HRS RUN	0.0	0.0	0.0
MESH 1	0	DISCARD RATE (gpm)	0.0	0.0	0.0
MESH 2	0	DISCARD WT (pqr)	0.00	0.00	0.00
MESH 3	0	RETURN WT (ppg)	0.00	0.00	0.00

# AMITY OIL NL

DAILY DRILLING REPORT # 10

Report Date: 25.01.98

FROM: Westman/Roots  
TO: Lenzen/Searles

BROADBILL -1

Casing					
CSG CD (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (MSRT)	
8.63	13.00		778	778	
TYPE	LNQTH (m)	CSG ID (")	WT lb/ft	GRD	THREAD
Shoe Jt	12.0	8.7	47.0	L-80	LTC
Casing Jt #2	12.0	8.7	47.0	L-80	LTC
Floar Jt	11.9	8.7	47.0	L-80	LTC
57 Jt csg	881.9	8.7	47.0	L-80	LTC
Pup (MSL)	8.1	8.7	47.0	L-80	LTC
Pup (MSL)	6.8	8.7	47.0	L-80	LTC
1 Jt csg	11.9	8.7	47.0	L-80	LTC
Pup	3.0	8.7	47.0	L-80	LTC
Pup	3.8	8.7	47.0	L-80	LTC
1 Jt csg	12.0	8.7	47.0	L-80	LTC
Stamp	8.0	8.7	47.0	L-80	LTC
Top of "B" Section	.7				

Personnel : on Site = 78

JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisor	Westman/Root	RBT	2
Geologist	Parson	Amity	1
GIM	Reece	Santa Fe	1
Toolpushers	Waiker/Wilkie	Santa Fe	2
Mud Engineer	Doust	Barold	1
Cementar	Danton/Gelzer	Hibin	2
Well Head	Chain	Kvemer	1
Mud Loggers		HML	4
Electric Line		Schlum	6
Rig Crews		Santa Fe	47
Sub Contractors		Santa Fe	
Catering		P&O	8

Survey	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Last Tool Type :										
Magnetic Declination :										
Survey method :										
	110	110	0.50	0	0.0					brico
	398	398	0.18	354	7.0					sole shot
	687	688	0.30	53	68.0					sole shot
	780	780	0.28	320	333.0					MMS
	1,074	1,074	2.25	32	45.0					MSS

# AMITY OIL NL

## DAILY DRILLING REPORT # 11

### BROADBILL -1

Report Date: 26.01.98

FROM : Westman/Roots  
TO : Lanzer/Searles

**Well Data**

DRILL CO. : SANTA FE  
RIG : PARAMESWARA  
MUD CO: BAROID  
RT ABOVE MSL (m) : 30.7  
WATER DEPTH @MSL (m) : 21.7  
RT TO SEABED (m) : 52.4

DEPTH (m RT) : 1,345  
PROGRESS (m): 0  
DAYS FROM SPUD : 9.33  
DAYS +/- CURVE:   
CUR. HOLE SIZE (") :  
CSG OD (") : 9.63  
SHOE TVD (m RT): 779  
LEAK-OFF EMW(ppg) 0.00

DAILY COST \$ :  
CUM COST \$ : \$2,473,328  
AFE COST \$ :  
AFE BASIS : UNKNOWN

CURRENT OP @ 0400 : Wiper trip  
PLANNED OP. : POOH to Log, P & A

**Summary of period 00:00 to 24:00 hrs:**

Wiper trip, POOH, Attempt to Log

**Formation Tops - This report only**

FORMATION	TOP(mBRT)
Strezlecki	1,340

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 26.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PD	D	00:00	02:00	2.00	1,345	Continue to drill 8.5" hole f/ 1335 to 1345 mt TD
8	PD	CIR	02:00	02:30	.50	1,345	Circulate bottoms up
8	PD	S	02:30	03:00	.50	1,345	Drop MSS survey, Flow check, Pump slug
8	TD	WT	03:00	09:30	6.50	1,345	POOH, 50k over pull (not free) Attempt to pump out of hole 50k o/pull & packing off, Back ream out of hole, Slow progress f/ 1268 to 1249 mt with hole packing off, Partial to zero returns, Losses to hole = 80 bbl.
8	PD	CIC	09:30	10:00	.50	1,345	Circulate hole clean from shoe.
8	PD	S	10:00	10:30	.50	1,345	Retrieve survey.
8	PD	RS	10:30	11:00	.50	1,345	Service TDS.
8	PD	TI	11:00	12:30	1.50	1,345	RIH to bottom. Wash and ream 1018m - 1124m,
8	PD	CIR	12:30	14:30	2.00	1,345	Sweep hole clean w/ 70 bbl Hi-Vis, Displace hole with Hi-Vis
8	PD	TO	14:30	15:30	1.00	1,345	POOH to shoe, No problems
8	PD	CIR	15:30	16:00	.50	1,345	Circulate hole clean, Pump slug
8	PD	TO	16:00	18:00	2.00	1,345	Continue to POOH
8	PE	LOG	18:00	24:00	6.00	1,345	Rig up Schlumberger Log #1: BHC-LDL-CNL-DLL-MSFL-GR-AMS-SP, Log in hole @ 20:00 hrs, Encountered problems passing: 860 to 897 mt, 960 mt, 1004 to 1030 mt, Unable to pass 1030 mt. POOH & Rig down Logging tools

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 27.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PE	LOG	00:00	00:30	.50	1,345	Continue to rig down Schlumberger
8	TE	WT	00:30	03:00	2.50	1,345	Make up bit (RR #4) & RIH to 880 mt
8	TE	WT	03:00	06:00	3.00	1,345	Work through Ledges @ 880 & 982 mt, Work through tight section f/ 1027 to 1036 mt, Came good, Continue to RIH no

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 26.01.98**

Mud Properties	MUD COST FOR TODAY: \$6,410	CUMULATIVE MUD COST TO DATE: \$77,332
Type : KCL/Ezy Mud/Poly	VISCOSITY (sec / qt) : 44 PV (cps) : 16 YP (lb/100sq.ft) : 22	API FLUID LOSS (cm3/30min) : 4 API FILTER CAKE (32nds inch) : 1 HTHP FLUID LOSS (cm3/30min) : 11 HTHP FILTER CAKE (32nds inch) : 2
FROM : FL TIME : 14:00 WEIGHT (ppg) : 9.40 TEMP (C) : 42	GEL 10s/10m/30m (lb/100sqft) : 6 9 1 FANN 3/6/100 : 5 7 23	Cl - (ppm) : 22,000 K+ (ppm) : 0 HARD/Ca (ppm) : 300 MBT (ppb eq) : .6 PM: .2 PF: .0
		SOLIDS (%vol) : 4.3 H2O (%vol) : 94.4 OIL (%vol) : 0 SAND : .5 PH : 8.5 PHPA : 1.0

Bit Data for Bit # 4	IADC # 4 4 7	Wear	NOZZLES
SIZE (") : 8.50 MANUFACTURER : OT TYPE : ATMGT SERIAL # : L8418D65 DEPTH IN (m RT) : 785 DEPTH OUT (m RT) : 1345	AVE WOB (k-lbs) : 2.0 AVE RPM : 130 FLOW (gpm) : 500 PUMP PRESS. (psi) : 1,375 HSI (hp/sq) : 6	1 2 D FC L A B E G 1 O2 R ID	2 X16 1 X14 X X X
		Drilled over the last 24 hrs	Calculated over the bit run
		FOOTAGE (m) : 10 ON BOTTOM HRS : 1.8 IADC DRILL. HRS : 2.0 ROP (m/hr) : 5.0	CUM.FOOTAGE (m) : 577 CUM. ON BOT. HRS : 27.1 CUM.IADC DRILL HRS: 31.5 ROP (m/hr): 18.3

# AMITY OIL NL

## DAILY DRILLING REPORT # 11

Report Date: 26.01.98

FROM: Westman/Roots  
TO: Lanzer/Searles

**BROADBILL -1**

<b>BHA #4</b>	<b>Length (m) :258.9</b>	DC(1) A.V. (mpm): 0.0	HRS ON JARS : 44.0
HRS ON MOTOR :	STRING WT(k-lbs) : 172	TRQE MAX (amps): 250	DC(2) A.V. (mpm): 0.0
WT BW JAR(k-lbs): 23	PICK UP WT(k-lbs) : 175	TRQE ON (amps): 200	S/N JARS : DAH 103309
BHA WT(k-lbs) : 42	SLK OFF WT(k-lbs) : 170	TRQE OFF (amps): 190	HWDP A.V. (mpm): 0.0
		D.P. A.V. (mpm): 0.0	HRS ON STABS: 31.5
			S/N STABS :D-9-89-13, 4811
<b>BHA DESCRIPTION:</b> Bit, NB Stab, NMDC, Stab, DC, Stab, 11 DC, Jar, DC, HWDP			

<b>Anchor Tension (kips)</b>	A1 :	A2 :	A3 :	A4 :	A5 :
	A6 :	A7 :	A8 :	A9 :	A10 :

<b>Workboats</b>	Location.	Fuel (kltr)	Barite (sx)	D/wtr (bbl)	P/wtr (bbl)	Cmt (sx)	Bent (sx)	Heli (kltr)	<b>Weather &amp; Rig data @ 24:00 hr</b>	VDL (kips 5,647.0)
Pacific Command	W/Pool To Rig								WIND SP. (kte) : 20.0	RIS.TENS:
									WIND DIR (deg) : 110	HEAVE (m) :
									PRES.(mbars): 1010	ROLL (deg) :
									AIR TEMP (C) : 17.0	PITCH (deg) :
									VISIB.(nm) : O/Cast	
									CEILING (m) : 1,500	
									WAVES (m) : 1.5	
									SWELL (m) : 2.0	

**COMMENTS:** Helicopter Movements: 9 on & 13 off P/Commander:Standby @ Rig 03:00 hrs

<b>Bulk Stocks</b>	DRILL WATER (bbl) : 3,635.0	FUEL ( kltr) : 1,846.0	GEL (sx) : 882	HELI-FUEL (kltr) : 0.0
	POT WATER (bbl) : 797.0	BARITE (sx) : 1,554	CEMENT (sx) : 1,524	

Drills, Permits & Inspections					
DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	25-1-98	BOP TEST	23-1-98	LTI	Logging
FIRE	17.01.9	NEXT TEST DUE DATE	06-2-98	MTI	
PIT DRILL	24-1-98	RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	137	#PTW Safety Meeting	

Casing					
CSG OD(")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)	
30.00			106	106	
9.63			779	779	
TYPE	LNGLH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.4	28.0		X-52	SF60
Shoe Jt	12.4	28.0		X-52	SF60
Casing Jt #2	11.8	28.0		X-52	SF60
Casing Jt #2	11.8	28.0		X-52	SF60
Casing Jt #3	11.6	28.0		X-52	SF60
Casing Jt #3	11.6	28.0	311.0	X-52	SF60
Casing Jt #4	9.3	28.0	311.0	X-52	SF60
Casing Jt #4	9.3	28.0	311.0	X-52	SF60
Casing Jt #5 (MLS)	12.1	28.0	311.0	X-52	SF60
Casing Jt #5 (MLS)	12.1	28.0	311.0	X-52	SF60
Casing Jt #6	11.6	28.0	311.0	X-52	SF60
Casing Jt #6	11.6	28.0	311.0	X-52	SF60
Casing Jt #7	11.9	28.0	311.0	X-52	SF60
Casing Jt #7	11.9	28.0	311.0	X-52	SF60
Casing Jt #8	11.5	28.0	311.0	X-52	SF60
Casing Jt #8	11.5	28.0	311.0	X-52	SF60
30"x 20" A section	1.4	21.0			21-1/4"2k
30"x 20" A section	1.4	21.0			21-1/4"2k
RKB to A Section	12.4				
RKB to A Section	12.4				
Stump	6.0	8.7	47.0	L-80	LTC
Stump	6.0	8.7	47.0	L-80	LTC
Top of "B" Section	.7				
Top of "B" Section	.7				

Pump Data										
Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNK (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T	6.50	50	100	250	1375	40	240	1181	9.3
2	Ideco - T	6.50	50	100	250	1375	50	360	1181	9.3

Solids Data			sand silt clean		
MESH 1	150	HRS RUN	0.0	0.0	0.0
MESH 2	150	DISCARD RATE (gpm)	0.00	0.00	0.00
MESH 3	80	DISCARD WT (ppg)	0.00	0.00	0.00
		RETURN WT (ppg)	0.00	0.00	0.00

Personnel : on Site =

# AMITY OIL NL

DAILY DRILLING REPORT # 11

Report Date: 26.01.98

FROM: Westman/Roots  
TO: Lanzer/Searles

**BROADBILL -1**

71			
JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisor	Westman/Root	RBT	2
Geologist	Patton	Amity	1
OIM	Reece	Santa Fe	1
Toolpushers	Walker/Wilkie	Santa Fe	2
Mud Engineer	Doust	Barold	1
Cementer	Donlon/Selzer	Hibtn	2
Well Head	Chain	Kvaerner	1
Mud Loggers		HML	4
Electric Line		Schlum	6
Rig Crews		Santa Fe	43
Sub Contractors		Santa Fe	
Catering		P&O	8

Survey		MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	'V' SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Last Tool Type :	MSS										
Magnetic Declination :	13.00										
Survey method :	Min Curvature										
		110	110	0.50	0	0.0					totco
		399	398	0.15	354	7.0					sgle shot
		687	686	0.30	53	66.0					sgle shot
		780	780	0.25	320	333.0					MMS
		1,074	1,074	2.25	32	45.0					MSS
		1,340	1,340	3.30	40	53.0					MSS



# AMITY OIL NL

## DAILY DRILLING REPORT # 12

Report Date: 27.01.98

FROM: Westman/Roos  
TO: Lanzer/Searles

BROADBILL -1

<b>Well Data</b>		DEPTH (m RT): 1,345	CUR. HOLE SIZE (?):	DAILY COST \$:
DRILL CO.:	SANTA FE	PROGRESS (m): 0	C9Q OD (?): 9.83	CUM COST \$: 50
RIG:	PARAMESWARA	DAYS FROM SPUD: 10.33	SHOE TVD (m RT): 779	APE COST \$:
MUD CO.:	BAROID	DAYS +/- CURVE:	LEAK-OFF EMW(ppg) 13.00	APE BASIS: UNKNOWN
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Setting Plug #1		
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Run EZ9V, Set plug #2, Nipple down BOP, Cut casing		
RT TO SEABED (m):	62.4			

<b>Summary of period 00:00 to 24:00 hrs:</b> Wiper trip, Attempt to Log, Lay down excess tubulars, RIH to P & A	<b>Formation Top - This report only</b>
	FORMATION TOP(mBRT)

### ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 27.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PE	LOG	00:00	00:30	.50	1,345	Continue to rig down Schlumberger
8	TE	WT	00:30	03:00	2.50	1,345	Make up bit (RR #4) & RIH to 880 mt
8	TE	WT	03:00	08:15	3.25	1,345	Work through Ledges @ 880 & 982 mt, Work through tight section fr 1027 to 1036 mt, Came good, Continue to RIH no problems
8	TE	CIR	06:15	07:30	1.25	1,345	Circulate hole clean, Displace open hole to HI-Vis mud
8	TE	WT	07:30	11:16	3.76	1,345	POOH (Pump slug at shoe)
8	TE	LOG	11:15	17:30	6.25	1,345	Rig up schlumberger: Log #2; BHC-LDL-CNL-DLL-MSFL-GR-SP, Unable to pass 870 mt, POOH to reconfigure tool (lay out LDL-CNL) RIH with log #3: BHC-DLL-MSFL-GR-SP, Unable to pass 867 mt, POOH & abandon logging program.
8	PA	LDP	17:30	18:30	1.00	1,345	RIH excess DP & lay down same
8	PA	RS	18:30	19:00	.50	1,345	Service TDS
8	PA	LDP	19:00	24:00	5.00	1,345	Lay down Excess BHA

### ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 28.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PA	LDP	00:00	02:30	2.50	1,345	Continue to lay down excess BHA
8	PA	CMP	02:30	06:00	3.50	1,345	Pick up 2.875" tubing, cement stinger & RIH to 930 mt

### ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 27.01.98

<b>Mud Properties</b>		MUD COST FOR TODAY: \$913	CUMULATIVE MUD COST TO DATE: \$78,245		
Type:	KCL/Ezy Mud/Poly	VISCOSITY (sec / qt): 43	API FLUID LOSS (cm <sup>3</sup> /30min): 4	Cl- (ppm): 22,000	SOLIDS (%vol): 5.1
FROM:	FL	PV (cps): 15	API FILTER CAKE (32nds inch): 1	K+ (ppm): 0	H <sub>2</sub> O (%vol): 93.7
TIME:	13:00	YP (lb/100sq.ft): 24	H <sub>2</sub> THP FLUID LOSS (cm <sup>3</sup> /30min): 11	HARD/Ca (ppm): 300	OIL (%vol): 0
WEIGHT (ppg):	9.80	GEL 10s/10m/30m (lb/100sqft): 7 9 1	H <sub>2</sub> THP FILTER CAKE (32nds inch): 2	MBT (ppb eq): .6	SAND: .25
TEMP (C):	0	FANN 3/8/100 8 7 24		PM: .1	PH: 8.0
				PF: .0	PHPA: 1.0

<b>BHA #5 Length (m) :57.9</b>				DC(1) A.V. (mpm): 0.0	HRS ON JARS:
HRB ON MOTOR:	STRING WT(k-lbs):	TRQE MAX (amps):	DC(2) A.V. (mpm): 0.0	S/N JARS:	
WT BW JAR(k-lbs):	PICK UP WT(k-lbs):	TRQE ON (amps):	HWDP A.V. (mpm): 0.0	HRS ON STABS:	
BHA WT(k-lbs):	SLK OFF WT(k-lbs):	TRQE OFF (amps):	D.P. A.V. (mpm): 0.0	S/N STABS:	
BHA DESCRIPTION: 8 ft TBG, XO,					

# AMITY OIL NL

## DAILY DRILLING REPORT # 12

Report Date: 27.01.98

FROM: Westman/Roots  
TO: Lanzer/Bsaries

### BROADBILL -1

<b>Anchor Tension (klps)</b>	A1:	A2:	A3:	A4:	A5:				
	A6:	A7:	A8:	A9:	A10:				
<b>Workboats</b>	Location:	Fuel (ktr)	Barite (ox)	D/wtr (bb)	P/wtr (bb)	Cmt (ox)	Bent (ox)	Hell (ktr)	<b>Weather &amp; Rig data @ 24:00 hrs</b> WIND SP, (kts): 10.0 WIND DIR (deg): 110 PRES.(mbars): 1009 AIR TEMP (C): 18.0 VISIB.(nm): clear CEILING (m): 2,000 WAVES (m): .8 SWELL (m): 1.0 VDL (klps): 5,547.0 RIS.TENS: HEAVE (m): ROLL (deg): PITCH (deg):
Pacific Command	To Bar								
<b>COMMENTS:</b> Helicopter Movements: 1 on & 3 off P/Commander:Departed rig @ 24:00 hrs Bound for Gaelong base									

<b>Bulk Stocks</b>	DRILL WATER (bb): 3,877.0	FUEL <del>BBL</del> : 1,800.0	GEL (ox): 862	HEU-FUEL (ktr): 0.0
	POT WATER (bb): 748.0	BARITE (ox): 1,524	CEMENT (ox): 1,324	

### Drills, Permits & Inspections

DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	28-1-98	BOP TEST	23-1-98	LTI	Lay out BHA
FIRE	17.01.98	NEXT TEST DUE DATE	06-2-98	MTI	
FIT DRILL	24-1-98	RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	138	#FTW Safety Meeting	

### Casing

CSG OD (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (MBRT)
9.63	13.00		778	779

TYPE	LNQTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.0	8.7	47.0	L-80	LTC
Casing Jt #2	12.0	8.7	47.0	L-80	LTC
Float Jt	11.9	8.7	47.0	L-80	LTC
57 Jt csg	881.9	8.7	47.0	L-80	LTC
Pup (MSL)	8.1	8.7	47.0	L-80	LTC
Pup (MSL)	8.6	8.7	47.0	L-80	LTC
1 Jt csg	11.9	8.7	47.0	L-80	LTC
Pup	3.0	8.7	47.0	L-80	LTC
Pup	3.8	8.7	47.0	L-80	LTC
1 Jt csg	12.0	8.7	47.0	L-80	LTC
Stump	6.0	8.7	47.0	L-80	LTC
Top of "B" Section	.7				

### Pump Data

#	TYPE	Pump Data - Last 24 hrs					Slow Pump Data			
		LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T1	8.50	50	100	250	1375	40	240	1181	9.3
2	Ideco - T1	8.50	50	100	250	1375	50	380	1181	9.3

### Solids Data

MESH	LBS	DISCARD RATE (gpm)	DISCARD WT (ppg)	RETURN WT (ppg)	HR8 RUN	sand	silt	clean
					0.0	0.0	0.0	
MESH 1	160		0.00	0.00				
MESH 2	160		0.00	0.00				
MESH 3	80		0.00	0.00				

### Personnel : on Site = 69

JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisors	Westman/Root	RBT	2
Geologist	Patton	Amity	1
OIM	Roece	Santa Fe	1
Toolpushers	Walker/Willis	Santa Fe	2
Mud Engineer	Douat	Baroid	1
Cementers	Denlon	Hibon	1
Mud Loggers		HML	2
Electric Line		Schlum	7
Rig Crews		Santa Fe	44
Sub Contractors		Santa Fe	
Catering		P&O	8

### Survey

Last Tool Type :	MSS	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	EW (m)	TOOL TYPE
Magnetic Declination :	13.00	110	110	0.50	0	0.0					tacco
Survey method :	Min Curvature	399	398	0.15	354	7.0					agle shot
		667	668	0.30	63	66.0					agle shot
		780	780	0.25	320	333.0					MMS
		1,074	1,074	2.25	32	45.0					MSS
		1,340	1,340	3.30	40	53.0					MSS

# AMITY OIL NL

## DAILY DRILLING REPORT # 13

Report Date: 28.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

**BROADBILL -1**

<b>Well Data</b>		DEPTH (m RT):	710	CUR. HOLE SIZE ("):	8.50	DAILY COST \$:	
DRILL CO.:	SANTA FE	PROGRESS (m):	-838	C89 OD ("):	9.83	CUM COST \$:	\$0
RIG:	PARAMESWARA	DAYS FROM SPUD:	11.33	SHOE TVD (m RT):	779	AFE COST \$:	
MUD CO:	BAROID	DAYS +/- CURVE:		LEAK-OFF EMW(ppg)	13.00	AFE BASIS:	
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Nipple down BOP					
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Plug & Abandon: Cut & Retrieve 9.625" & 30" casing, Set plug #4, See bed survey					
RT TO SEABED (m):	52.4						

Summary of period 00:00 to 24:00 hrs:

Plug and Abandon

Formation Tops - This report only

FORMATION	TOP (mBRT)
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### ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 28.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
8	PA	LDP	00:00	02:30	2.50	1,345	Continue to lay down excess BHA
8	PA	CMP	02:30	06:00	3.50	1,345	Pick up 2.875" tubing, cement stinger & RIH to 930 mt
8	PA	CMP	06:00	08:45	.75	1,345	Circulate bottoms up.
8	PA	CMP	08:45	07:00	.25	1,345	POOH to 875 mt.
8	PA	CMP	07:00	07:45	.75	1,345	Head up Howco and set balanced plug 183ex "G" w/ 1% CaCl at 15.8 ppg.
8	PA	CMP	07:45	08:15	.50	795	POOH to 745m.
8	PA	CMP	08:15	08:45	.50	1,345	Circulate bottoms up. Trace of cement.
8	PA	CMP	08:45	10:30	1.75	795	POOH w/ drill pipe and 2-7/8" tbg stinger.
OTH	PA	CMP	10:30	13:15	2.75	795	R/u Schlumberger. Run 8.4" Gauge ring and junk basket to 745m. Held up at 340m but ran free on second try. R/u hose and pressure test 30" x 9-8/8" annulus w/ Howco 50 psi 5 min OK.
OTH	PA	CMP	13:15	15:15	2.00	795	Schlumberger run EZSV. Check collar positions w/ CCL. Set at 745m. Tag packer. POOH.
OTH	PA	CMP	15:15	16:45	1.50	795	RIH w/ cement stinger to 740 mt
OTH	PA	CMP	16:45	17:15	.50	795	Circulate @ 740 mt
OTH	PA	CMP	17:15	17:45	.50	710	Set Plug #2 f/ 740 to 710, HCS mix, pump & displace 7 bbl slurry @ 15.8 ppg
OTH	PA	CMP	17:45	20:00	2.25	710	Pull back 5 std & Reverse circulate 2 x cap of string. Displace well to inhibited mud, Pressure test plug 1000 psi/15 min
OTH	PA	LDP	20:00	24:00	4.00	710	Lay down excess drill pipe

### ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 29.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
OTH	PA	CMP	00:00	01:15	1.25	65	Set cement plug #3 f/ 110 to 65 mt, HCS mix, pump & displace 10.8 bbl slurry @ 15.8 ppg. Pull back to 65 mt, Reverse circulate 2 x capacity of string
OTH	PA	LDP	01:15	02:45	1.50	85	Lay down excess drill pipe & cement stinger
OTH	PA	WH	02:45	04:00	1.25	65	Retrieve wear bushing. Pick up jetting tool & wash BOP and Wellhead, Lay down same
OTH	PA	BOP	04:00	06:00	2.00	1,345	Nipple down diverter system & BOP

### ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 28.01.98

<b>Mud Properties</b>		MUD COST FOR TODAY: \$593		CUMULATIVE MUD COST TO DATE: \$78,638	
Type:	KCL/Ezy Mud/Poly	VISCOSITY (sec/qt):	28	API FLUID LOSS (cm <sup>3</sup> /30min)	0
FROM:	FL	FV (opa):	0	API FILTER CAKE (32nds inch)	0
TIME:	13:00	YP (lb/100sq.ft):	0	HHP FLUID LOSS (cm <sup>3</sup> /30min)	0
WEIGHT (ppg):	9.50	GEL 10s/10m/30m (lb/100sq.ft):	0 9 0	HHP FILTER CAKE (32nds inch)	0
TEMP (C):	0	FANN-3M/100	0 0 0	Cl- (ppm):	0
				K+ (ppm):	0
				HARD/Ca (ppm):	0
				MBT (ppb eq):	0.0
				PM:	0.0
				PP:	0.0
				SOLIDS (%vol):	0
				H2O (%vol):	0.0
				OIL (%vol):	0
				SAND:	0
				PH:	0.0
				PHPA:	0.0

# AMITY OIL NL

Report Date: 28.01.98

FROM: Westman / Roots  
TO: Larzer / Searles

## DAILY DRILLING REPORT # 13

BROADBILL -1

<b>Anchor Tension (kips)</b>	A1:	A2:	A3:	AA:	A6:					
	A8:	A7:	A8:	A9:	A10:					
<b>Workboats</b>	Location:	Fuel (kW):	Barite (ex):	D/Wr (bb):	P/Wr (bb):	Cmt (ex):	Bert (ex):	Hell (kW):	<b>Weather &amp; Rig data @ 24:00 hrs</b>	VOL (kips): 5,466.0
Pedfly Command	⊗	Res							WIND SP. (kts): 30.0	VIB (mm): clear
									WIND DIR (deg): 210	CEILING (m): 2,000
									PRES. (meters): 1000	WAVES (m): 1.0
									AIR TEMP (C): 18.0	SWELL (m): 2.0
<b>COMMENTS:</b> Helicopter Movements: 14 on & 23 off										

<b>Bulk Stocks</b>	DRILL WATER (bb): 3,286.0	FUEL (kW): 1,781.0	GEL (ex): 682	HELI-FUEL (kW): 0.0
	POI WATER (bb): 746.0	BARITE (ex): 1,313	CEMENT (ex): 1,624	

Drills, Permits & Inspections					
DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	28-1-98	DOF TEST	23-1-98	LTI	Lay out BHA
FIRE	17.01.98	NEXT TEST DUE DATE	08-2-98	MTI	
PIT DRILL	24-1-98	RIG INSPECTION	1-1-98	J&A	
INCIDENT		DAYS SINCE LTA	130	#PTW Safety Meeting	

Casing				
CSG OD (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (MBRT)
9.83	13.00		779	779

TYPE	LNQTI (m)	CSG ID (")	WT (lb/ft)	GRD	THREAD
Shoe Jt	12.0	8.7	47.0	L-80	LTC
Casing Jt #2	12.0	8.7	47.0	L-80	LTC
Float Jt	11.9	8.7	47.0	L-80	LTC
57 jt csg	681.0	8.7	47.0	L-80	LTC
Pup (MSL)	6.1	8.7	47.0	L-80	LTC
Pup (MSL)	6.6	8.7	47.0	L-80	LTC
1 jt csg	11.9	8.7	47.0	L-80	LTC
Pup	3.0	8.7	47.0	L-80	LTC
Pup	3.8	8.7	47.0	L-80	LTC
1 jt csg	12.0	8.7	47.0	L-80	LTC
Stump	6.0	8.7	47.0	L-80	LTC
Top of "B" Section	.7				

Pump Data										
Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNQTI (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Idaco - T1	6.50	50	100	250	1375	40	240	1181	9.3
2	Idaco - T1	6.50	50	100	250	1375	50	360	1181	9.3

Solids Data					
	HRS RUN	sand	silt	clean	
MESH 1	0	DISCARD RATE (gpm)	0.0	0.0	0.0
MESH 2	0	DISCARD WT (ppg)	0.00	0.00	0.00
MESH 3	0	RETURN WT (ppg)	0.00	0.00	0.00

Personnel : on Site = 60			
JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisor	Westman/Root	RBT	2
OHM	Rocco	Santa Fe	1
Toolpushers	Walker/Wilke	Santa Fe	2
Mud Engineer		Barold	
Cementier	Donlon	Hibin	1
Mud Loggers		HML	
Electric Line		SciNum	3
Rig Drows		Santa Fe	42
Sub Contractors		Santa Fe	
Catering		P&O	8
Fishing Hand	Wilcox	Aurboil	1

Survey	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	FAW (m)	TOOL TYPE
Last Tool Type :										MSS
Magnetic Declination :										13.00
Survey method :										Min Curvature
	110	110	0.60	0	0.0					total
	396	396	0.18	364	7.0					type shot
	687	686	0.30	63	66.0					spig shot
	780	780	0.26	320	333.0					MMG
	1,074	1,074	2.26	32	45.0					MSS
	1,340	1,340	3.30	40	53.0					MSS

# AMITY OIL NL

## DAILY DRILLING REPORT # 14

Report Date: 29.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

**BROADBILL -1**

<b>Well Data</b>		DEPTH (m RT): 65	CUR. HOLE SIZE ("):	DAILY COST \$:
DRILL CO.:	SANTA FE	PROGRESS (m): -645	CSG OD (") : 9.63	CUM COST \$:
RIG:	PARAMESWARA	DAYS FROM SPUD: 12.33	SHOE TVD (m RT): 779	AFE COST \$:
MUD CO:	BAROID	DAYS +/- CURVE:	LEAK-OFF EMW(ppg) 0.00	AFE BASIS: P&A
RT ABOVE MSL (m): 30.7		CURRENT OP @ 0400: Lay down excess tubulars		
WATER DEPTH @MSL (m): 21.7		PLANNED OP.: Set plug #4, Sea bed survey, Prepare to sid in & jack down		
RT TO SEABED (m): 52.4				

<b>Summary of period 00:00 to 24:00 hrs:</b>	<b>Formation Tops - This report only</b>				
Set cement plug #3, Cut & Retrieve 9 5/8" & 30" casing, Lay down tubulars	<table border="1"> <thead> <tr> <th>FORMATION</th> <th>TOP(mBRT)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	FORMATION	TOP(mBRT)		
FORMATION	TOP(mBRT)				

**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 29.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
OTH	PA	CMP	00:00	01:15	1.25	65	Set cement plug #3 f/ 110 to 65 mt, HCS mix, pump & displace 10.6 bbl slurry @ 15.8 ppg. Pull back to 65 mt, Reverse circulate 2 x capacity of string
OTH	PA	LDP	01:15	02:45	1.50	65	Lay down excess drill pipe & cement stinger
OTH	PA	WH	02:45	04:00	1.25	65	Retrieve wear bushing, Pick up jetting tool & wash BOP and Wellhead, Lay down same
OTH	PA	BOP	04:00	11:15	7.25	65	Nipple down diverter system & BOP, wellhead "B" section. Land BOP on test stump.
OTH	PA	O	11:15	13:30	2.25	65	Make up 9-5/8" csg cutting assembly, cut casing @ 63 mt, Lay out cutting assembly & make up spear assembly, Retrieve and lay down 9 5/8" casing
OTH	PM	O	13:30	15:15	1.75	65	Remove casing spider, Layout pup joints & MLS
OTH	PM	O	15:15	17:00	1.75	65	Rig up slings to support 30" conductor
OTH	PM	O	17:00	19:30	2.50	65	Layout spear assembly, Make up 30" cutting assembly, Open knives & tag MLS support ring, Pull back 0.5 mt
OTH	PM	O	19:30	21:30	2.00	65	Cut 30" conductor below seabed, Pull back & lay put cutting assembly
OTH	PM	O	21:30	24:00	2.50	65	Rig up 30" handling equipment, Make up landing joint to conductor, Remove suspension ring

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 30.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
OTH	PM	O	00:00	02:00	2.00	65	Pull 30" conductor, 2 7/8" grout line stuck on bottom, Attempt to pull grout line, No success, Support grout line on BOP winch.
OTH	PM	O	02:00	04:30	2.50	65	Pull 30" conductor & Backload to Pacific Commander

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 29.01.98**

<b>Mud Properties</b>	MUD COST FOR TODAY: \$0	CUMULATIVE MUD COST TO DATE: \$0
Type:	VISCOSITY( sec / qt ): 0	API FLUID LOSS (cm3/30min) 0
FROM:	PV (cps): 0	API FILTER CAKE (32nds Inch) 0
TIME:	YP (lb/100sq.ft) 0	HTHP FLUID LOSS (cm3/30min) 0
WEIGHT (ppg): 0.00	GEL 10s/10m/30m (lb/100sqft): 0 0 0	HTHP FILTER CAKE (32nds Inch) 0
TEMP (C): 0	FANN 3/6/100 0 0 0	Cl - (ppm): 0
		K+ (ppm): 0
		HARD/Ca (ppm): 0
		MBT (ppb eq): 0.0
		PM: 0.0
		PF: 0.0
		SOLIDS (%vol): 0.0
		H2O (%vol): 0.0
		OIL (%vol): 0
		SAND: 0.0
		PH: 0.0
		PHPA: 0.0

<b>Anchor Tension (kips)</b>	A1:	A2:	A3:	A4:	A5:
	A6:	A7:	A8:	A9:	A10:

<b>Workboats</b>	Location: Pacific Command	Fuel: To Bas	Barite: (sx)	D/wtr: (bbl)	P/wtr: (bbl)	Cmt: (sx)	Bent: (sx)	Hell: (kltr)	<b>Weather &amp; Rig data @ 24:00 hrs</b>
									WIND SP. (kts): 10.0
									WIND DIR (deg): 210
									PRES.(mbars): 1010
									AIR TEMP (C): 18.0
									VISIB.(nm): clear
									CEILING (m): 2,000
									WAVES (m): .5
									SWELL (m): 1.0
									VDL (kips 5,720.0)
									RIS.TENS:
									HEAVE (m):
									ROLL (deg):
									PITCH (deg):

COMMENTS: Helicopter Movements: 17 on & 16 off, Pacific Commander departed Rig @ 04:50 hrs

# AMITY OIL NL

## DAILY DRILLING REPORT # 14

Report Date: 29.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

**BROADBILL -1**

<b>Bulk Stocks</b> DRILL WATER (bbl) : 3,949.0	FUEL (bbl) : 1,744	GEL (sx) : 882	HELI-FUEL (ktr) : 0.0
POT WATER (bbl) : 777.0	BARITE (sx) : 1,243	CEMENT (sx) : 1,524	

### Drills, Permits & Inspections

DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	25-1-98	BOP TEST	23-1-98	LTI	Layout casing
FIRE	17.01.9	NEXT TEST DUE DATE	06-2-98	MTI	
PIT DRILL	24-1-98	RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	140	#PTW Safety Meeting	

### Casing

CSG OD (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)
30.00			106	106
9.63			779	779

### Pump Data

Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T	6.50	50	100	250	1375	40	240	1181	9.3
2	Ideco - T	6.50	50	100	250	1375	50	360	1181	9.3

TYPE	LNGTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.4	28.0		X52	SF60
Shoe Jt	12.4	28.0		X52	SF60
Casing jt #2	11.8	28.0		X-52	SF60
Casing jt #2	11.8	28.0		X-52	SF60
Casing jt #3	11.6	28.0		X-52	SF60
Casing jt #3	11.6	28.0		X-52	SF60
Casing jt #4	9.3	28.0		X-52	SF60
Casing jt #4	9.3	28.0		X-52	SF60
Casing jt #5 (MLS)	12.1	28.0		X-52	SF60
Casing jt #5 (MLS)	12.1	28.0		X-52	SF60
Casing jt #6	11.6	28.0		X-52	SF60
Casing jt #6	11.6	28.0		X-52	SF60
Casing jt #7	11.9	28.0		X-52	SF60
Casing jt #7	11.9	28.0		X-52	SF60
Casing jt #8	11.5	28.0		X-52	SF60
Casing jt #8	11.5	28.0		X-52	SF60
30"x 20" A sectic	1.4	21.0			21-1/4"2k
30"x 20" A sectic	1.4	21.0			21-1/4"2k
RKB to A Section:	12.4				
RKB to A Section:	12.4				
Stump	6.0	8.7	47.0	L-80	LTC
Stump	6.0	8.7	47.0	L-80	LTC
Top of "B" Sectic	.7				
Top of "B" Sectic	.7				

### Solids Data

		HRS RUN	sand	silt	clean
MESH 1	0	DISCARD RATE (gpm)	0.0	0.0	0.0
MESH 2	0	DISCARD WT (ppg)	0.00	0.00	0.00
MESH 3	0	RETURN WT (ppg)	0.00	0.00	0.00

### Personnel : on Site = 61

JOB TITLE	NAME	COMPANY NAME	#
Drig Supervisor	Westman/Root	RBT	2
OIM	Reece	Santa Fe	1
Toolpushers	Walker/Wilkie	Santa Fe	2
Mud Engineer		Baroid	
Cementer	Donlon	Hibtn	1
Mud Loggers		HML	
Electric Line		Schlum	
Rig Crews		Santa Fe	42
Sub Contractors		Santa Fe	
Catering		P&O	8
Fishing Hand	Willcox	Austoil	1
ROV Operator	Simmons/Mc		2
Insurance Surve	Bredderman	Noble Denton	1
Seman (Brute Tl)	Schell	Tide Water	1

### Survey

Last Tool Type : **MSS**  
Magnetic Declination : **13.00**  
Survey method : **Min Curvature**

MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
110	110	0.50	0	0.0					totco
399	398	0.15	354	7.0					sgle shot
687	686	0.30	53	66.0					sgle shot
780	780	0.25	320	333.0					MSS
1,074	1,074	2.25	32	45.0					MSS
1,340	1,340	3.30	40	53.0					MSS

# AMITY OIL NL

## DAILY DRILLING REPORT # 15

Report Date: 30.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

**BROADBILL -1**

<b>Well Data</b>		DEPTH (m RT):	0	CUR. HOLE SIZE ("):		DAILY COST \$:	
DRILL CO.:	SANTA FE	PROGRESS (m):	-65	CSG OD ("):	9.63	CUM COST \$:	\$4,095,302
RIG:	PARAMESWARA	DAYS FROM SPUD:	13.33	SHOE TVD (m RT):	779	AFE COST \$:	
MUD CO:	BAROID	DAYS +/- CURVE:		LEAK-OFF EMW(ppg)	0.00	AFE BASIS:	P&A
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Securing Rig for tow					
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Jump ROV, Secure for tow, Jack down, Attach tow bridle, Unpin legs					
RT TO SEABED (m):	52.4						

Summary of period 00:00 to 24:00 hrs:

Plug & Abandon, Prepare Rig for move

Formation Tops - This report only

FORMATION	TOP(mBRT)

### ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 30.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
OTH	PM	O	00:00	02:00	2.00	65	Pull 30" conductor, 2 7/8" grout line stuck on bottom, Attempt to pull grout line, No success, Support grout line on BOP winch.
OTH	PM	O	02:00	04:30	2.50	65	Pull 30" conductor & Backload to Pacific Commander. Grout string would not pull with conductor. Secure w/ BOP winch.
OTH	PM	O	04:30	06:30	2.00	65	Lay down excess BHA.
OTH	PA	O	06:30	09:00	2.50	65	Pull 2-7/8" grout string.
OTH	PA	CMP	09:00	09:30	.50	65	RIH w/ OEDP to 61m. Jump ROV to observe entry to well.
OTH	PA	CMP	09:30	10:30	1.00	0	Howco set balanced plug 61m to mud line. 52sx "G" at 15.8 ppg 1% CaCl.
OTH	PA	CMP	10:30	11:00	.50	0	L/d remaining tubulars.
OTH	PM	RM	11:00	24:00	13.00	0	Prepare for move. Pull shaker hose, rig down conductor guide. Secure deckload. Skid cantilever into tow position @ 20:30 hrs, Jump ROV & obtain seabed sample. Problems manoeuvring ROV due to current.

### ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 31.01.98

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
OTH	PM	RM	00:00	06:00	6.00	0	Prepare to jack down

### ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 30.01.98

<b>Mud Properties</b>		MUD COST FOR TODAY: \$0				CUMULATIVE MUD COST TO DATE: \$0			
Type:		VISCOSITY (sec/qt):	0	API FLUID LOSS (cm <sup>3</sup> /30min)	0	Cl- (ppm):	0	SOLIDS (%vol):	
FROM:		PV (cps):	0	API FILTER CAKE (32nds inch)	0	K+ (ppm):	0	H <sub>2</sub> O (%vol):	0.0
TIME:		YP (lb/100sq.ft)	0	HTHP FLUID LOSS (cm <sup>3</sup> /30min)	0	HARD/Ca (ppm):	0	OIL (%vol):	0
WEIGHT (ppg):	0.00	GEL 10s/10m/30m (lb/100sqft):	0 0 0	HTHP FILTER CAKE (32nds inch)	0	MBT (ppb eq):	0.0	SAND:	
TEMP (C):	0	FANN 3/6/100	0 0 0			PM:	0.0	PH:	0.0
						PF:	0.0	PHPA:	0.0

<b>Anchor Tension (kips)</b>	A1:	A2:	A3:	A4:	A5:
	A6:	A7:	A8:	A9:	A10:

<b>Workboats</b>	Location, Fuel (kltr)	Barite (sx)	D/wtr (bbt)	P/wtr (bbt)	Cmt (sx)	Bent (sx)	Heli (kltr)	<b>Weather &amp; Rig data @ 24:00 hrs</b>
Pacific Command @ Bas								WIND SP. (kts): 10.0
Brute Tide @ BBM								VISIB. (nm): clear
								WIND DIR (deg): 210
								CEILING (m): 2,000
								PRES. (mbars): 1016
								WAVES (m): .2
								AIR TEMP (C): 18.0
								SWELL (m): .4
								RIS. TENS:
								HEAVE (m):
								ROLL (deg):
								PITCH (deg):

COMMENTS: Helicopter Movements: 8 on & 3 off, Brute Tide departed Rig @ 21:00 hrs Bound for BBMT

<b>Bulk Stocks</b>	DRILL WATER (bbt): 3,933.0	FUEL (bbt): 1,735	GEL (sx): 862	HELI-FUEL (kltr): 0.0
	POT WATER (bbt): 746.0	BARITE (sx): 1,521	CEMENT (sx): 1,032	

# AMITY OIL NL

## DAILY DRILLING REPORT # 15

Report Date: 30.01.98

FROM : Westman / Roots  
TO : Lanzer / Searles

**BROADBILL -1**

Drills, Permits & Inspections					
DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL	25-1-98	BOP TEST	23-1-98	LTI	Skid Rig
FIRE	17.01.9	NEXT TEST DUE DATE	06-2-98	MTI	
PIT DRILL	24-1-98	RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	141	#PTW Safety Meeting	

Casing				
CSG OD (")	LOT	PHASE	CSG SHOE MD	CSG SHOE TVD (mBRT)
30.00			106	106
9.63			779	779

Pump Data										
Pump Data - last 24 hrs							Slow Pump Data			
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T	6.50	50	100	250	1375	40	240	1181	9.3
2	Ideco - T	6.50	50	100	250	1375	50	360	1181	9.3

TYPE	LNGLTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.4	28.0		X-52	SF60
Shoe Jt	12.4	28.0		X-52	SF60
Casing Jt #2	11.8	28.0		X-52	SF60
Casing Jt #2	11.8	28.0		X-52	SF60
Casing Jt #3	11.6	28.0		X-52	SF60
Casing Jt #3	11.6	28.0	311.0	X-52	SF60
Casing Jt #4	9.3	28.0	311.0	X-52	SF60
Casing Jt #4	9.3	28.0	311.0	X-52	SF60
Casing Jt #5 (MLS)	12.1	28.0	311.0	X-52	SF60
Casing Jt #5 (MLS)	12.1	28.0	311.0	X-52	SF60
Casing Jt #6	11.6	28.0	311.0	X-52	SF60
Casing Jt #6	11.6	28.0	311.0	X-52	SF60
Casing Jt #7	11.9	28.0	311.0	X-52	SF60
Casing Jt #7	11.9	28.0	311.0	X-52	SF60
Casing Jt #8	11.5	28.0	311.0	X-52	SF60
Casing Jt #8	11.5	28.0	311.0	X-52	SF60
30"x 20" A section	1.4	21.0			21-1/4"2k
30"x 20" A section	1.4	21.0			21-1/4"2k
RKB to A Section	12.4				
RKB to A Section	12.4				
Stump	6.0	8.7	47.0	L-80	LTC
Stump	6.0	8.7	47.0	L-80	LTC
Top of "B" Section	.7				
Top of "B" Section	.7				

Solids Data			sand silt clean		
MESH	HRS RUN	DISCARD RATE (gpm)	DISCARD WT (ppg)	RETURN WT (ppg)	
MESH 1	0	0.0	0.00	0.00	0.00
MESH 2	0	0.0	0.00	0.00	0.00
MESH 3	0	0.0	0.00	0.00	0.00

Personnel : on Site = 66			
JOB TITLE	NAME	COMPANY NAME	#
Orig Supervisor	Westman/Root	RBT	2
AM	Reece	Santa Fe	1
Toolpushers	Walker/Wilkie	Santa Fe	2
Mud Engineer		Barold	
Cementer		Hibtn	
Mud Loggers		HML	
Electric Line		Schlum	
Rig Crews		Santa Fe	42
Sub Contractors		Santa Fe	
Catering		P&O	8
ROV Operator	Simmons/Mc		2
Insurance Surve	Bredderman	Noble Denton	1
Seaman		Tide Water	8

Survey											
Last Tool Type :	MSS	MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	'V' SECT (m)	DOGLEG (m/30m)	N/S (m)	E/W (m)	TOOL TYPE
Magnetic Declination :	13.00	110	110	0.50	0	0.0					totco
Survey method :	MIn Curvature	399	398	0.15	354	7.0					sgle shot
		687	686	0.30	53	66.0					sgle shot
		780	780	0.25	320	333.0					MMS
		1,074	1,074	2.25	32	45.0					MSS
		1,340	1,340	3.30	40	53.0					MSS



# AMITY OIL NL

## DAILY DRILLING REPORT # 16

Report Date: 31.01.98

FROM: Westman / Roots  
TO: Lanzer / Searles

BROADBILL -1

<b>Well Data</b>		DEPTH (m RT):	0	CUR. HOLE SIZE (?):		DAILY COST \$:	
DRILL CO.:	SANTA FE	PROGRESS (m):	-65	CSG OD (?):	8.63	CUM COST \$:	\$0
RIG:	PARAMESWARA	DAYS FROM SPUD:	14.33	SHOE TVD (m RT):	779	AFE COST \$:	
MUD CO.:	BAROID	DAYS +/- CURVE:		LEAK-OFF EMW(ppg)	13.00	APE BASIS:	P&A
RT ABOVE MSL (m):	30.7	CURRENT OP @ 0400: Under tow to new location. Passing lighthouse Wilsons Promontory at 08:00. Speed 6.1 kts.					
WATER DEPTH @MSL (m):	21.7	PLANNED OP.: Tow to new location.					
RT TO SEABED (m):	52.4						

**Summary of period 00:00 to 24:00 hrs:**

Secure deck load and machinery spaces for ocean tow. Jack down and go afloat.

**Formation Tops - This report only**

FORMATION	TOP(mBRT)
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**ACTIVITY FOR PERIOD 00:00 HRS TO 24:00 HRS ON 31.01.98**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
OTH	PM	RM	00:00	18:15	18.25	0	Secure deck load and machinery spaces for ocean tow. Prepare to jack down.
MV	PM	O	18:15	20:30	2.25	1,346	Disconnect and raise raw water pump on bow leg. Jack down to 7ft draught.
MV	PM	O	20:30	21:15	.75	1,345	Check hull integrity.
MV	PM	RM	21:15	21:30	.25	0	Jack down and go afloat.
MV	PM	RM	21:30	22:00	.50	0	One kilometer from location.

**ACTIVITY FOR PERIOD 00:00 HRS TO 06:00 HRS ON 06.00.0000**

PHSE	CLS	OP	FROM	TO	HRS	DEPTH	ACTIVITY DESCRIPTION
------	-----	----	------	----	-----	-------	----------------------

**ANNOTATIONS FOR PERIOD 00:00 HRS TO 24:00 HRS ON 31.01.98**

REMARK / OBSERVATION	SOLUTION / RECOMMENDATION
Fuel on board rig at 1km from Broadbill #1 location. 1688 bbls.	
Fuel on board Brute Tide. 291,083 ltrs	
Bulk on board Brute Tide. Drill water 184 ton. Pot water 90 ton.	
Fuel on board Pacific Commander. 248,900 ltrs.	
Bulk on board Pacific Commander. 660 sx Bentonite. Pot water 300 ton.	

**Mud Properties**

MUD COST FOR TODAY: \$0

CUMULATIVE MUD COST TO DATE: \$0

Type:	VISCOSITY( sec / qt):	0	API FLUID LOSS (cm3/30min)	0	Cl- (ppm):	0	SOLIDS (%vol):	
FROM:	PV (cps):	0	API FILTER CAKE (32nds inch)	0	K+ (ppm):	0	H2O (%vol):	0.0
TIME:	YP (lb/100sq.ft.):	0	HTHP FLUID LOSS (cm3/30min)	0	HARD/Ca (ppm):	0	OIL (%vol):	0
WEIGHT (ppg):	GEL 10m/10m/30m (lb/100sqft):	0 0 0	HTHP FILTER CAKE (32nds inch)	0	MBT (ppb eq):	0.0	SAND:	
TEMP (C):	FANN 3/8/100	0 0 0			PM:	0.0	PH:	0.0
					PF:	0.0	PHFA:	0.0

**Anchor Tension (kips)**

A1: A2: A3: A4: A5:  
A6: A7: A8: A9: A10:

**Workboats**

Location. Fuel (kltr) Barite (sx) D/W (bbl) P/W (bbl) Cmt (sx) Bent (sx) Hell (ktr)

**Weather & Rig data @ 24:00 hrs**

WIND SP. (kts): VISIB.(nm): VDL (kips):  
WIND DIR (deg): CEILING (m): RIS.TENS:  
PRES.(mbars): WAVES (m): HEAVE (m):  
AIR TEMP (C): SWELL (m): ROLL (deg):  
PITCH (deg):

**COMMENTS:**

# AMITY OIL NL

DAILY DRILLING REPORT # 18

Report Date: 31.01.98

FROM: Westman / Roots  
TO: Lanzer / Bearles

BROADBILL -1

Bulk Stocks DRILL WATER (bb): 3,933.0	FUEL (bb): 1,858	GEL (cc): 882	HELL-FUEL (ltr): 0.0
POT WATER (bb): 873.0	BARITE (cc): 1,521	CEMENT (cc): 1,032	

## Drills, Permits & Inspections

DRILL TYPE	DATE	INSPECTIONS	DATE	SAFETY	DETAILS
TRIP DRILL		BOP TEST	23-1-98	LTI	Skid Rig
FIRE	17.01.98	NEXT TEST DUE DATE	06-2-98	MTI	
PIT DRILL	24-1-98	RIG INSPECTION	1-1-98	JSA	
INCIDENT		DAYS SINCE LTA	142	#PTW	
			30-1-98	Safety Meeting	

## Casing

CSG OD (")	LOT	PHASE	CSG SHOES MD	CSG SHOES TVD (mBRT)
6.83	13.00		779	779

TYPE	LNTH (m)	CSG ID (")	WT lbs/ft	GRD	THREAD
Shoe Jt	12.0	8.7	47.0	L-80	LTC
Casing Jt #2	12.0	8.7	47.0	L-80	LTC
Float Jt	11.9	8.7	47.0	L-80	LTC
87 Jt csg	881.8	8.7	47.0	L-80	LTC
Pup (MSL)	6.1	8.7	47.0	L-80	LTC
Pup (MSL)	6.8	8.7	47.0	L-80	LTC
1 Jt csg	11.9	8.7	47.0	L-80	LTC
Pup	3.0	8.7	47.0	L-80	LTC
Pup	3.9	8.7	47.0	L-80	LTC
1 Jt csg	12.0	8.7	47.0	L-80	LTC
Bump	6.0	8.7	47.0	L-80	LTC
Top of "B" Section	.7				

## Pump Data

Pump Data - last 24 hrs					Slow Pump Data					
#	TYPE	LNR (")	SPM	EFF (%)	Flow (gpm)	SPP (psi)	SPM	SPP (psi)	DEPTH (m RT)	MW (ppg)
1	Ideco - T1	6.50	50	100	280	1375	40	240	1181	9.3
2	Ideco - T1	6.50	50	100	250	1375	60	360	1181	9.3

## Solids Data

	HRS RUN	DISCARD RATE (gpm)	DISCARD WT (ppg)	RETURN WT (ppg)
MESH 1	0	0.0	0.0	0.0
MESH 2	0	0.0	0.0	0.0
MESH 3	0	0.0	0.0	0.0

## Personnel : on Site = 58

JOB TITLE	NAME	COMPANY NAME	#
Orig Supervisor	Westman	RBT	1
OIM / Townmaster	Reece /	Santa Fe	2
Toolpushers	Walker/Wilkie	Santa Fe	2
Mud Engineer		Berold	
Cementar		Hibin	
Mud Loggers		HML	
Electric Lina		Schlum	
Rig Crews		Santa Fe	35
Sub Contractors		Santa Fe	
Catering		P&O	7
ROV Operator	Slimmons/Mc		2
Insurance Surve	Breckerman	Noble Danton	1
Seaman		Tide Water	8

## Survey

Last Tool Type : MSS  
Magnetic Declination : 13.00  
Survey method : Min Curvature

MD (m RT)	TVD (m RT)	INCL DEG	AZ (deg)	CORR. AZ (deg)	V SECT (m)	DOGLEG (m/30m)	N/S (m)	EW (m)	TOOL TYPE
110	110	0.50	0	0.0					latco
398	398	0.16	354	7.0					egle shot
687	686	0.30	53	68.0					egle shot
780	780	0.25	320	333.0					MSS
1,074	1,074	2.25	32	45.0					MSS
1,340	1,340	3.30	40	53.0					MSS



**DAILY REPORT FOR AMITY OIL NL**  
**WELL: BROADBILL-1**

**REPORT/DAY NO :** 7 ( No report submitted for Day 6)  
**DATE :** 23 JANUARY 1998  
**MIDNIGHT HOLE DEPTH:** 786 m MDRT  
**CURRENT RIG ACTIVITY:** RIH NB4 BR4 **PROGRESS last 24 hrs:** 0 m

**FORMATION TOPS: (PROVISIONAL)**

FORMATION	PROGNOSED MDRT (m)	PROGNOSED TVDRT (m)	ACTUAL MDRT (m)	ACTUAL TVDRT (m)
MIOCENE SST.	368	358		
LAKES ENTRANCE	760	760		
LATROBE GROUP	800	800		
STREZLECKI GROUP	1330	1330		
TOTAL DEPTH	1600	1600		

**LITHOLOGY/S:**

**LIMESTONE 240-786m:** light to medium grey, off white to yellow, calcarenite grading to occasionally calcituffite, trace of glauconite, common fossil fragments, moderately hard.

**CLAYSTONE 756-786m:** medium to dark grey, olive grey in part, slightly silty, trace carbonaceous material & streaks, trace glauconite, slight to moderately calcareous, soft to occasionally firm, sub-blocky.

**GAS DATA:**

	TG (units)	C1 (ppm)	C2	C3	C4's	C5		
Background	-	-	-	-	-	-		ROP
MAX								m/hr DEPTH
							Max	
TRIP GAS							Min	
Wiper TG							Avg	

(NOTE: 1% GAS = 50 API Units, 1 API Unit = 200 ppm)

**BIT DATA:**

	PRESENT BIT	PREVIOUS BIT
BIT NO. / HOLE SIZE	New Bit 4 8.5"	New Bit 3 12.25"
TYPE	HTC ATM -GT18D	HTC MAX-GT1
JETS:	2X16, 1x14	3X16
MUD MOTOR (Rev/gal)	-	-
DEPTH IN:	785	110
METRES LAST 24hrs	0	240
METRES TOTAL:	0	675
RHOE LAST 24hrs	0	9.0
RHOE TOTAL BITRUN	0	21.6
RPM (Surface)	-	80-105

**COMMENTS:**

- 9 5/8" shoe set at 777.58m.

**APPENDIX 2b**

**DAILY GEOLOGICAL REPORTS**

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: **BROADBILL-1**  
REPORT NO: **1**  
LAST SURVEY:  
CURRENT OPERATION:

TIME: **2400 HRS**  
DEPTH:  
DEVIATION:

DATE: **16 JAN 1998**  
PROGRESS:  
GEOLOGIST: **L. PATON**

## LITHOLOGY:

HYDROCARBON SHOWS:  
OIL SHOWS:

GAS PEAKS:

## ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
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## CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5
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REMARKS: **SPUD WELL.**

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: *BROADBILL-1*  
REPORT NO: *2*  
LAST SURVEY:  
CURRENT OPERATION:

TIME: *2400HRS*  
DEPTH: *110 metres*  
DEVIATION:

DATE: *17 JAN, 1998*  
PROGRESS: *57m (S.S.)*  
GEOLOGIST: *I. PATON*

*P.O.O.H to run conductor 36"*

## LITHOLOGY:

<i>S3-110M</i>	<i>no returns</i>

## HYDROCARBON SHOWS: OIL SHOWS:


## GAS PEAKS:


## ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)

## CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5

## REMARKS:

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: *IS ROAD BELL - 1*  
REPORT NO: *3*  
LAST SURVEY:  
CURRENT OPERATION:

TIME: *2400 HRS*  
DEPTH: *110 metres*  
DEVIATION:  
CURRENT OPERATION: *RUN CASING*

DATE: *18 JANUARY 1998*  
PROGRESS:  
GEOLOGIST: *I PATON*

## LITHOLOGY:

HYDROCARBON SHOWS:  
OIL SHOWS:

GAS PEAKS:

## ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
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## CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5
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REMARKS:

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: BRAD BILL-1 TIME: 2400 DATE: 19 JANUARY 1998  
REPORT NO: 4 DEPTH: 110m PROGRESS: NIL  
LAST SURVEY: DEVIATION: GEOLOGIST: IAN PATON  
CURRENT OPERATION: @ 0600 RUN IN HOLE TO DRILL AHEAD @ T.D. 117m

LITHOLOGY:

HYDROCARBON SHOWS:  
OIL SHOWS:

GAS PEAKS:

ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
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CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5
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REMARKS:



# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: BROADBILL-1  
 REPORT NO: 5  
 LAST SURVEY: 399m  
 CURRENT OPERATION:

TIME: 2400 HRS  
 DEPTH: 545m  
 DEVIATION: 0.15°

DATE: 20 JANUARY, 1998  
 PROGRESS: 435m  
 GEOLOGIST: *[Signature]*

@ 0600 HOURS - RUNNING SURVEY

## LITHOLOGY:

110 - 255m	SANDSTONE - translucent, vt to mg, rounded, mod sorted, abundant fossils, loose quartz gns, good vis $\phi$ .
255 - 385	LIMESTONE - lt grey to cream, calcarenite to calcisiltite, fossiliferous, trace glauconite.
385 - 420	SANDSTONE (80%) - clr to translucent, fgned, subang, mod well sorted, quartzose loose gns, good $\phi$ . LIMESTONE (20%) a-a.
420 - 545	LIMESTONE (80%) - lt gy to milky, calcarenite to calcilutite, + glauc, abund fossil frags. SANDSTONE (20%) a-a.

## HYDROCARBON SHOWS:

### OIL SHOWS:


## GAS PEAKS:


## ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
110 - 255m	2 - 197 m/hr	12 m/hr	—	—
255 - 385m	8 - 208 m/hr	36 m/hr	—	—
385 - 420m	14 - 76 m/hr	44 m/hr	—	—
420 - 545m	18 - 153 m/hr	28 m/hr	—	—

## CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5

REMARKS: TOP MIOCENE SANDSTONE @ 385m (4 metres low. to prognosis)

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: BROADBILL -1  
 REPORT NO: 6  
 LAST SURVEY: 779M  
 CURRENT OPERATION:

TIME: 2400 HRS  
 DEPTH: 785M  
 DEVIATION: 0.25°

DATE: 21 JANUARY, 1998  
 PROGRESS: 240 M  
 GEOLOGIST: *[Signature]*

@ 0600 HRS RIGGING DOWN SCHLUMBERGER.

**LITHOLOGY:**

545 - 760m	LIMESTONE - lt gy to cream, calcarenite to calcisiltite, trace glauconite, abundant foss fragments
760 - 785	LIMESTONE (80%) - lt gy to cream, calcarenite to calcilutite, trace glauconite, abun foss frags CLAYSTONE (20%) - med grey-olive grey, slightly silty, calcareous, soft to firm, to carbonaceous matter [increases from 0% at 760m to 20% at 785m]

**HYDROCARBON SHOWS:  
 OIL SHOWS:**


**GAS PEAKS:**


**ROP\* AND GAS READINGS:**

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
545-760M	5-128 m/hr	29 m/hr	—	—
760-785m	6-39 m/hr	7 m/hr	0.4	0.3

**CHROMATOGRAPH READINGS (PPM)**

Interval (m)	C1	C2	C3	C4	C5
760-785	50				

REMARKS: TOP OF LAKE'S ENTRANCE ESTIMATED AT 775metres (6M High).

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: BROADBILL-1  
REPORT NO: 7  
LAST SURVEY:  
CURRENT OPERATION:

TIME: 2400 HRJ  
DEPTH: 785m  
DEVIATION:  
Run LOSS

DATE: 22 JANUARY 1998  
PROGRESS: —  
GEOLOGIST: I. PATON

## LITHOLOGY:

HYDROCARBON SHOWS:  
OIL SHOWS:

GAS PEAKS:

## ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
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## CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5
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REMARKS:

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: **BROADBILL-1**  
REPORT NO: **8**  
LAST SURVEY:  
CURRENT OPERATION: **RUN CASINGS**

TIME: **2400**  
DEPTH: **785m**  
DEVIATION:

DATE: **23 JANUARY 1998**  
PROGRESS: **—**  
GEOLOGIST: **I. PATON**

## LITHOLOGY:

HYDROCARBON SHOWS:  
OIL SHOWS:

GAS PEAKS:

## ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
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## CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5
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REMARKS:

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: BROADBILL-1  
 REPORT NO: 9  
 LAST SURVEY: 1074 m  
 CURRENT OPERATION:

TIME: 2400 HRS  
 DEPTH: 1070 metres  
 DEVIATION: 2°

DATE: 24 JANUARY, 1998  
 PROGRESS: 285M  
 GEOLOGIST: I. PATON

Ⓢ 0600 RIH to DRILL AHEAD AFTER SURVEY & RIQ SERVICE

## LITHOLOGY:

785-850m	CLAYSTONE - lt grey to green grey, soft to v. soft, tr glauconite
850-875m	COAL - dull black, mod hard, bituminous
875-880m	SANDSTONE - clear, f-med gned, subrded, loose gas, quartzose, good $\phi$
880-890m	SILTSTONE - brown-gy, tr carbonaceous fragments, mod soft
890-930m	SANDSTONE - clear, fine-med gned, subrded, trace pyrite, good $\phi$ with minor SILTSTONE & COAL.
930-950m	COAL (40%) - black, dull mod hard; SILTSTONE (30%) - lt bwn, soft; SST (30%)
950-980m	SANDSTONE - clear to frosted, med gned, well sorted, subrded, trace pyrite, good porosity, loose gas.
980-990m	SANDSTONE (30%) - a.a; SILTSTONE (30%) - bwn gy a.a; COAL (20%) a.a
990-1070m	SANDSTONE - clear, med gn, subrded, good $\phi$ with COAL at 1020-1030m.

## HYDROCARBON SHOWS:

### OIL SHOWS:

	NO FLUORESCENCE OVER INTERVALS DRILLED 875m - 1070m

## GAS PEAKS:

868m	10500 ppm C1	940m - 1814 ppm C1
893m	4374 ppm C1	
944m	1726 ppm C1	

## ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
785-850	11-141 m/hr	26 m/hr	1.8	0.5
850-875	19-187 m/hr	38 m/hr	54	12.9
875-950	11-139 m/hr	32 m/hr	22.1	7
950-1070	10-124 m/hr	17 m/hr	10.3	3

## CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5
785-850	335				
850-875	10518				
875-950	4375				
950-1070	1775				

## REMARKS:

- TOP LATROBE GROUP - 850M (RKB)
- HIGH SUSTAINED C1 GAS READINGS TO 966M.

# AMITY OIL NL

ACN 009 230 835

# DAILY GEOLOGICAL REPORT

WELL: BROADBILL-1  
 REPORT NO: 10  
 LAST SURVEY: 1074 m  
 CURRENT OPERATION:

TIME: 2400 HRS  
 DEPTH: 1335 m  
 DEVIATION: 2°

DATE: 25 JANUARY  
 PROGRESS: 265 m  
 GEOLOGIST: I. PATON

LITHOLOGY: @ 0600 HRS P.O.H to RUN WIPER TRIP

1070-1090m	SANDSTONE - cr, occ transl, med to coarse grnd, subrded, fair $\phi$ , loose qtz gns.
1090-1100m	COAL (30%) - black, dull bituminous; SANDSTONE (70%) a.a
1100-1290m	SANDSTONE - cr to translucent, f-medgrnd, subrded, argill matrix fair $\phi$ .
1290-1335m	SANDSTONE (80%) - transl to milky, qtz overgrowths, subangular, med to coarse grnd, tr of lithic fragments, V. poor vis porosity
	CLAYSTONE (10%) - lt grey to lt brown, tr mica, v soft
	SILTSTONE (10%) - lt brown, argill, soft, blk.

### HYDROCARBON SHOWS:

#### OIL SHOWS:

	NIL

### GAS PEAKS:

1129m	3.2 units.

### ROP\* AND GAS READINGS:

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
1070-1090m	6-75 m/h	26 m/h	1.4 @ 1070m	0.7
1090-1100m	12-73 m/h	41 m/h	3 @ 1099m	1.8
1100-1290m	3-127 m/h	17 m/h	3.2 @ 1129m	0.6
1290-1335m	3-36 m/h	11 m/h	1.2 @ 1330m	0.6

### CHROMATOGRAPH READINGS (PPM)

Interval (m)	C1	C2	C3	C4	C5
1070-1090m	280				
1090-1100m	600				
1100-1290m	640				
1290-1335m	220				

### REMARKS:

POSSIBLE BASE LATROBE @ 1290 metres - noticeable sharp decrease in drilling rate & low  $\phi$  sandstone, qtz overgrowths, lithic fragments.

# AMITY OIL NL

# DAILY GEOLOGICAL REPORT

ACN 009 230 835

WELL: **BROADBILL-1**  
 REPORT NO: **11**  
 LAST SURVEY: **1340M**  
 CURRENT OPERATION:

TIME: **2400 HRS**  
 DEPTH: **1345M**  
 DEVIATION: **3 1/4°**

DATE: **26 JANUARY**  
 PROGRESS: **10M**  
 GEOLOGIST: **I. PATON**

② 0600 **RUNNING WIPER TRIP**

**LITHOLOGY:**

1335-1340M	SANDSTONE - clear to milky white, f-med gr, subang, tr lithic (30%) fragments, poor vis Ø.
	SILTSTONE (70%) - lt brn to lt gy, soft, blk.
1340-1345M	SILTSTONE - dk brn gy to pink, trace lithic fragments, soft.

**HYDROCARBON SHOWS:**

**OIL SHOWS:**


**GAS PEAKS:**


**ROP\* AND GAS READINGS:**

(\*Rate of Penetration)

Interval (m MDRT)	ROP range (min/m)	ROP average (min/m)	Max Gas (units)	Total Gas average (units)
1335-1345M	7-5 m/hr	6m/hr	1.5	0.7

**CHROMATOGRAPH READINGS (PPM)**

Interval (m)	C1	C2	C3	C4	C5
1335-1345	300				

**REMARKS:**

TOP STREZLECKI FORMATION AT 1340 metres - (pink, brown mottled SILTSTONE INDICATES THIS FORMATION).  
 T.D. AT 1345 METRES.

**APPENDIX 3**

**WELLSITE LITHOLOGY SAMPLE  
DESCRIPTION**



## APPENDIX 3

### WELLSITE LITHOLOGY SAMPLE DESCRIPTION

0-110m	No returns to surface.	
110-255m	SANDSTONE 100%	translucent, fine to medium grained, rounded, moderately sorted, abundant fossils, good visible porosity.
255-385m	LIMESTONE 100%	light grey to cream, calcarenite to calcisiltite, fossiliferous, trace glauconite.
385-420m	SANDSTONE 80%	clear to translucent, fine grained, subangular, moderately well sorted, quartzose loose grains, good porosity.
	LIMESTONE 20%	light grey to cream, calcarenite to calcisiltite, fossiliferous, trace glauconite
420-545m	LIMESTONE 80%	light grey to milky, calcarenite to calcilutite, trace glauconite, abundant fossil fragments.
	SANDSTONE 20%	clear to translucent, fine grained, subangular, moderately well sorted, quartzose loose grains, good porosity. .
545-760m	LIMESTONE 100%	light grey to cream, calcarenite to calcisiltite, trace glauconite, abundant fossil fragments.
760-785m	LIMESTONE 80%	light grey to cream, calcarenite to calcilutite, trace glauconite, abundant fossil fragments.
	CLAYSTONE 20%	medium grey to olive grey, slightly silty, calcareous, soft to firm, trace carbonaceous matter. [increases from 0% at 760m to 20% at 785m].
785-850m	CLAYSTONE 100%	light grey to green grey, soft to very soft, trace glauconite.
850-875m	COAL 100%	dull black, moderately hard, bituminous.
875-880m	SANDSTONE 100%	clear, fine-medium grained, subrounded, loose grains, quartzose, good porosity.
880-890m	SILTSTONE 100%	brown-grey, trace carbonaceous fragments, moderately soft.
890-930m	SANDSTONE 100%	clear, fine-medium grained, subrounded, trace pyrite, good porosity with minor SILTSTONE and COAL.
930-950m	COAL 40%	black, dull moderately hard;
	SILTSTONE 30%	light brown;
	SANDSTONE 30%.	clear, fine-medium grained, subrounded, trace pyrite, good porosity
950-980m	SANDSTONE 100%	clear to frosted, medium grained, well sorted, subrounded, trace pyrite, good porosity, loose grains.
980-990m	SANDSTONE 30%	clear to frosted, medium grained, well sorted, subrounded, trace pyrite, good porosity, loose.
	SILTSTONE 30%	brown grey, trace carbonaceous fragments, moderately soft grains
	COAL 20%	dull black, moderately hard

990-1070m	SANDSTONE 100%	clear, medium grained, subrounded, good porosity with COAL at 1020-1030m.
1070-1090m	SANDSTONE 100%	clear, occasionally translucent, medium to coarse grained, subrounded, fair porosity, loose quartz grains.
1090-1100m	COAL 30% SANDSTONE 70%	black, dull bituminous; clear, occasionally translucent, medium to coarse grained, subrounded, fair porosity, loose quartz grains.
1100-1290m	SANDSTONE 100%	clear to translucent, fine-medium grained, subrounded, trace argillaceous matrix, fair porosity.
1290-1335m	SANDSTONE 80% CLAYSTONE 10% SILTSTONE 10%	translucent to milky, quartz overgrowths, subangular, medium to coarse grained, trace lithic fragments, very poor visible porosity. light grey to light brown, trace mica, very soft. light brown, argillaceous, soft, blocky.
1335-1340m	SANDSTONE 30% SILTSTONE 70%	clear to milky white, fine to medium grained, subangular, trace lithic fragments, poor visible porosity. light brown to light grey, soft, blocky.
1340-1345m	SILTSTONE 100%	dark brown grey to pink siltstone, trace lithic fragments, soft.

**APPENDIX 4**

**MUD ENGINEERING REPORT**

**AMITY OIL NL  
DRILLING FLUID RECAP  
BROADBILL 1  
BASS STRAIT, VICTORIA**



Prepared by : Nicholas Doust  
Date : January 1998

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1.

WELL SUMMARY

## 1.1 Well Data

Well Name	:	Broadbill 1
Operator	:	Amity Oil NL
Well Type	:	Vertical
Average Inclination	:	0 - 2°
Bottom Hole Temperature	:	68° C
Location	:	VIC P/36, Bass Strait, Victoria
Contractor/Rig	:	Santa Fe / Paramaswara
Start Date (Abandonment)	:	16/01/98
Spud Date	:	17/01/98
RKB to Seabed	:	52.4 m
Total Depth	:	1345 m
Date TD Reached	:	26/01/97
Total Days Drilling	:	6 days
Date Released	:	31/01/97
Total Days on Well	:	16

## 1.2 Formation Tops

Formation	MD	TVD	Inclination
Seabed	52.4	52.4	0
Miocene Sand	385	385	0
Lakes Entrance	775	775	0.25
Latrobe	850	850	0.25
Strezelecki Group	1340	1340	2.25
TD	1345	1345	3.25

## 1.3 Casing Program

30"	Conductor	@	106 m
9 <sup>5</sup> / <sub>8</sub> "	Intermediate Casing	@	779 m

## 1.4 Personnel

Drilling Supervisors	:	Wally Westman	Murray Jackson	Chris Roots
Baroid Field Service Rep.	:	Nicholas Doust		

2.

COST SUMMARY

## 2.1 Drilling Fluid Costs

	Drilling Fluid	Hole Size	MD From	MD To	Cost (A\$)
1.	Seawater/ Hi-vis sweeps	36"	52.4 m	110 m	\$4,306.30
2.	Seawater/AQUAGEL/Polymer	12-1/4"	110 m	785 m	\$26,877.49
3.	KCI/EZ-MUD/Polymer	8-1/2"	785 m	1345 m	\$46,956.64
<b>Mud Materials Used For Drilling</b>				<b>Total A\$</b>	<b>78,140.44</b>
<b>Mud Materials Not Used For Drilling</b>			<b>(Cementing, P &amp; A )</b>	<b>A\$</b>	<b>698.40</b>
<b>Total Materials</b>				<b>A\$</b>	<b>78,838.83</b>

## 2.2 Engineering Costs

Service Representatives	From (date)	To (date)	Days
Nicholas Doust	16/01/98	28/01/98	13

Total Days

Service Cost @	\$650 per day	Total (A\$)	\$8,450.00
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<b>Total Cost of Drilling Material &amp; Engineering</b>	<b>A\$</b>	<b>87,288.83</b>
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3.

PERFORMANCE SUMMARY**3.1 Comments**

Most of the performance indicators were not met in Broadbill 1. The overall cost of the well was higher than programmed because of unanticipated problems with seepage losses and coal sloughing.

**3.2 Performance Indicators**

	Programmed	Actual	Achieved (± 10 %)
<b>Interval 1. 36" Hole ( 54.2 - 110 m)</b>			
• Volume Used, bbl	850	900	Yes
• Dilution Rate, bbl/m	5	6.28	No
• Consumption Rate, bbl/m	14.12	15.63	No
• Cost per bbl, A\$	\$4.55	\$4.78	Yes
• Cost per m, A\$	\$64.19	\$74.76	No
• Interval Mud Cost, A\$	\$4,089.58	\$4,306.3	Yes
<b>Interval 2. 12<sup>1</sup>/<sub>4</sub>" Hole (110 - 785 m)</b>			
• Volume Used, bbl	2321	2905	No
• Dilution Rate, bbl/m	2.0	2.83	No
• Consumption Rate, bbl/m	3.32	4.30	No
• Cost per bbl, A\$	\$6.51	\$9.03	No
• Cost per m, A\$	\$21.57	\$38.84	No
• Interval Mud Cost, A\$	\$15,761.45	\$26,218.4	No
<b>Interval 3. 8<sup>1</sup>/<sub>2</sub>" Hole (785 - 1345 m)</b>			
• Volume Used, bbl	1462	1668	No
• Dilution Rate, bbl/m	0.9	1.7	No
• Consumption Rate, bbl/m	1.78	2.98	No
• Cost per bbl, A\$	\$25.72	\$27.81	Yes
• Cost per m, A\$	\$45.80	\$82.84	No
• Interval Mud Cost, A\$	\$34,669.89	\$46,392.8	No
<b>Entire Well</b>			
• Total Drilling Fluid Cost, A\$	\$54,520.92	\$76,917.47	No

\* Programmed costs have been adjusted to reflect the material prices ex Geelong.

**3.3 Explanation of Non-Conformance**

- Interval 1 : Consumption rate, dilution rate and mud cost per metre were extremely close to programmed values. More frequent sweeps were pumped, resulting in a slightly higher cost, and consumption rates.
- Interval 2 : Mud costs and dilution/consumption rates were higher than programmed for the following reasons : (1) More mud was required due to seepage losses through coarse sands and contingency lost circulation material was used which was not programmed ; (2) Less mud making formation clays were drilled through than expected. This meant that extra mud material was required to maintain mud properties such as mud weight, viscosity and wall cake, subsequently raising costs ; (3) More PAC was required to maintain API filtrate at programmed levels.
- Interval 3 : Mud costs were higher as more volume was required. This was due to the significant losses that occurred, both downhole and over the shakers. Extra costs were also incurred with the use of contingency lost circulation material which was not programmed.



**4. INTERVAL - 1****4.1 SUMMARY**

**36" Hole From 52.4 m To 110 In 1 Days**

**Drilling Fluid Seawater/Hi-Vis AQUAGEL sweeps**

**Formations Gippsland Marl**

**Maintenance**

- Built 400 bbls of hi-vis AQUAGEL spud mud for sweeps.
- Drilled with seawater with returns to the seabed, pumping 40 bbl hi-vis sweeps every 5 - 10 metres.
- Pumped an 80 bbl hi-vis sweep followed by a 35 bbl hi-vis sweep after reaching section TD.
- The hole was displaced to unflocculated pre-hydrated AQUAGEL prior to a wiper trip at TD, and again prior to POOH to run 30" conductor.

**Solids Control Equipment**

- This section was drilled riserless.

## 4.2 EVALUATION

### Comments

- No hole problems were experienced and the 30" conductor was successfully run to bottom.

### Problems, Causes, Remedial Action Taken or Recommended

#### Hole Conditions

- 1) Problem No cement in casing annulus at the seabed.  
Cause Valve on stinger leaking.  
Action Perform remedial cement job on casing annulus via 2-7/8" tubing.

#### Drilling Fluid

- 1) Problem No drilling fluid problems.  
Cause  
Action

#### Solids Control and Mud Mixing Equipment

- 1) Problem No solids control equipment required.  
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

12<sup>1</sup>/<sub>4</sub>" Hole From 110 m To 785 m In 2 Days

Drilling Fluid Seawater/AQUAGEL/Polymer

Formations Gippsland Marl, Miocene Sand, Lakes Entrance

Properties	Programmed		Actual (Typical)		Conformance
	Min	Max	Min	Max	
Mud Weight, ppg		9.3	8.9	9.2	Yes
Funnel Viscosity, sec/qt	35	45	39	85	No
API Filtrate, ml		8.0	7.8	12	No
Residual Sulphite, mg/l	100	150	100	120	Yes

**Explanation of Non-Conformance**

- Funnel viscosity increased with PAC-R additions and incorporation of mud making clays towards the end of the interval. The funnel viscosity was allowed to stay high to ensure effective hole cleaning.
- The API filtrate was initially high but was reduced to specification as soon as drilling commenced.

**Maintenance**

- Built initial volume of 1430 bbls of seawater/AQUAGEL/Polymer mud.
- Direct additions of PAC-R to the active system were required to maintain the API filtrate at less than 8 ml/30 min.
- BARACOR-129 oxygen scavenger was added directly to the active system to maintain residual sulphites at 100 - 150 mg/l.
- The active system volume was maintained with addition of Seawater/AQUAGEL/PAC mud.
- Seepage losses occurred while drilling very coarse sands after drilling out of the 30" conductor. Approximately 700 bbls were lost downhole while further losses occurred over the shakers as the coarse sands blinded the scalper screens.
- Drilling continued at a reduced pump rate but downhole losses were still evident. A 25 bbl hi-vis sweep (viscosified with PAC-R) was pumped. A 50 bbl LCM pill (enough to cover the 12<sup>1</sup>/<sub>4</sub>" open hole) was also pumped prior to making a connection. The LCM pill consisted of: AQUAGEL : 20 ppb, BARACARB-25 : 18 ppb, BARACARB-100 : 20 ppb, BAROFIBRE : 4.5 ppb.
- Downhole losses were reduced as a result of pumping the LCM pill along with the formation becoming more clayey.
- A 100 bbl LCM pill (formulation as above) was spotted on bottom as a precaution prior to conducting a survey at 399 m.
- Both LCM pills were retained in the system.
- As more mud making clays were drilled and the mud became more viscous, seawater with 0.5 ppb PAC-L was used to maintain viscosity and filtration control. PAC-L was used instead of PAC-R to prevent excessive mud viscosity.

### Solids Control Equipment

- The two scalper screens were initially fitted with 20 mesh screens. However, one scalper was reduced to 10 mesh to reduce mud losses caused by blinding of the screens by coarse sands.
- The four Sweco LM3 shakers were fitted with 150 mesh screens for the entire interval.
- The Crestex desander and desilter were run for the entire interval.

## 5.2 EVALUATION

### Comments

Apart from seepage losses, no other hole problems occurred. Logs reached bottom. The caliper log showed that the hole was washed out to over 18" in the coarse sands from 200 to 235 m and 360 to 410 m. The hole was almost gauge from 410 m onwards. The 9<sup>5</sup>/<sub>8</sub>" casing was successfully run to bottom.

### Problems, Causes, Remedial Action Taken or Recommended

#### Hole Conditions

- 1) Problem Seepage losses.  
Cause Very coarse sands.  
Action Reduce pump strokes. Pump 25 bbl hi-vis sweep. Pump 50 bbl LCM sweep (containing BARACARB 25 : 18 ppb, BARACARB 100 : 20 ppb, BAROFIBRE : 4.5ppb, AQUAGEL : 20 ppb) before connection. Pump 100 bbl LCM pill (formulation as above) before conducting survey.
- 2) Problem Tight hole upon POOH at section TD, 70 K overpull.  
Cause Gauge hole. No fill recorded from multishot survey.  
Action POOH.

#### Drilling Fluid

- 1) Problem No drilling fluid problems.  
Cause  
Action

#### Solids Control and Mud Mixing Equipment

- 1) Problem No solids control problems.  
Cause  
Action

## 5.3 RECOMMENDATIONS FOR IMPROVEMENT

#### Hole Conditions

- No recommendations.

#### Drilling Fluid

- Program 0.75 ppb PAC for improved API filtration control.

#### Solids Control and Mud Mixing Equipment.

- No recommendations.

6. INTERVAL - 3

## 6.1 SUMMARY

8<sup>1</sup>/<sub>2</sub>" Hole From 785 To 1345 m In 3 Days

Drilling Fluid KCl/EZ-MUD/Polymer

Formations Lakes Entrance, Latrobe, Strezeleki Group

Properties	Programmed		Actual (Typical)		Conformance
	Min	Max	Min	Max	
Mud Weight, ppg	9.0	9.5	8.9	9.5	No
Plastic Viscosity, cP		30	10	16	Yes
6 rpm, lb/100 ft <sup>2</sup>	6	10	6	7	Yes
API Filtrate, ml		6.0	3.6	5.0	Yes
HPHT Filtrate, ml		15.0	10.6	12.5	Yes
pH	8.5	9.2	8.2	9.2	No
KCl Content, % vol	3	5	3	4	Yes
Excess PHPA, ppb	1	1.5	1	1	Yes
Low Gravity Solids, %		10.0	1.7	2.8	Yes
Residual Sulphites, mg/l	100	150	100	100	Yes

**Explanation of Non-Conformance**

- Initial mud weight (premix) was 8.9 ppg. The mud weight was allowed to remain at 8.9 ppg until approximately 865 m, when there was evidence that a coal seam appeared to be sloughing and mud losses occurred.
- The pH was purposely kept low to allow for any increase from cement. It was raised with caustic potash additions as soon as drilling commenced.

**Maintenance**

- Built initial volume of 1418 bbls of KCl/EZ-MUD/Polymer mud.
- Initial premixes were built with 4 % KCl to allow for some depletion while drilling through the Lakes Entrance Formation.
- To prevent mud losses over the shakers upon displacement, only half the programmed concentration of EZ-MUD DP was added to the initial premixes. As soon as drilling began, the full complement of EZ-MUD DP was mixed into the active. No mud losses over the shakers occurred.
- BARACOR-129 oxygen scavenger was added directly to the active system to maintain residual sulphites at 100 - 150 mg/l.
- The active system was weighted up from 8.9 to 9.1 ppg at 865 m after induced losses occurred as a result of coal sloughing.
- BARAZAN-D Plus additions were made directly to the active system to maintain the specified low end rheology and combat the effects of the coal thinning the mud.
- Induced seepage losses occurred while reaming the last stand to bottom at 1095 m after a wiper trip to the 9<sup>5</sup>/<sub>8</sub>" shoe. Approximately 40 bbls was squeezed into the formation due to coal pack off. Mud was also lost over the shakers due to the copious amounts of coal that covered the scalper screens. To help stabilise the coals, the mud weight was increased to 9.3 ppg.
- To prevent further losses, the active system was treated with 5 ppb each of BARACARB-25 and BARACARB-100.
- A 70 bbl hi-vis 10 ppg sweep was pumped after reaming to bottom on a wiper trip at TD.
- Approximately 100 bbls of hi-vis mud was spotted on bottom at TD.
- Mud left in the 9<sup>5</sup>/<sub>8</sub>" casing was treated with 0.2 ppb ALDACIDE and 1 ppb BARACOR-129.

### Solids Control Equipment

- The two scalper screens were dressed with 10 mesh screens for the entire section.
- The four Sweco LM3 shakers were initially dressed with 80 mesh screens. As the mud sheared, three shakers were downsized to 150 mesh screens.
- The Crestex desander and desilter were run intermittently. They were switched off once BARACARB was added to the mud system.

## 6.2 EVALUATION

### Comments

Broadbill 1 proved to be a dry well so 7" production casing was not run. Two attempts at logging were unable to get to bottom due to apparent coal caving or ledges. The caliper log showed severe washout over 16" in the coal sections. The mud system performed well. The mud properties were kept within specification with minimal maintenance required. The unanticipated problems experienced such as seepage losses which were able to be controlled and coal sloughing which was not able to be completely controlled, resulted in a failure of logging tools to reach bottom.

The addition of BARABLOK was included as a contingency in the original mud program and load out list submitted, it was decided not to proceed with this recommendation.

### Problems, Causes, Remedial Action Taken or Recommended

#### Hole Conditions

- 1) Problem Coal sloughing caused annulus packoff while drilling at 865 m causing mud losses.  
Cause Mud squeezed into formation when coal packed off, blocking annulus.  
Action Raised mud weight from 8.9 ppg to 9.1 ppg to help stabilise coals.
- 2) Problem Coal packing off while reaming last stand to bottom during wiper trip @ 1095 m. Approximately 40 bbls lost down hole.  
Cause Mud squeezed into formation when coal packed off, blocking annulus.  
Action Raised mud weight from 9.1 ppg to 9.3 ppg to help stabilise coals.  
Treat active system with 5 ppb each of BARACARB 25 and BARACARB 100.
- 3) Problem Tight hole on wiper trip out of hole at 1345 m TD.  
Cause Coals packing off.  
Action Circulate coal out of hole. Backream out of hole. Ream to TD. Circulate hole & pump approximately 100 bbls of 10 ppg hi-vis sweep. Spot 100 bbls of hi-vis mud on bottom prior to POOH.
- 4) Problem Logs at TD unable to get past 1029 m.  
Cause Logging tool apparently hanging up on coal ledge.  
Action Perform wiper trip. Ream coal ledge.
- 5) Problem Logging tool unable to get past 869 m on second run after wiper trip.  
Cause Logging tool apparently hanging up on coal ledges.  
Action Reconfigure logging tools - still could not get any further. Plug and abandon as a dry well.

#### Drilling Fluid

- 1) Problem No problems maintaining specified fluid properties.  
Cause  
Action

#### Solids Control and Mud Mixing Equipment

- 1) Problem No solids control problems.  
Cause  
Action

### 6.3 RECOMMENDATIONS FOR IMPROVEMENT

#### Hole Conditions

- Control drill coal beds to reduce sloughing and caving.
- Begin with an initial mud weight of 9.2 - 9.3 ppg to enhance borehole and coal stability.

#### Drilling Fluid

- In future wells we recommend adding a microfracture plugging agent such as BARABLOK or BARATROL to help reduce pore pressure penetration into coals. The BARABLOK blocking agent works by plugging microfractures and minimising filtration invasion into the coals, thereby stabilising the coal.

#### Solids Control and Mud Mixing Equipment.

- No solids control recommendations.



## APPENDIX-A

CALIPER DATA

Depth m	Hole Size (ins)	Depth m	Hole Size (ins)
110	14.25	525	12.25
125	14.35	550	12.25
150	14.25	575	12.00
175	14.25	600	12.00
200	15.00	625	12.25
225	16.50	650	12.25
250	14.00	675	12.00
275	12.25	700	12.25
300	12.25	725	12.00
325	12.25	750	12.25
350	12.25	800	8.50
375	13.50	825	11.00
400	18.50	850	12.25
425	13.00	875	8.50
450	12.50	900	8.50
475	12.00	925	8.25
500	12.25	950	8.00

## APPENDIX-B

DEVIATION DATA

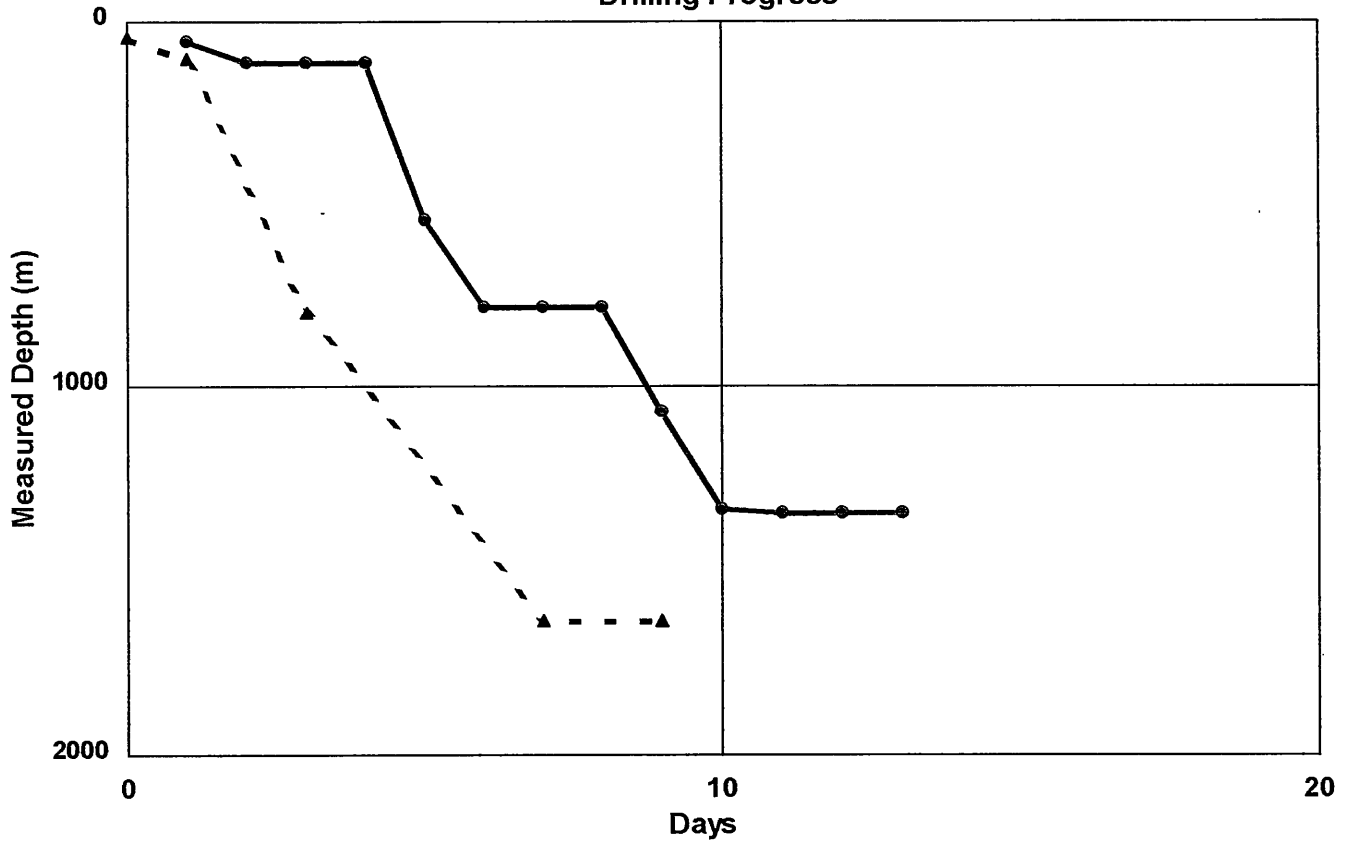
Depth MD (m)	Depth TVD (m)	Inclination (deg)	Direction (deg)	Displacement (m)
113.1	113.1	0.15	100.0	0.00
142.1	142.1	0.00	0.0	-0.01
170.3	170.3	0.00	0.0	-0.01
198.3	198.3	0.30	63.0	0.03
226.4	226.4	0.10	51.0	0.07
255.3	255.3	0.35	47.0	0.15
284.1	284.1	0.35	112.0	0.18
312.9	312.9	0.15	75.0	0.15
341.8	341.8	0.30	126.0	0.12
370.6	370.6	0.25	142.0	0.03
399.4	399.4	0.10	348.0	0.00
428.3	428.3	0.15	330.0	0.06
457.1	457.1	0.20	27.0	0.14
485.9	485.9	0.25	32.0	0.23
514.7	514.7	0.20	33.0	0.33
543.6	543.6	0.25	91.0	0.37
572.4	572.4	0.30	101.0	0.35
601.2	601.2	0.35	103.0	0.32
630.1	630.1	0.35	149.0	0.23
658.9	658.9	0.30	97.0	0.14
687.7	687.7	0.25	88.0	0.13
716.6	716.6	0.40	54.0	0.20
745.4	745.4	0.30	28.0	0.32
774.2	774.2	0.25	1.00	0.45
779.6	779.6	0.25	320.0	0.47

# DRILLING FLUID PERFORMANCE

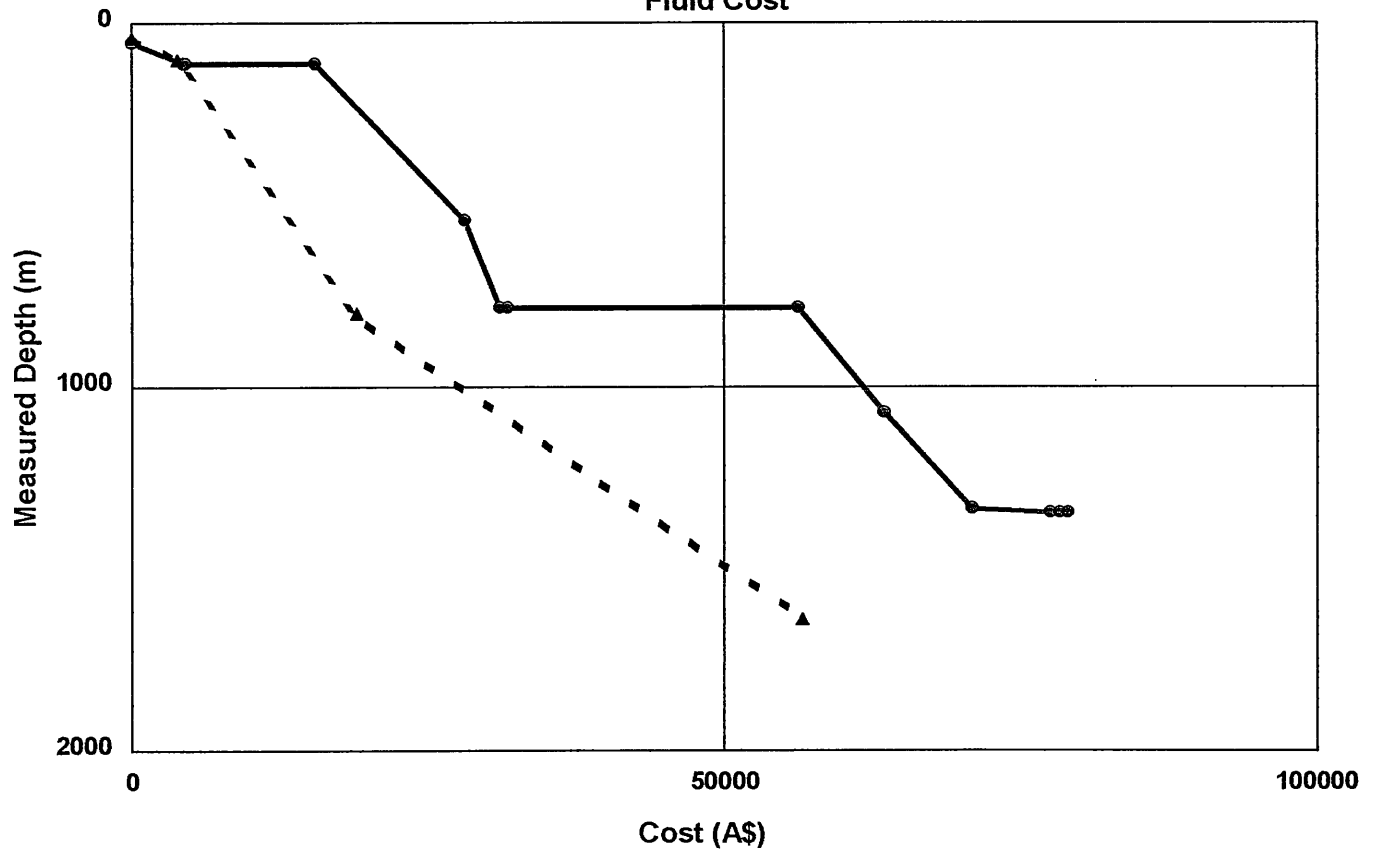
Operator : Amity Oil NL  
Well : Broadbill 1



### Drilling Progress



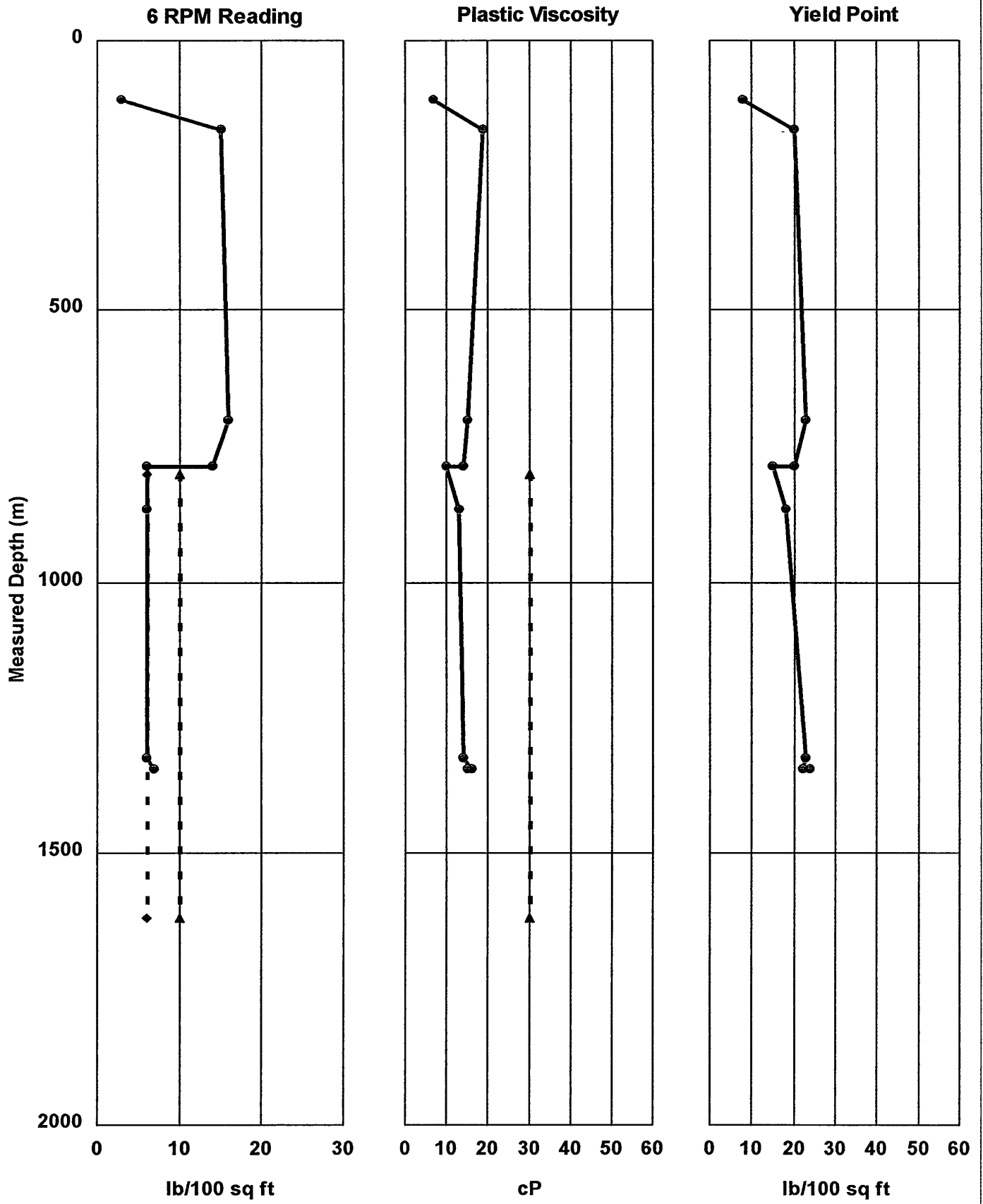
### Fluid Cost



DRILLING FLUID PROPERTIES (Page - 1)



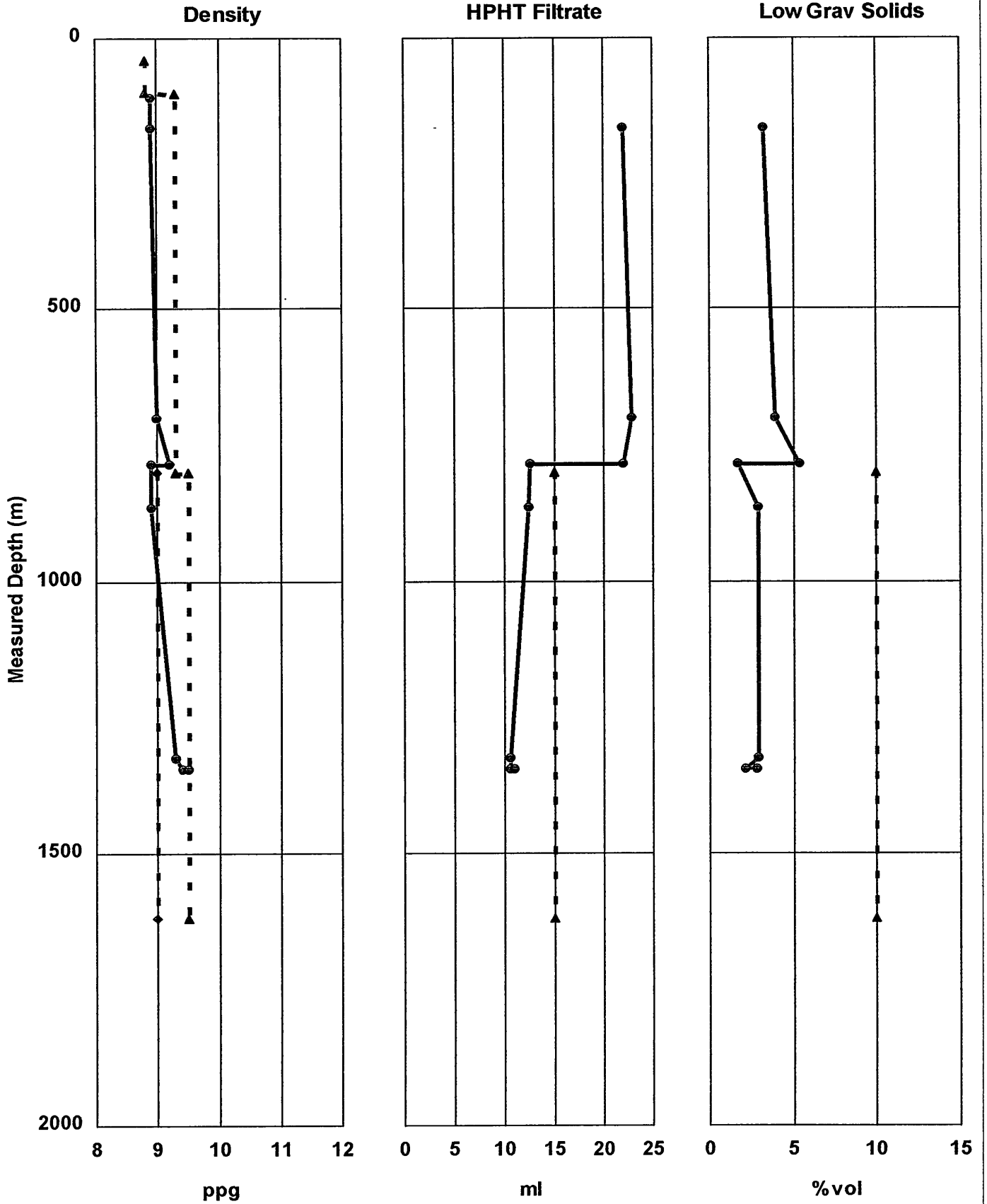
Operator : Amity Oil NL  
Well : Broadbill 1





Operator : Amity Oil NL

Well : Broadbill 1





# Postwell Audit

Amity Oil NL

Broadbill 1

Drilling Contractor	Santa Fe Drilling
Rig	Paramswara
Prepared by	JAMES GALLAGHER
Date	05/02/98
Internal Well Number	M0300280

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Well Summary

Well data Spud date : 17/01/98  
 TD date : 26/01/98  
 Days on well : 12  
 Drilling days : 6  
 Water depth ( RKB to seabed ) : 22 (52) meters  
 Total measured depth : 1,345 meters  
 True vertical depth : 1,345 meters  
 Distance Drilled : 1,293 meters  
 Maximum deviation : 3.25°  
 BHT : 68 Deg C  
 Total mud cost : \$A 78,140.43  
 Mud cost per meters : \$A 60.45  
 Total cost : \$A 78,838.83  
 Baroid Engineers : NICHOLAS DOUST

Casing Program	Casing size in.	Shoe depth meters
	30	106
	30	106
	9 5/8	779
	9 5/8	779

Mud type	Interval meters	Hole size in.	Mud cost, \$A
No Mud	52 To 110		4,306.30
Gel/Seawater			
Seawater			
Gel/Polymer	110 To 785	12.25	26,877.49
KCl/Polymer	785 To 1345	8.5	46,956.64

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Total Material Consumption

Material	Unit size	Quantity	Total cost (\$A)
ALDACIDE G	25 L. CAN	4	815.84
AQUAGEL	25 KG. BAG	56	659.12
AQUAGEL	1000 KG. TON	40.200	19,074.90
BARACARB 100	25 KG. SACK	144	2,073.60
BARACARB 25	25 KG. BAG	144	1,663.20
BARACOR 129	25 KG. CAN	47	2,849.02
BARAZAN-D PLUS	25 KG. BAG	40	14,399.20
barite	1000 KG. TON	24.300	7,829.95
BAROFIBRE	25 LB. BAG	27	1,606.50
caustic soda	25 KG. PAIL	7	302.47
DEXTRID LT	25 KG. BAG	123	6,464.61
EZ-MUD DP	50 LB. BAG	51	5,846.04
lime	20 KG. BAG	5	42.15
PAC-L	25 KG. BAG	41	6,034.86
PAC-R	25 KG. BAG	25	3,680.25
potassium chloride	1000 KG. BAG	10	4,312.10
potassium hydroxide	20 KG. PAIL	9	397.53
soda ash	25 KG. BAG	6	89.10
<b>Miscellaneous Items</b>			
Cacl2			698.40

Total mud cost \$A 78,140.44

Total miscellaneous cost \$A 698.40

Total cost \$A 78,838.84

Programmed mud cost \$A 41,456.17

Variance \$A 36,684.27

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Interval Summary

---

Interval #	01
Bit Size	in.
Mud type(s)	No Mud Gel/Seawater Seawater
Top of interval	52.4 meters
Bottom of interval	110.0 meters
Maximum density	8.30 ppg
Interval start date	16/01/98
Interval end date	18/01/98
Interval days	3
Drilling days	1
Interval TD date	17/01/98
Rotating hours	3.00
Average penetration rate	19.2 meters
Bottomhole static temperature	40° Deg C
Maximum flowline temperature	0° Deg C
Casing size	30 in.
Major lithology	Marl
Interval mud cost	\$A 4,306.30
Mud cost per (bbl)	\$A 4.78
Mud cost per meters	\$A 74.76
Total Interval Cost	\$A 4,597.30



Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



## Interval Summary

---

Interval #	02
Bit Size	12.25 in.
Mud type(s)	Gel/Polymer
Top of interval	110.0 meters
Bottom of interval	785.0 meters
Maximum density	9.20 ppg
Interval start date	19/01/98
Interval end date	22/01/98
Interval days	4
Drilling days	2
Interval TD date	21/01/98
Rotating hours	25.75
Average penetration rate	26.2 meters
Bottomhole static temperature	68° Deg C
Maximum flowline temperature	46° Deg C
Casing size	9 5/8 in.
Major lithology	Claystone, Marl, Sands
Maximum deviation	0.25°
Interval mud cost	\$A 26,877.49
Mud cost per (bbl)	\$A 9.03
Mud cost per meters	\$A 39.82
Total Interval Cost	\$A 27,255.79

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Interval Summary

Interval #	03
Bit Size	8.5 in.
Mud type(s)	KCI/Polymer
Top of interval	785.0 meters
Bottom of interval	1,345.0 meters
Maximum density	9.50 ppg
Interval start date	23/01/98
Interval end date	28/01/98
Interval days	6
Drilling days	3
Interval TD date	26/01/98
Rotating hours	29.75
Average penetration rate	18.8 meters
Bottomhole static temperature	68° Deg C
Maximum flowline temperature	42° Deg C
Casing size	9 5/8 in.
Major lithology	Claystone, Sands, Coal
Maximum deviation	3.25°
Interval mud cost	\$A 46,956.64
Mud cost per (bbl)	\$A 27.81
Mud cost per meters	\$A 83.85
Total Interval Cost	\$A 46,985.74

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Interval Material Consumption

Interval #01 in. Hole Section

Top of Interval 52 meters  
 Bottom of Interval 110 meters

Material	Unit size	Quantity	Total cost (\$A)
AQUAGEL	1000 KG. TON	8.500	4,033.25
caustic soda	25 KG. PAIL	5	216.05
lime	20 KG. BAG	5	42.15
soda ash	25 KG. BAG	1	14.85
Miscellaneous Items			
Cacl2			291.00

Interval mud cost \$A 4,306.30

Interval miscellaneous cost \$A 291.00

Total interval cost \$A 4,597.30

Programmed mud cost \$A 3,851.16

Variance \$A 455.14

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Interval Material Consumption

Interval #02 12.25 in. Hole Section

Top of Interval 110 meters  
 Bottom of Interval 785 meters

Material	Unit size	Quantity	Total cost (\$A)
AQUAGEL	25 KG. BAG	56	659.12
AQUAGEL	1000 KG. TON	31.700	15,041.65
BARACARB 100	25 KG. SACK	48	691.20
BARACARB 25	25 KG. BAG	48	554.40
BARACOR 129	25 KG. CAN	21	1,282.05
barite	1000 KG. TON	2.400	773.33
BAROFIBRE	25 LB. BAG	27	1,606.50
caustic soda	25 KG. PAIL	2	86.42
PAC-L	25 KG. BAG	17	2,502.57
PAC-R	25 KG. BAG	25	3,680.25
Miscellaneous Items			
Cacl2			378.30

Interval mud cost \$A 26,877.49  
 Interval miscellaneous cost \$A 378.30  
 Total interval cost \$A 27,255.79

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Interval Material Consumption

Interval #03 8.5 in. Hole Section

Top of Interval 785 meters  
 Bottom of Interval 1,345 meters

Material	Unit size	Quantity	Total cost (\$A)
ALDACIDE G	25 L. CAN	4	815.84
BARACARB 100	25 KG. SACK	96	1,382.40
BARACARB 25	25 KG. BAG	96	1,108.80
BARACOR 129	25 KG. CAN	26	1,566.97
BARAZAN-D PLUS	25 KG. BAG	40	14,399.20
barite	1000 KG. TON	21.900	7,056.62
DEXTRID LT	25 KG. BAG	123	6,464.61
EZ-MUD DP	50 LB. BAG	51	5,846.04
PAC-L	25 KG. BAG	24	3,532.29
potassium chloride	1000 KG. BAG	10	4,312.10
potassium hydroxide	20 KG. PAIL	9	397.53
soda ash	25 KG. BAG	5	74.25
Miscellaneous Items			
Cacl2			29.10

Interval mud cost \$A 46,956.65

Interval miscellaneous cost \$A 29.10

Total interval cost \$A 46,985.75

Programmed mud cost \$A 37,605.01

Variance \$A 9,351.64

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE:in.

MUD TYPE:No Mud

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
16/01/98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: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	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
17/01/98	0	0	0	879	0	21	900	900	662	0	662	662	0	238	238	0	0

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE:in.

MUD TYPE:Seawater

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
18/01/98	238	0	0	0	0	0	0	0	0	0	0	0	0	281	281	0	0



Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: 12.25 in.

MUD TYPE: Gel/Polymer

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
19/01/98	281	0	0	1,390	0	40	1,430	1,430	340	0	340	340	0	1,371	281	572	518
20/01/98	1,371	0	0	1,042	0	39	1,081	2,511	584	700	1,284	1,624	0	1,168	441	419	308
21/01/98	1,168	0	0	385	0	0	384	2,905	217	24	241	1,865	0	1,321	590	523	208
22/01/98	1,321	0	0	0	0	0	0	2,905	1,015	0	1,015	2,880	0	308	100	0	116

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: 8.5 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	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
23/01/98	306	0	0	1,371	0	47	1,418	1,418	0	0	0	0	0	1,724	100	0	1,534
24/01/98	1,724	0	0	0	16	3	18	1,436	450	70	529	529	0	1,213	215	467	531
25/01/98	1,213	0	0	0	11	12	23	1,459	273	40	313	842	0	923	270	542	111
26/01/98	923	0	0	104	7	0	207	1,666	140	100	249	1,091	0	881	317	440	118
27/01/98	881	0	0	0	2	0	2	1,668	57	0	57	1,148	0	826	317	509	0
28/01/98	826	0	0	0	0	0	0	1,668	0	0	0	1,148	0	826	317	509	0

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
16/01/98	52	<b>OFFLOADING BOAT</b>  Baroid Engineer arrived on rig.  Offloading boats.
17/01/98	110	<b>POOH TO RUN 30" CSG</b>  Built 400 bbls of flocculated spud mud for 1 hi-vis sweeps and 500 bbls of pre-hydrated 1 AQUAGEL for filling hole. Built 1066 bbls of 1 pre-hydrated AQUAGEL for 12-1/4" section - 1 will charge of 12-1/4" mud costs tomorrow. Total mud built : 1966 bbls.  Actual AQUAGEL stock remaining : 16.4 MT. Initial Barite on board: 19.64 MT (432 sxs) All material ordered in loadout 1 rec'd.  Continue to offload boat. Make up 36" BHA. 1 RIH. Tag seabed @ 52.4 m. Drill ahead with 1 seawater pumping 40 bbl hi-vis AQUAGEL 1 sweeps every 5 - 10 m. Drill to 110.4 m. 1 Pump 80 bbl hi-vis sweep. Circulate out 1 sweep. Pump 35 bbl hi-vis mud. Displace hole 1 to unflocculated pre-hydrated AQUAGEL. POOH. 1 RIH. Displace hole to unflocculated 1 pre-hydrated AQUAGEL. POOH to run 30" 1 conductor.
18/01/98	110	<b>INSTALL DIVERTER</b>  Calcium Chloride used for cementing. To be 1 charged as non-drilling cost.  Will charge off 12-1/4" mud costs tomorrow.  Total 12-1/4" mud built to date : 1182 bbls.  Rig up and run 30" conductor to 106 m. Pick 1 up 2-7/8" tubing and run with 30" conductor. 1 Cut conductor joint. Cement casing. Install 1 12-1/4" diverter.
19/01/98	110	<b>PICK UP 12-1/4" BHA</b>  Calcium chloride used for cementing to be charged as 'non-drilling cost'.  Built total of 1430 bbls of seawater/AQUAGEL/Polymer mud for 12-1/4" hole.  Expect API filtrate to decrease with incorporation of drill solids and more PAC-R once drilling commences.  Continue to install diverter and riser. Function flowline, seals and overboard 1 lines. Run wear bushing. Cement top of 30" 1 conductor via 2-7/8" tubing. Pick up 5" 1 drill pipe. Make up 17-1/2" BHA to drill 1 cement out. RIH. Drill cement, shoe track 1 and rathole. Displace hole to 1 seawater/AQUAGEL/PAC mud system. POOH. Pick 1 up and make up 12-1/4" BHA.

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
20/01/98	545	<p><b>DRILLING</b></p> <p>Built 1070 bbls of new mud. Heavy mud losses experienced through coarse sands (approx 700 bbls). Adding PAC-R to maintain API filtrate and BARACOR-129 to maintain Excess Sulfite.</p> <p>LCM Sweeps : BARACARB 25 : 18 ppb      BARACARB 100: 21 ppb BAROFIBRE : 4.5 ppb      AQUAGEL : 20 ppb Running all solids control equipment. Building 30 bbls pumpable KCl/EZ-MUD/Polymer mud for spotting across Lakes Entrance.</p> <p>PROBLEM : Seepage losses</p> <p>Seepage losses occurring through coarse sands. Pumped LCM pill/sweep of : BARACARB 25 : 18 ppb BARACARB 100 : 21 ppb AQUAGEL : 20 ppb BAROFIBRE (reg): 4.5 ppb</p> <p>Continue to pick up 8" drill collars. Drill 7 m of 12-1/4" hole. Pick up last 8" drill collar. Unable to circulate - plugged above float. POOH. Unblock float. RIH. Drill ahead to 117 m - Incurring downhole losses. Pump 25 bbl hi-vis sweep. Circulate bottoms up. Pump 25 bbl hi-vis. Drill ahead to 227 m at reduced pump strokes (120 spm). Pump 50 bbl LCM pill (as above) before connection - losses halted/red'd. Drill to 399 m. Circ b/u. Spot 100 bbl LCM pill (as precaution) before conducting survey. Drill ahead.</p>
21/01/98	785	<p><b>R/U TO LOG / LOG</b></p> <p>Maintained treatment of active system with PAC-R to hold API filtrate. Diluted active with seawater/PAC-L to control mud viscosity increase from drilling claystone. BARACOR-129 used to maintain excess sulfites. Building KCl/EZ-MUD/Polymer mud for 8-1/2" hole. Ran desander and desilter in non-stop.</p> <p>Reports have been cost modified to reflect updated mud material prices. No new shakers screens used to date.</p> <p>PROBLEM : Seepage losses</p> <p>Hole not taking correct volume when POOH. Slight seepage losses of 4-6 bbl/hr prior to logging.</p> <p>Continue to drill ahead to 701 m. Circulate bottoms up. Conduct Hofco survey. Drill ahead to 785 m. Circulate bottoms up. Conduct multishot survey. POOH. Some tight hole on first 6 stands (hole took 6 bls). POOH to 30" conductor @ 110 m. Conduct top drive service (hole took 12 bbls). RIH. Hole good. Circulate hole clean. POOH. Rig up to run Schlumberger logs. Hole drink rate currently 4-6 bbls/hr.</p>

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
22/01/98	785	<p><b>WOC</b></p> <p>Mixing 3% KCl/EZ-MUD/Polymer mud. Costs/volume to be included tomorrow.</p> <p>Three shakers changed to coarser 80 mesh size screens to prevent/reduce initial losses of unsheared mud. Scalpers changed to 10 mesh. No new screens used to date.</p> <p>Dumping and cleaning pits at report time.</p> <p>AQUAGEL and Calcium Chloride used in cement job - to be charged as non-drilling cost.</p> <p>Rig up Schlumberger. Log 12-1/4" hole -BHC-LDL-CNL-DLL-MSPL-GR-CALI-SP. Rig down Schlumberger. Pull diverter bag. Retrieve wear bushing &amp; laydown running tool. Rig up &amp; run 9-5/8" casing to 779 m. Circulate casing while waiting on chemicals. Cement as per program. WOC.</p>
23/01/98	785	<p><b>RUN WEAR BUSHING</b></p> <p>Built total of 1418 bbls of KCl/EZ-MUD/Poly for 8-1/2" section. Mud built contains only 0.75 ppb EZ-MUD to reduce mud losses over shakers upon displacement.</p> <p>Mud check is on reserve mud. Mud mixed with 1 KCl content of 4 % to allow for depletion 1 through Lakes Entrance Formation.</p> <p>WOC. Cut off 9-5/8" casing. Rig up &amp; pull diverter. o/shot &amp; riser &amp; lay don. Install adapter ring. Test flange to 2000 psi. Lower BOP's &amp; nipple up. Pressure test BOP's. Run 1 wear bushing.</p>
24/01/98	1,070	<p><b>DRILLING</b></p> <p>Mud dumped is gel mud in hole &amp; pit. Raised EZ-MUD concentration to programmed value after displacing. Adding BARACOR-129 to 1 maintain excess sulphites. Weighed up mud to 1 9.1 ppg @ 865 m for extra hole stability 1 while drilling coal seams. Lost approx 70 1 bbls downhole while drilling coal seams. 1 Treated active with additional BARAZAN 1 D-Plus to combat thinning of the mud from 1 coal. Running desander/desilter.Changed 1 shakers to finer 150 mesh screens. No new screens used to date. KCl content : 3 %</p> <p>Lay down 8" drill collars. Pick up &amp; make up 1 8-1/2" BHA. Pick up 5 " drill pipe. RIH. Tag 1 cement @ 745 m. Drill out cement &amp; float to 1 775 with seawater. Pump 100 bbl sweep of old 1 mud. Displace hole to KCl/EZ-MUD/Polymer 1 mud. Perform LOT @ 788 m to 13 ppg EMW (564 psi). Drill ahead to 865 m. Circulate 1 out coal. Drill ahead to 1070 m.</p>

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
25/01/98	1,335	<p><b>DRILLING</b></p> <p>Maintain volume &amp; properties with addition of premix. Lost approx 40 bbls downhole (squeezed into formation after coal pack off) while reaming last stand to bottom during wiper trip. Raised mud weight to 9.3 ppg to help stabilise coals. Treated active with 5 ppb each of BARACARB 25 &amp; BARACARB 100 to prevent further seepage losses. Maintaining BARACARB concentrations with regular additions. Maintaining excess sulfites with BARACOR-129. BARAZAN D-Plus used to maintain 6 rpm. KCl Content : 3.2 %</p> <p>Drill from 1070 - 1095 m. Circulate bottoms up, working pipe. Drop Single shot survey. POOH to shoe @ 779 m. Retrieve survey. Service TDS. RIH. Lose circulation 1 std off bottom. Work pipe. Begin to increase mud weight to 9.3 ppg. Drill ahead to 1335 m.</p>
26/01/98	1,345	<p><b>LOGGING</b></p> <p>Lost approximately 100 bbls downhole when backreaming out of hole due to coal sloughing.</p> <p>Built 200 bbls of new premix to maintain mud volume.</p> <p>BARAZAN-D Plus used to make hi-vis sweeps.</p> <p>No new shakers screens used on Broadbill 1.</p> <p>KCl content : 3 %</p> <p>Drill ahead from 1335 to 1345 m. Circulate bottoms up. Drop survey. POOH 1 stand. Backream out of tight hole (coal sloughing, mud losses occurring) from 1326 to 9-5/8" casing shoe @ 779 m. Circulate bottoms up. Retrieve survey. Service TDS. RIH to 1018 m &amp; ream to TD. Circulate &amp; work pipe. Pump 70 bbl 10 ppg hi-vis sweep. Circulate hole clean, some downhole losses. Spot 100 bbls hi-vis on bottom. POOH - no problem. Rig up &amp; log 8-1/2" hole.</p>
27/01/98	1,345	<p><b>PREPARE TO P &amp; A</b></p> <p>BARAZAN-D Plus used to build 100 bbls of hi-vis spotted on bottom prior to POOH.</p> <p>Barite used for slugs.</p> <p>KCl content : 3 %</p> <p>Logs unable to get past 1029 m. Rig down Schlumberger. Pick up 8-1/2" BHA. RIH. Wash &amp; ream from 880 - 982 m &amp; 1027 - 1095 m. RIH. Circulate &amp; condition mud @ 1191 m. RIH to TD. Circulate bottoms up. Pump hi-vis sweep. POOH - no problem. Rig up &amp; log. Logs unable to get past 869 m. Change logging tool configuration - still unable to get further. Rig down. Break &amp; laydown excess drillpipe. Prepare to P &amp; A.</p>

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
28/01/98	1,345	PLUG & ABANDON  All chemicals used for P & A.  Mud engineer leaves rig.  Plug and abandon.

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Bit and Hydraulic Record

DATE IN	BIT NO.	BIT SIZE in.	BIT MAKE	BIT TYPE	JETS or TFA	DEPTH OUT meters	DRILLED meters	HOURS RUN	CUM HOURS	WEIGHT ON BIT lb/1000	BIT RPM	PUMP OUTPUT gpm	ANN. VEL DP/DC m/min	PUMP PRESSURE psig	MUD WEIGHT ppg	BIT GRADING	MUD TYPE, LITHOLOGY, REMARKS
//		0.00									0		0/0				
17/01/98	1	36.00	VAREL	L3AB	3 X 22	110	58	1	1		0	924	0/0		9	1-1-NO-A-0	Seawater/AQUAGEL sweeps, Marl
20/01/97	2	17.50	HUGHES	R1	3 X 20						0	924	0/0		9	1-1-NO-A-0	Cement
20/01/97	3	12.25	HUGHES	MAX-GT1	3 X 16	785	675	22	22	20	0	840	16/140	2420	9	1-2-NO-A-2	Seawater/AQUAGEL/Polymer, Micaceous Sand, siltstone, claystone.
24/01/97	4	8.50	HUGHES	ATM GT1B	2 X 16, 14	1345	580	27	43	15	140	504	74/125	1350	9	4-5-IN GAU	KCl/EZ-MUD/Polymer, Sandstone, coal



Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Mud Property Recap: Water-Based Mud

DATE	DEPTH meters	F/L TEMP Deg C	DENSITY ppg	FUN VIS sec/qt	RHEOLOGY @ 120°F			pH	FILTRATION				FILTRATE ANALYSIS					SAND % by vol	RETORT ANALYSIS					MBT me/ml mud	RHEOMETER DIAL READINGS				
					PV cP	YP lbs/100 ft2	GELS		API ml/30 ml	HTHP ml/30 min	Cake 32nd in	Temp Deg C	Rm ml	Pf ml	Mf ml	Cl mg/L	Total Hardness mg/L		Corr Solids % by vol	LGS % by vol	Oil % by vol	Water % by vol	600/300		200/100	6/3			
16/01/98	52		8.3	28	1.0		/				2/0	121															/	/	/
17/01/98	110		0.0		1.0		/				2/0	121															/	/	/
18/01/98	110		0.0		1.0		/				2/0	121															/	/	/
19/01/98	110		8.9	38	7.0	8.0	3.0/ 4.0		12.0		1/0	121														22 / 15	11 / 7	3 / 2	
20/01/98	545	38	8.9	39	10.0	20.0	17.0/ 21.0	8.50	8.2	22.00	1/0	121	0.30	0.01	0.05	20,500	600.0	0.5	3.22	3.22		85.60	4.00	58 / 39	31 / 24	15 / 14			
21/01/98	785	48	9.0	85	15.0	23.0	17.0/ 30.0	8.20	8.0	22.80	1/2	121	0.40	0.02	0.06	21,000	600.0	tr	3.90	3.90		94.90	5.00	53 / 38	32 / 26	16 / 13			
22/01/98	785	48	9.2	44	14.0	20.0	15.0/ 23.0	8.20	7.8	22.00	1/2	121	0.30	0.01	0.06	21,000	580.0	tr	5.41	5.41		93.40	5.50	48 / 34	29 / 25	14 / 12			
23/01/98	785		8.9	65	10.0	15.0	4.0/ 8.0	8.20	5.0	12.50	1/1	121	0.20	0.07	0.11	43,000	380.0		1.67	1.67		95.80		35 / 25	20 / 14	6 / 3			
24/01/98	1070	40	8.9	44	13.0	18.0	4.0/ 8.0	9.00	4.7	12.40	1/2	121	0.22	0.02	0.18	24,000	320.0	1.0	2.91	2.91		85.70	0.20	44 / 31	25 / 18	6 / 4			
25/01/98	1335	42	9.3	42	14.0	23.0	5.0/ 8.0	8.50	3.8	10.80	1/2	121	0.20	0.01	0.16	22,000	300.0	0.25	4.34	2.87		94.40	0.60	51 / 37	30 / 21	6 / 4			
26/01/98	1345	42	9.4	44	16.0	22.0	6.0/ 9.0	8.50	3.8	10.50	1/2	121	0.15	0.01	0.16	22,000	300.0	0.5	4.34	2.12		94.40	0.00	54 / 38	31 / 23	7 / 5			
27/01/98	1345		9.5	43	15.0	24.0	7.0/ 9.0	8.00	4.0	11.00	1/2	121	0.10	0.01	0.18	22,000	300.0	0.25	5.05	2.78		93.70	0.60	54 / 39	32 / 24	7 / 5			
28/01/98	1345		9.5	28	1.0		/				2/0	121														/	/	/	

Date	16/01/98	Depth	52.4 m [MD]
Spud Date	17/01/98	Present Activity	OFFLOADING BOAT

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING		CASING		CIRCULATION DATA				
Size	in.	Pipe OD	ID	Len.		Pump Make/Model				
Type		Pipe OD	ID	Len.	in.	m	Size	Eff.	v/st	
No. Jets		Pipe OD	ID	Len.	Set @		spm	bbl/min		
Jets 32nd inch		Collar OD	ID	Len.	Set @		Pump Make/Model			
		Collar OD	ID	Len.	Set @		Size	Eff.	v/st	
		in. OPEN HOLE		m	Set @		spm	bbl/min		
Tot Noz Area		Size	Len.		Set @		Pump Make/Model			
TFA		Size	Len.		Set @		Size	Eff.	v/st	
		Size	Len.		Set @		spm	bbl/min		
		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	Essential
Source	Flowline				Targets	Program
Time	10:54				*=Excep	Properties
FL Temp	Deg C	0			P 2 3	
Depth	m	0.0				
Weight	ppg	8.3				
FV @ 16 Deg C	sec/qt	28				
PV @ 49 Deg C	cP	1				
YP	lbs/100 ft <sup>2</sup>	0				
Gels	lbs/100 ft <sup>2</sup>	0/0				
API Filt.	ml/30 min	0.0				
HTHP @ 121 Deg C	ml/30 min	0.0				
Cake API/HTHP	32nd in	2/0				
Corr.Solids % by vol		0.0				
Oil/Water % by vol		0.0/0.0				
Sand % by vol						
MBT		0.0				
pH STRIP		0.0				
Alk. Mud (Pm)		0.00				
Alk. Filtr. (PE/ME)		0.00/0.00				
Chlorides mg/l		0				
Hard. Ca mg/l		0				
Low Gravity Solids	ppb	0.00				

MUD TREATMENTS
Baroid Engineer arrived on rig.

RIG ACTIVITY
Offloading boats.

MATERIALS USED
NO INVENTORY USED ON THIS REPORT

SOLIDS EQUIPMENT		
Device	Make	Sz/Screen HR

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT TIME	
MUD VOLUME	MUD TYPE				
Hole	Pits	No Mud	600 rpm	Water Depth	21.7
0	0	MUD CONSUMPTION	300 rpm	Calc. F. Grad	0.0
Active Volume		ADDITIONS	200 rpm	Leak Off Test	0.0
0		Oil	100 rpm	ACD	ppg
Reserve	Total	Brine Water	6 rpm	Cog. Shoe	0.0
0	0	Drill Water	3 rpm	TD	0.0
Low Grav. vol %	0.0	Sea Water	0	Max. Diff. Press	0
ppb	0.00	Whole Mud	0		
High Grav. vol %	0.0	Barite	0		
ppb	0.00	Chemicals	0		
ASG	2.60	LOSSES	Actual Circ. Press		
Drill Cuttings	0	Dumped	0		
Dilution Rate	0.00	Lost	0		
Slids Control Eff	0.00	VOL GAIN/LOSS	0		

BAROID REPRESENTATIVE Nicholas Doust	OFFICE/HOME WARRHOUSE	Melbourne Welshpool	TELEPHONE (03) 9621 3311 (03) 56 881 445	DAILY COST \$A	CUMULATIVE COST \$A
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NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA					
Size	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600				
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00	V/st	0.120
No. Jets		Pipe OD	ID	Len.	Set #		spm	0	bbl/min	0.0		
Jets 32nd inch		Collar OD	ID	Len.	Set #		Pump Make/Model	Ideco T-1600				
		Collar OD	ID	Len.	Set #		Size	6.5 X 12	Eff.	97.00	V/st	0.120
		in. OPEN HOLE			m	Set #	spm	0	bbl/min	0.0		
Tot Noz Area		Size	36	Len.	57.6		Set #	Pump Make/Model				
TFA		Size		Len.			Set #	Size	Eff.	V/st		
		Size		Len.			Set #	spm	bbl/min			
		Size		Len.			Set #	Tot. Vol./min	0	gpm	0.0	bbl
		Size		Len.			Set #	BU Time	0	TC Time	0	

MUD PROPERTIES					MUD TREATMENTS				
		Primary	2	3	Program	Essential			
Source		Flowline			Targets	Program	Built 400 bbls of flocculated spud mud for hi-vis sweeps and 500 bbls of pre-hydrated AQUAGEL for filling hole. Built 1066 bbls of pre-hydrated AQUAGEL for 12-1/4" section - will charge of 12-1/4" mud costs tomorrow. Total mud built : 1966 bbls.  Actual AQUAGEL stock remaining : 16.4 MT. Initial Barite on board: 19.64 MT (432 sxs) All material ordered in loadout 1 rec'd.		
Time		10:57			**Excep	Properties			
FL Temp	Deg C	0			P 2 3				
Depth	m	110.0							
Weight	ppg	0.0							
FV @ 16 Deg C	sec/qt	0							
PV @ 49 Deg C	cP	1							
YP	lbs/100 ft2	0							
Gels	lbs/100 ft2	0/0							
API Filt.	ml/30 min	0.0							
HIHP @ 121 Deg C	ml/30 min	0.0							
Cake API/HIHP	32nd in	2/0							
Corr.Solids % by vol		0.0							
Oil/Water % by vol		0.0/0.0							
Sand % by vol									
NBT		0.0							
pH STRIP		0.0							
Alk. Mud (Pm)		0.00							
Alk. Filtr. (PE/NE)		0.00/0.00							
Chlorides mg/l		0							
Hard. Ca mg/l		0							
Low Gravity Solids	ppb	0.00							

MATERIALS USED					RIG ACTIVITY				
Product	Used	Cost	Product	Used	Cost				
AQUAGEL - 1000 KG. TON	8.500	4033.25				Continue to offload boat. Make up 36" BHA. RIH. Tag seabed @ 52.4 m. Drill ahead with seawater pumping 40 bbl hi-vis AQUAGEL sweeps every 5 - 10 m. Drill to 110.4 m. Pump 80 bbl hi-vis sweep. Circulate out sweep. Pump 35 bbl hi-vis mud. Displace hole to unflocculated pre-hydrated AQUAGEL. FOOH. RIH. Displace hole to unflocculated pre-hydrated AQUAGEL. POOH to run 30" conductor.			
caustic soda - 25 KG. PAIL	5	216.05							
lime - 20 KG. BAG	5	42.15							
soda ash - 25 KG. BAG	1	14.85							

MATERIALS USED					SOLIDS EQUIPMENT				
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	8.500	4033.25				Shkr #1	Scalper		
caustic soda - 25 KG. PAIL	5	216.05				Shkr #2	Scalper		
lime - 20 KG. BAG	5	42.15				Shkr #3	Sweco LM3		
soda ash - 25 KG. BAG	1	14.85				Shkr #4	Sweco LM3		
						Shkr #5	Sweco LM3		
						Shkr #6	Sweco LM3		
						dSndr	Crestex	3 x 10"	
						dslt #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT		TIME	
MUD VOLUME	bbbl	MUD TYPE				Water Depth	21.7	DRLG	3.00
Hole	Pits	SEAWATER/HI VIS SWEEPS	600 rpm			Calc. F. Grad	0.0	CIRC	2.00
238	0	MUD CONSUMPTION	300 rpm			Leak Off Test	0.0	TRIPS	2.50
Active Volume		ADDITIONS	200 rpm			ECD	ppg	SRV. RIG	0.00
238		Oil	0	100 rpm		Csg. Shoe	0.0	SURVEY	0.00
Reserve	Total	Brine Water	0	6 rpm		TD	0.0	FISHING	0.00
	238	Drill Water	629	3 rpm		Max. Diff. Press	0	LOGGING	0.00
Low Grav. vol %	0.0	Sea Water	250	Pressure Units:	psig			RUN CSG	0.00
ppb	0.00	Whole Mud	0	Press Drop. DP	0			CORE	0.00
High Grav. vol %	0.0	Barite	0	Press Drop. BIT	0	DEVIATION INFO		BACK REAM	0.00
ppb	0.00	Chemicals	21	Press Drop. ANN	0	MD	110.0 m	RRAMING	0.00
ASG		LOSSES	bbbl	Actual Circ. Press	0	TVD	110.0 m	TESTING	0.00
Drill Cuttings	0	Dumped	662	AV, DP m/min	0.0	Angle	0.00	OTHER	16.50
Dilution Rate	0.00	Loat	0	AV, DC m/min	0.0	Direction		AVERAGE ROP	0.00
Slids Control Eff	0.00	VOL GAIN/LOSS	238	AV, Riser m/min		Horiz. Displ	0.0 m		

BAROID REPRESENTATIVE Nicholas Doust	OFFICE/HOME Melbourne	WAREHOUSE Weshpool	TELEPHONE (03) 9621 3311	TELEPHONE (03) 56 881 445	DAILY COST \$A 4306.30	CUMULATIVE COST \$A 4306.30
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NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
 The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Date	Depth
18/01/98	110.0 m [MD]
Spud Date	Present Activity
17/01/98	INSTALL DIVERTER

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara	
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria	
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait	COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	in.	Pipe OD	ID	Len.	in.	m	Pump Make/Model	Ideco T-1600	
Type		Pipe OD	ID	Len.			Size 6.5 X 12	Eff. 97.00	V/st 0.120
No. Jets		Pipe OD	ID	Len.	30	Set @ 106.0	spm 0	bbl/min 0.0	
Jets 32nd inch		Collar OD	ID	Len.		Set @	Pump Make/Model	Ideco T-1600	
		Collar OD	ID	Len.		Set @	Size 6.5 X 12	Eff. 97.00	V/st 0.120
		in. OPEN HOLE				Set @	spm 0	bbl/min 0.0	
Tot Noz Area		Size 36	Len. 4.0			Set @	Pump Make/Model		
TFA		Size	Len.			Set @	Size	Eff.	V/st
		Size	Len.			Set @	spm	bbl/min	
		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	Essential
Source	Flowline				Targets	Program
Time	19:37				**Excep	Properties
FL Temp	Deg C	0			P 2 3	
Depth	m	110.0				
Weight	ppg	0.0				
FV @ 16	Deg C sec/qt	0				
PV @ 49	Deg C cP	1				
YP	lbs/100 ft2	0				
Gels	lbs/100 ft2	0/0				
API Filt.	ml/30 min	0.0				
HHP @ 121	Deg C ml/30 min	0.0				
Cake API/HHP	32nd in	2/0				
Corr.Solids % by vol		0.0				
Oil/Water % by vol		0.0/0.0				
Sand % by vol						
HBT		0.0				
pH STRIP		0.0				
Alk. Mud (Pm)		0.00				
Alk. Filtr. (PE/MF)		0.00/0.00				
Chlorides mg/l		0				
Hard. Ca mg/l		0				
Low Gravity Solids ppb		0.00				

MUD TREATMENTS	
Calcium Chloride used for cementing. To be charged as non-drilling cost.	
Will charge off 12-1/4" mud costs tomorrow.	
Total 12-1/4" mud built to date : 1182 bbls.	

MATERIALS USED	
NO INVENTORY USED ON THIS REPORT	

RIG ACTIVITY			
Rig up and run 30" conductor to 106 m. Pick up 2-7/8" tubing and run with 30" conductor. Cut conductor joint. Cement casing. Install 12-1/4" diverter.			

SOLIDS EQUIPMENT			
Device	Make	Sz/Scrn	HR
Shkr #1	Scalper	20	
Shkr #2	Scalper	20	
Shkr #3	Sweco LM3	150 x 3	
Shkr #4	Sweco LM3	150 x 3	
Shkr #5	Sweco LM3	150 x 3	
Shkr #6	Sweco LM3	150 x 3	
dSndr	Crestex	3 x 10"	
dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME	
MUD VOLUME bbl	MUD TYPE			Water Depth	21.7	DRLG	0.00
Hole	Seawater	600 rpm		Calc. F. Grad	0.0	CIRC	0.00
281		300 rpm		Leak Off Test	0.0	TRIPS	0.00
Active Volume	MUD CONSUMPTION	200 rpm		ECD	ppg	SERV. RIG	0.00
281	Oil	0	100 rpm	Csg. Shoe	0.0	SURVEY	0.00
Reserve	Brine Water	0	6 rpm	TD	0.0	FISHING	0.00
Total	Drill Water	0	3 rpm	Max. Diff. Press	0	LOGGING	0.00
281	Sea Water	0	Pressure Units: psig			RUN CSG	14.00
Low Grav. vol %	Whole Mud	0	Press Drop. DP			CORE	0.00
ppb 0.00	Barite	0	Press Drop. BIT			BACK REAM	0.00
High Grav. vol %	Chemicals	0	Press Drop. AMH			REAMING	0.00
ppb 0.00	LOSSES	bbl	Actual Circ. Press			TESTING	0.00
ASG	Dumped	0	AV, DP m/min			OTHER	10.00
Drill Cuttings	Lost	0	AV, DC m/min			AVERAGE POP	0.00
Dilution Rate	VOL GAIN/LOSS	0	AV, Riser m/min				
0.00							
Sids Control Eff							
0.00							

BAROID REPRESENTATIVE	OFFICE/HQHE	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 0.00	\$A 4306.30

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	Depth
19/01/98	110.0 m [MD]
Spud Date	Present Activity
17/01/98	PICK UP 12-1/4" BHA

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA				DRILLING STRING				CASING				CIRCULATION DATA				
Size	in.	Pipe OD	ID	Len.								Pump Make/Model	Ideco T-1600			
Type		Pipe OD	ID	Len.		in.	m	Size	6.5 X 12	Eff.	97.00	V/st	0.120			
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	spm	0	bbl/min	0.0					
Jets 32nd inch		Collar OD	ID	Len.		Set @		Pump Make/Model	Ideco T-1600							
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120			
		in. OPEN HOLE				m		Set @	spm	0	bbl/min	0.0				
Tot Ho2 Area		Size	36	Len.	4.0	Set @		Pump Make/Model								
TFA		Size		Len.		Set @		Size		Eff.		V/st				
		Size		Len.		Set @		spm		bbl/min						
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl				
		Size		Len.		Set @		BU Time	0	TC Time	0					

MUD PROPERTIES				MUD TREATMENTS				
Source	Pits, Circ	2	3	Program	Essential Program Properties			Calcium chloride used for cementing to be charged as 'non-drilling cost'.  Built total of 1430 bbls of seawater/AQUAGEL/Polymer mud for 12-1/4" hole.  Expect API filtrate to decrease with incorporation of drill solids and more PAC-R once drilling commences.
Time	20:45			Targets				
FL Temp	Deg C	0		*=Excep				
Depth	m	110.0		P	2	3		
Weight	ppg	8.9						
FV @ 18 Deg C	sec/qt	38						
PV @ 49 Deg C	cP	7						
YP	lbs/100 ft2	8						
Gels	lbs/100 ft2	3/4						
API Filtr.	ml/30 min	12.0						
HTHP @ 121 Deg C	ml/30 min	0.0						
Cake API/HTHP	32nd in	1/0						
Corr.Solids % by vol		0.0						
Oil/Water % by vol		0.0/0.0						
Sand % by vol								
MHT		0.0						
pH STRIP		0.0						
Alk. Mud (Pm)		0.00						
Alk. Filtr. (P/ME)		0.00/0.00						
Chlorides mg/l		0						
Hard. Ca mg/l		0						
Low Gravity Solids ppg		0.00						
Excess sulfite mg/l								

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	17.100	8113.95				Shkr #1	Scalper	20	1
PAC-L - 25 KG. BAG	14	2060.94				Shkr #2	Scalper	20	1
PAC-R - 25 KG. BAG	2	294.42				Shkr #3	Sweco LM3	150 x 3	
						Shkr #4	Sweco LM3	150 x 3	
						Shkr #5	Sweco LM3	150 x 3	
						Shkr #6	Sweco LM3	150 x 3	
						dSndr	Crestex	3 x 10"	
						dsit #1	Crestex	16 x 5"	

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT				TIME			
MUD VOLUME	bbbl	MUD TYPE		Water Depth	21.7	DRLG	0.00	Calc. F. Grad	0.0	CIRC	0.75	Leak Off Test	0.0	TRIPS	0.00
Hole	Pits	GEL/SEAWATER/POLYMER	600 rpm	22				SCD	ppg	SERV. RIG	0.00	Csg. Shoe	0.0	SURVEY	0.00
281	572	MUD CONSUMPTION	300 rpm	15				TD	0.0	FISHING	0.00	Max. Diff. Press	0	LOGGING	0.00
Active Volume		ADDITIONS	200 rpm	11						RUN CSG	0.00			CORE	0.00
853		Oil	100 rpm	7						DEVIATION INFO	0.00			BACK REAM	0.00
Reserve	Total	Brine Water	6 rpm	3						MD	110.0	m		REAMING	0.00
518	1371	Drill Water	3 rpm	2						TVD	110.0	m		TESTING	0.00
Low Grav. vol %	0.0	Sea Water	Pressure Units:	psig						Angle	0.00			OTHER	23.25
ppb	0.00	Whole Mud	Press Drop. DP	0						Direction				AVERAGE ROP	0.00
High Grav. vol %	0.0	Barite	Press Drop. BIT	0						Horiz. Displ	0.0	m			
ppb	0.00	Chemicals	Press Drop. ANN	0											
ASC		LOSSES	Actual Circ. Press	0											
Drill Cuttings	0	Dumped	AV, DP	m/min	0.0										
Dilution Rate	0.00	Lost	AV, DC	m/min	0.0										
Slids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min											
1090															

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 10469.31	\$A 14775.61

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	20/01/98	Depth	545.0 m [MD]
Spud Date	17/01/98	Present Activity	DRILLING

OPERATOR	CONTRACTOR	RIG NUMBER	
Amity Oil NL	Santa Fe Drilling	Paramswara	
REPORT FOR	REPORT FOR	REGION	
Wally Westman/Murray Jackson	Santa Fe Drilling	Victoria	
WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Broadbill 1	VIC P/36	Bass Strait	Austral

BIT DATA		DRILLING STRING		CASING		CIRCULATION DATA			
Size 12.25 in.	Pipe OD 5	ID 4.276	Len. 314.2			Pump Make/Model	Ideco T-1600		
Type MAX GT1	Pipe OD 5	ID 3.000	Len. 112.4	in.	m	Size 6.5 X 12	Eff. 97.20	V/st 0.120	
No. Jets	Pipe OD	ID	Len.	30	Set @ 106.0	spm 80	bbl/min 9.6		
Jets 32nd inch	Collar OD 8	ID 2.75	Len. 118.4		Set @	Pump Make/Model	Ideco T-1600		
16	16	16	Collar OD	ID	Len.	Size 6.5 X 12	Eff. 97.20	V/st 0.120	
			in.	OPEN HOLE		spm 80	bbl/min 9.6		
Tot Noz Area	Size 12.25	Len. 439.0			Set @	Pump Make/Model			
TFA	Size	Len.			Set @	Size	Eff.	V/st	
	Size	Len.			Set @	spm	bbl/min		
	Size	Len.			Set @	Tot. Vol./min 803 gpm 19.1 bbl			
	Size	Len.			Set @	BU Time 22	TC Time 45		

MUD PROPERTIES				MUD TREATMENTS			
	Primary	2	3				
Source	Pits, Circ	Flowline		Program	Essential		
Time	08:00	20:00		Targets	Program		
FL Temp	Deg C 36	44		*=Excep	Properties		
Depth	m 165.0	420.0		P 2 3	110.0	784.9	
Weight	ppg 8.9	9.0			<	9.3	
FV @ 44 Deg C	sec/qt 39	44			35	45	
PV @ 49 Deg C	cP 19	17					
YP	lbs/100 ft <sup>2</sup> 20	26					
Gels	lbs/100 ft <sup>2</sup> 17/21	16/21					
API Filt.	ml/30 min 8.2	8.0		*	<	8.0	
HTHP @ 121 Deg C	ml/30 min 22.0	21.0					
Cake API/HTHP	32nd in 1/0	1/0					
Corr.Solids % by vol	3.2	4.1					
Oil/Water % by vol	0.0/95.6	0.0/94.7					
Sand % by vol	0.5	0.5					
HBT	4.0	4.2					
pH METER @ 20 Deg C	8.5	8.5					
Alk. Mud (Fm)	0.30	0.36					
Alk. Filt. (FE/ME)	0.01/0.05	0.01/0.07					
Chlorides mg/l	20500	21000					
Hard. Ca mg/l	600	620					
Low Gravity Solids ppb	29.30	37.31					
Excess sulfite mg/l	100	100					

Built 1070 bbls of new mud. Heavy mud losses experienced through coarse sands (approx 700 bbls). Adding PAC-R to maintain API filtrate and BARACOR-129 to maintain Excess Sulfite.

LCM Sweeps : BARACARB 25 : 18 ppb  
 BARACARB 100 : 21 ppb  
 BAROFIBRE : 4.5 ppb  
 AQUAGEL : 20 ppb

Running all solids control equipment.  
 Building 30 bbls pumpable KCl/SE-MUD/Polymer mud for spotting across Lakes Entrance.

**RIG ACTIVITY**

Continue to pick up 8" drill collars. Drill 7 m of 12-1/4" hole. Pick up last 8" drill collar. Unable to circulate - plugged above float. POOH. Unblock float. RIH. Drill ahead to 117 m - Incurring downhole losses. Pump 25 bbl hi-vis sweep. Circulate bottoms up. Pump 25 bbl hi-vis. Drill ahead to 227 m at reduced pump strokes (120 spm). Pump 50 bbl LCM pill (as above) before connection - losses halted/red'd. Drill to 399 m. Circ b/u. Spot 100 bbl LCM pill (as precaution) before conducting survey. Drill ahead.

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	12.400	5883.80				Shkr #1	Scalper	10	17
BARACARB 100 - 25 KG. SACK	48	691.20				Shkr #2	Scalper	20	17
BARACARB 25 - 25 KG. BAG	48	554.40				Shkr #3	Sweco LM3	150 x 3	17
BARACOR 129 - 25 KG. DRUM	19	1159.95				Shkr #4	Sweco LM3	150 x 3	17
BAROFIBRE - 25 LB. SACK	27	1606.50				Shkr #5	Sweco LM3	150 x 3	17
PAC-R - 25 KG. BAG	19	2796.99				Shkr #6	Sweco LM3	150 x 3	17
caustic soda - 25 KG. PAIL	2	86.42				dSndr	Crestex	3 x 10"	17
						dSlt #1	Crestex	16 x 5"	17

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT TIME			
MUD VOLUME	bbbl	MUD TYPE							
Hole	Pits	GEL/SEAWATER/POLYMER	600 rpm	58	60	Water Depth	21.7	DRLG	15.00
441	419	MUD CONSUMPTION	300 rpm	39	43	Calc. F. Grad	0.0	CIRC	3.00
Active Volume			200 rpm	31	37	Leak Off Test	0.0	TRIPS	4.75
860		ADDITIONS	100 rpm	24	29	ECD	ppg	SERV. RIG	0.00
Reserve	Total	Oil	6 rpm	15	16	Cug. Shoe	9.0	SURVEY	0.50
308	1168	Brine Water	3 rpm	14	15	TD	9.2	FISHING	0.00
Low Grav. vol %	3.2	Drill Water	759	3	15	Max. Diff. Press	0	LOGGING	0.00
ppb	29.30	Sea Water	283					RUN CSG	0.00
High Grav. vol %	0.0	Whole Mud	0					CORE	0.00
ppb	0.00	Barite	0					BACK REAM	0.00
ASG	2.58	Chemicals	39					REAMING	0.00
Drill Cuttings	12	LOSSES	bbbl					TESTING	0.00
Dilution Rate	16.83	Dumped	40					OTHER	0.75
Slids Control Eff	0.00	Lost	1244					A/EPAGE ROP	0.00
		VOL GAIN/LOSS	-203						

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 12779.26	\$A 27554.87

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	Depth
21/01/98	785.0 m [MD]
Spud Date	Present Activity
17/01/98	R/U TO LOG / LOG

OPERATOR	CONTRACTOR	RIG NUMBER	
Amity Oil NL	Santa Fe Drilling	Paramswara	
REPORT FOR	REPORT FOR	REGION	
Wally Westman/Murray Jackson	Santa Fe Drilling	Victoria	
WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Broadbill 1	VIC P/36	Bass Strait	Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA						
Size	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600					
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00	v/st	0.120	
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	apm	0	bbl/min	0.0		
Jets 32nd inch		Collar OD	ID	Len.		Set @		Pump Make/Model	Ideco T-1600				
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	v/st	0.120
		in. OPEN HOLE			m	Set @		apm	0	bbl/min	0.0		
Tot Noz Area		Size	12.25	Len.	679.0	Set @		Pump Make/Model					
TFA		Size		Len.		Set @		Size		Eff.		v/st	
		Size		Len.		Set @		apm		bbl/min			
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl	
		Size		Len.		Set @		BU Time	0	TC Time	0		

MUD PROPERTIES						MUD TREATMENTS							
		Primary		2		3							
Source		Pits, Circ	Flowline			Program	Essential	Maintained treatment of active system with PAC-R to hold API filtrate. Diluted active with seawater/PAC-L to control mud viscosity; increase from drilling claystone. BARACOR-129 used to maintain excess sulfites. Building KCl/EZ-MUD/Polymer mud for 8-1/2" hole. Ran desander and desilter non-stop.  Reports have been cost modified to reflect updated mud material prices. No new shakers screens used to date.					
Time		06:00	13:00			Targets	Program						
FL Temp	Deg C	46	46			*=Excep	Properties						
Depth	m	701.0	785.0			P	2 3						
Weight	ppg	9.0	9.2										
FV @ 46 Deg C	sec/qt	85	70										
PV @ 49 Deg C	cP	15	15										
YP	lbs/100 ft2	23	21										
Gels	lbs/100 ft2	17/30	17/29										
API Filt.	ml/30 min	8.0	7.8			*	<						
HHP @ 121 Deg C	ml/30 min	22.8	21.0			*							
Cake API/HHP	32nd in	1/2	1/2										
Corr.Solids % by vol		3.9	5.4										
Oil/Water % by vol		0.0/94.9	0.0/93.4										
Sand % by vol		tr	tr										
HBT		5.0	5.5										
pH METER @ 20 Deg C		8.2	8.2			*							
Alk. Mud (Pm)		0.40	0.45										
Alk. Filt. (PF/ME)		0.02/0.06	0.02/0.07										
Chlorides mg/l		21000	21000										
Hard. Ca mg/l		600	600										
Low Gravity Solids ppb		35.49	49.23										
Excess sulfite mg/l		120	100										

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	2.200	1043.90				Shkr #1	Scalper	10	13
BARACOR 129 - 25 KG. DRUM	2	122.10				Shkr #2	Scalper	20	13
PAC-L - 25 KG. BAG	3	441.63				Shkr #3	Sweco LM3	150 x 3	13
PAC-R - 25 KG. BAG	4	588.84				Shkr #4	Sweco LM3	150 x 3	13
barite - 1000 KG. TON	2.400	773.33				Shkr #5	Sweco LM3	150 x 3	13
						Shkr #6	Sweco LM3	150 x 3	13
						dSndr	Crestex	3 x 10"	13
						dSlit #1	Crestex	16 x 5"	13

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT TIME				
MUD VOLUME	bbbl	MUD TYPE								
Hole	Pits	GEL/SEAWATER/POLYMER	600 rpm	53	51	Water Depth	21.7	DRLG	10.75	
590	523	MUD CONSUMPTION	300 rpm	38	36	Calc. F. Grad	0.0	CIRC	2.25	
Active Volume		ADDITIONS	200 rpm	32	31	Leak Off Test	0.0	TRIPS	7.00	
1113		Oil	100 rpm	26	25	SCD	ppg	SRV. RIG	0.00	
Reserve	Total	Brine Water	6 rpm	16	15	Cog. Shoe	9.1	SURVEY	1.25	
208	1321	Drill Water	3 rpm	13	13	TD	9.3	FISHING	0.00	
Low Grav. vol %	3.9	Sea Water	385	Pressure Units:	paig	Max. Diff. Press	0	LOGGING	0.00	
ppb	35.49	Whole Mud	0	Press Drop. DP	0			RUN CSG	0.00	
High Grav. vol %	0.0	Barite	0	Press Drop. BIT	0	DEVIATION INFO				
ppb	0.00	Chemicals	9	Press Drop. ARN	0	MD	785.0	m	REAMING	0.00
ASG	2.60	LOSSES	bbbl	Actual Circ. Press	0	TVD	785.0	m	TESTING	0.00
Drill Cuttings	0	Dumped	62	AV, DP	m/min	0.0	Angle	0.25	OTHER	2.75
Dilution Rate	0.00	Lost	179	AV, DC	m/min	0.0	Direction	320	AVERAGE ROP	0.00
Slids Control Eff	0.00	VOL GAIN/LOSS	153	AV, Riser	m/min		Horiz. Diapl	0.5	m	

BAROID REPRESENTATIVE	OFFICE/HQ/HE	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 2969.80	\$A 30524.67

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Date	22/01/98	Depth	785.0 m [MD]
Spud Date	17/01/98	Present Activity	WOC

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara	
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria	
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait	COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA			
Size in.	Pipe OD	ID	Len.	in.	m	Pump Make/Model	Ideco T-1600			
Type	Pipe OD	ID	Len.	30	Set @ 106.0	spm	0	Eff.	97.00	V/st 0.120
No. Jets	Pipe OD	ID	Len.	9 5/8	Set @ 779.0	Pump Make/Model	Ideco T-1600			
Jets 32nd inch	Collar OD	ID	Len.	Set @	Size 6.5 X 12	Eff.	97.00	V/st	0.120	
		in. OPEN HOLE			m	Set @	spm	0	bbl/min	0.0
Tot Not Area	Size	12.25	Len.	6.0	Set @	Pump Make/Model				
TFA	Size	Len.	Set @	Size	Eff.	V/st				
	Size	Len.	Set @	spm	bbl/min					
	Size	Len.	Set @	Tot. Vol./min			0	gpm	0.0	bbl
	Size	Len.	Set @	BU Time	0	TC Time	0			

MUD PROPERTIES				MUD TREATMENTS				
Primary		2	3	Essential		Properties		
Source	Pits, Circ			Program	Mixing 3% KCl/BZ-MUD/Polymer mud.			
Time	15:30			Targets	Costs/volume to be included tomorrow.			
FL Temp	Deg C	46		*=Excep	Three shakers changed to coarser 80 mesh			
Depth	m	785.0		P 2 3	784.9	1654.1	size screens to prevent/reduce initial	
Weight	ppg	9.2			9.0	9.5	losses of unshered mud. Scalpers changed to	
FV @ 46 Deg C	sec/qt	44					10 mesh. No new screens used to date.	
FV @ 49 Deg C	cP	14					Dumping and cleaning pits at report time.	
YP	lbs/100 ft2	20					AQUAGEL and Calcium Chloride used in cement	
Gels	lbs/100 ft2	15/23					job - to be charged as non-drilling cost.	
API Filt.	ml/30 min	7.8		*			RIG ACTIVITY	
HTHP @ 121 Deg C	ml/30 min	22.0		*			Rig up Schlumberger. Log 12-1/4" hole	
Cake API/HTHP	32nd in	1/2					-BHC-LDL-CNL-DLL-MSPL-GR-CALI-SP. Rig down	
Corr.Solids % by vol		5.4					Schlumberger. Pull diverter bag. Retrieve	
Oil/Water % by vol		0.0/93.4					wear bushing & laydown running tool. Rig up	
Sand % by vol		tr					& run 9-5/8" casing to 779 m. Circulate	
MBT		5.5					casing while waiting on chemicals. Cement as	
pH METER @ 20 Deg C		8.2		*	8.5	9.2	per program. WOC.	
Alk. Mud (Pm)		0.30						
Alk. Filt. (PF/ME)		0.01/0.06						
Chlorides mg/l		21000						
Hard. Ca mg/l		580						
Low Gravity Solids ppb		49.23						
6 rpm		14		*	6.00	10.00		
KCl Content	ppb			*	11.00	14.00		

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 25 KG. BAG	56	659.12				Shkr #1	Scalper	10	5
						Shkr #2	Scalper	10	5
						Shkr #3	Sweco LM3	150 x 3	5
						Shkr #4	Sweco LM3	80 x 3	5
						Shkr #5	Sweco LM3	80 x 3	5
						Shkr #6	Sweco LM3	80 x 3	5
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME	
MUD VOLUME	bbbl	MUD TYPE		Water Depth	21.7	DRLG	0.00
Hole	Pits	GEL/SEAWATER/POLYMER	600 rpm 48	Calc. P. Grad	0.0	CIRC	5.00
190	0	MUD CONSUMPTION	300 rpm 34	Leak Off Test	0.0	TRIPS	0.00
Active Volume		ADDITIONS	200 rpm 29	ECD	ppg	SERV. RIG	0.00
190		Oil	100 rpm 25	Cog. Shoe	0.0	SURVEY	0.00
Reserve	Total	Brine Water	6 rpm 14	TD	0.0	FISHING	0.00
116	306	Drill Water	3 rpm 12	Max. Diff. Press	0	LOGGING	6.50
Low Grav. vol %	5.4	Sea Water	Pressure Units: psig			RUN CSG	9.50
ppb	49.23	Whole Mud	Press Drop. DP			CORE	0.00
High Grav. vol %	0.0	Barite	Press Drop. BIT			BACK REAM	0.00
ppb	0.00	Chemicals	Press Drop. ANN			REAMING	0.00
ASG	2.60	LOSSES	Actual Circ. Press			TESTING	0.00
Drill Cuttings	0	Dumped	AV, DP m/min	0.0		OTHER	3.00
Dilution Rate	0.00	Lost	AV, DC m/min	0.0		AVERAGE ROP	0.00
Sids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser m/min				
		-1015					

BAROID REPRESENTATIVE	OFFICE/HOMR	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	SA	659.12 SA 31183.79

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	Depth
23/01/98	785.0 m [MD]
Spud Date	Present Activity
17/01/98	RUN WEAR BUSHING

OPERATOR	CONTRACTOR	RIG NUMBER	
Amity Oil NL	Santa Fe Drilling	Paramswara	
REPORT FOR	REPORT FOR	REGION	
Wally Westman/Chris Roots	Mike Walker/ Blain Wilkie	Victoria	
WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Broadbill 1	VIC P/36	Bass Strait	Austral

BIT DATA				DRILLING STRING				CASING				CIRCULATION DATA					
Size	in.	Pipe OD	ID	Len.								Pump Make/Model	Ideco T-1600				
Type		Pipe OC	ID	Len.	in.	m						Size	6.5 X 12	Eff.	97.00	V/st	0.120
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	spm	0	bbl/min	0.0						
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @	779.0	Pump Make/Model	Ideco T-1600								
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120				
		in. OPEN HOLE				m	Set @		spm	0	bbl/min	0.0					
Tot Moz Area		Size	12.25	Len.	6.0	Set @		Pump Make/Model									
TFA		Size		Len.		Set @		Size		Eff.		V/st					
		Size		Len.		Set @		spm		bbl/min							
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl					
		Size		Len.		Set @		BU Time	0	TC Time	0						

MUD PROPERTIES						MUD TREATMENTS					
		Primary	2	3							
Source		Pito, Circ			Program	Essential					
Time		20:07			Targets	Program					
FL Temp	Deg C	0			*=Excep	Properties					
Depth	m	785.0			P 2 3	784.9	1654.1				
Weight	ppg	8.9			*	9.0	9.5				
FV 4 20	Deg C oec/qt	55									
PV 4 49	Deg C cP	10					< 30				
YP	lbs/100 ft <sup>2</sup>	15									
Gels	lbs/100 ft <sup>2</sup>	4/8									
API Filt.	ml/30 min	5.0					< 6.0				
HTHP 4 121	Deg C ml/30 min	12.5					< 15.0				
Cake API/HTHP	32nd in	1/1									
Corr.Solids % by vol		1.7									
Cil./Water % by vol		0.0/95.8									
Sand % by vol											
MBT		0.0									
pH MBT @ 20	Deg C	8.2			*	8.5	9.2				
Alk. Mud (Pm)		0.20									
Alk. Filtr. (PE/ME)		0.07/0.11									
Chlorides mg/l		43000									
Hard. Ca mg/l		380									
Low Gravity Solids ppg		15.20					< 91.00				
6 rpm		6					6.00 10.00				
KCl Content	ppb	14					11.00 14.00				
KCl	% by vol	4									

Built total of 1418 bbls of KCl/EZ-MUD/Poly for 8-1/2" section. Mud built contains only 0.75 ppb EZ-MUD to reduce mud losses over shakers upon displacement.

Mud check is on reserve mud. Mud mixed with KCl content of 4 % to allow for depletion through Lakes Entrance Formation.

**RIG ACTIVITY**

WOC. Cut off 9-5/8" casing. Rig up & pull diverter. o/shot & riser & lay don. Install adapter ring. Test flange to 2000 psi. Lower BOP's & nipple up. Pressure test BOP's. Run wear bushing.

MATERIALS USED						SOLIDS EQUIPMENT			
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
ALDACIDE G - 25 L. CAN	3	611.88				Shkr #1	Scalper	10	
BARAZAN-D PLUS - 25 KG. BAG	23	8279.54				Shkr #2	Scalper	10	
DEXTRID LT - 25 KG. BAG	107	5631.49				Shkr #3	Sweco LM3	150 x 3	
EZ-MUD DP - 50 LB. BAG	24	2754.96				Shkr #4	Sweco LM3	80 x 3	
PAC-L - 25 KG. BAG	22	3238.62				Shkr #5	Sweco LM3	80 x 3	
potassium chloride - 1000 KG.	9	3892.89				Shkr #6	Sweco LM3	80 x 3	
soda ash - 25 KG. BAG	5	74.25				dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT				TIME			
MUD VOLUME		MUD TYPE													
Hole	Pits	KCL/EZ MUD/POLYMER		600 rpm	35	Water Depth		21.7	DRLG		0.00				
190	0	MUD CONSUMPTION		300 rpm	25	Calc. F. Grad		0.0	CIRC		0.00				
Active Volume		ADDITIONS		200 rpm	20	Leak Off Test		0.0	TRIPS		0.00				
190		Oil		100 rpm	14	ECD		ppg	SERV. RIG		0.00				
Reserve		Brine Water		6 rpm	6	Cog. Shoe		0.0	SURVEY		0.00				
1534		Drill Water		3 rpm	3	TD		0.0	FISHING		0.00				
Total		Sea Water		Pressure Units:		Max. Diff. Press		0	LOGGING		0.00				
1724		Whole Mud		psig		RUN CSG		0.00							
Low Grav. vol %		Barite		Press Drop. DP		CORE		0.00							
ppb		Chemicals		Press Drop. BIT		BACK REAM		0.00							
15.20		LOSSES		Press Drop. AMN		REAMING		0.00							
High Grav. vol %		Dumped		Actual Circ. Press		TESTING		0.00							
ppb		Lost		AV. DP m/min		OTHER		24.00							
0.00		VOL GAIN/LOSS		AV. DC m/min		AVERAGE ROP		0.00							
ASG		1418		AV. Riser m/min		Horiz. Displ		0.5		m					
2.57															
Drill Cuttings															
0															
Dilution Rate															
0.00															
Slids Control Eff															
0.00															

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 24483.63	\$A 55667.42

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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OPERATOR Amity Oil NL REPORT FOR Wally Westman/Chris Roots	CONTRACTOR Santa Fe Drilling REPORT FOR Mike Walker/ Blain Wilkie	RIG NUMBER Paramswara REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
COUNTRY Austral		

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size 8.5 in.	Pipe OD	5	ID 4.276	Len. 811.0			Pump Make/Model	Ideco T-1600	
Type ATMG18D	Pipe OD	5	ID 3.000	Len. 112.5	in.	m	Size 6.5 X 12	Eff. 97.00	V/st 0.120
No. Jets	Pipe CD	ID	Len.		30	Set @ 106.0	spm 50	bbl/min 6.0	
Jets 32nd inch	Collar OD	6.5	ID 3.75	Len. 146.5	9 5/8	Set @ 779.0	Pump Make/Model	Ideco T-1600	
16	16	14	Collar OD	ID	Len.	Set @	Size 6.5 X 12	Eff. 97.00	V/st 0.120
			in. OPEN HOLE			m	Set @	spm 50	bbl/min 6.0
Tot Moz Area	Size 8.5	Len. 291.0				Set @	Pump Make/Model		
TFA	Size	Len.				Set @	Size	Eff.	V/st
	Size	Len.				Set @	spm	bbl/min	
	Size	Len.				Set @	Tot. Vol./min 502 gpm	12.0	bbl
	Size	Len.				Set @	BU Time 13	TC Time 57	

MUD PROPERTIES					MUD TREATMENTS				
		Primary	2	3					
Source	Pits, Circ	Flowline			Program	Essential			
Time	17:00	22:30			Targets	Program			
FL Temp	Deg C	40	40		*=EXcep	Properties			
Depth	m	865.0	1032.0		P 2 3	784.9	1654.1		
Weight	ppg	8.9	9.1		*	9.0	9.5		
FV @ 40 Deg C	sec/qt	44	40						
FV @ 49 Deg C	cP	13	14					< 30	
YP	lbs/100 ft2	18	22						
Gels	lbs/100 ft2	4/6	4/7						
API Filt.	ml/30 min	4.7	4.2					< 6.0	
HTHP @ 121 Deg C	ml/30 min	12.4	11.2					< 15.0	
Cake API/HTHP	32nd in	1/2	1/2						
Corr.Solids % by vol		2.9	3.2						
Oil/Water % by vol		0.0/95.7	0.0/95.5						
Sand % by vol		1.0	0.5						
MBT		0.2	0.2						
pH METER @ 20 Deg C		9.0	9.2			8.5	9.2		
Alk. Mud (Pm)		0.22	0.28						
Alk. Filt. (PF/ME)		0.02/0.18	0.05/0.18						
Chlorides mg/l		24000	23000						
Hard. Ca mg/l		320	225						
Low Gravity Solids ppb		26.48	19.20					< 91.00	
6 rpm		6	6			6.00	10.00		
KCl Content ppb		12	11			11.00	14.00		
Excess sulfite mg/l		100	100						

Mud dumped in gel mud in hole & pit. Raised EZ-MUD concentration to programmed value after displacing. Adding BARACOR-129 to maintain excess sulphites. Weighed up mud to 9.1 ppg @ 865 m for extra hole stability while drilling coal seams. Lost approx 70 bbls downhole while drilling coal seams. Treated active with additional BARAZAN D-Plus to combat thinning of the mud from coal. Running desander/desilter. Changed shakers to finer 150 mesh screens. No new screens used to date. KCl content : 3 %

**RIG ACTIVITY**  
 Lay down 8" drill collars. Pick up & make up 8-1/2" BHA. Pick up 5" drill pipe. RIH. Tag cement @ 745 m. Drill out cement & float to 775 with seawater. Pump 100 bbl sweep of old mud. Displace hole to KCl/EZ-MUD/Polymer mud. Perform LOT @ 788 m to 13 ppg EHW (564 psi). Drill ahead to 865 m. Circulate out coal. Drill ahead to 1070 m.

MATERIALS USED					SOLIDS EQUIPMENT				
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BAPACOR 129 - 25 KG. DRUM	8	487.33				Shkr #1	Scalper	10	10
BARAZAN-D PLUS - 25 KG. BAG	5	1799.90				Shkr #2	Scalper	10	10
DEXTRID LT - 25 KG. BAG	1	52.07				Shkr #3	Sweco LM3	150 x 3	10
EZ-MUD DP - 50 LB. BAG	14	1607.06				Shkr #4	Sweco LM3	150 x 3	10
barite - 1000 KG. TON	9.700	3125.53				Shkr #5	Sweco LM3	150 x 3	10
potassium hydroxide - 20 KG.	2	88.14				Shkr #6	Sweco LM3	80 x 3	10
						dSndr	Crestex	3 x 10"	5
						dSlt #1	Crestex	16 x 5"	6

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME		
MUD VOLUME bbl	MUD TYPE										
Hole 215	Pits 457	KCL/EZ MUD/POLYMER	600 rpm	44	50	Water Depth	21.7	DRLG	9.25		
Active Volume 582		MUD CONSUMPTION	300 rpm	31	36	Calc. F. Grad	0.0	CIRC	1.50		
Reserve 531	Total 1213	Oil	200 rpm	25	30	Leak Off Test	13.0	TRIPS	4.75		
Low Grav. vol % 2.9	ppb 26.48	Brine Water	100 rpm	18	20	ECD	ppg	SERV. RIG	0.00		
High Grav. vol % 0.0	ppb 0.00	Drill Water	6 rpm	6	6	Cog. Shoe	9.4	SURVEY	0.00		
ASG 2.61		Sea Water	3 rpm	4	4	TD	9.5	FISHING	0.00		
Drill Cuttings 0		Whole Mud	Pressure Units:	poig		Max. Diff. Press	0	LOGGING	0.00		
Dilution Rate 0.00		Barite	Press Drop. DP	524				RUN CSG	0.00		
Slds Control Eff 0.00		Chemicals	Press Drop. BIT	695		<b>DEVIATION INFO</b>					
		LOSSES	Press Drop. AMN	116		MD	1070.0 m	BACK REAM	0.00		
		Dumped	Actual Circ. Press	1200		TVD	1070.0 m	REBAMING	0.00		
		Loat	AV, DP	m/min 74.5		Angle	0.25	TESTING	2.00		
		VOL GAIN/LOSS -511	AV, DC	m/min 125.1		Direction	320	OTHER	6.50		
			AV, Riser	m/min		Horiz. Displ	0.5 m	AVERAGE ROP	0.00		

BAROID REPRESENTATIVE Nicholas Doust	OFFICE/HOME Melbourne	TELEPHONE (03) 9621 3311	DAILY COST SA 7160.23	CUMULATIVE COST SA 62827.65
	WAREHOUSE Welshpool	TELEPHONE (03) 56 881 445		

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
 The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Date	25/01/98	Depth	1335.0m [MD]
Spud Date	17/01/98	Present Activity	DRILLING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size 8.5 in.	Pipe OD 5	ID 4.276	Len. 1076.0				Pump Make/Model	Ideco T-1600	
Type ATHGT18D	Pipe OD 5	ID 3.000	Len. 112.5				Size 6.5 X 12	Bff. 97.00	V/st 0.120
No. Jets	Pipe OD	ID	Len.	30	Set #	106.0	spm 50	bbl/min 6.0	
Jets 32nd inch	Collar OD 6.5	ID 2.75	Len. 146.5	9 5/8	Set #	779.0	Pump Make/Model	Ideco T-1600	
16	16	14	Collar OD	ID	Len.		Size 6.5 X 12	Bff. 97.00	V/st 0.120
			in. OPEN HOLE				Set #	spm 50	bbl/min 6.0
Tot Noz Area	Size 8.5	Len. 556.0			Set #		Pump Make/Model		
TFA	Size	Len.			Set #		Size	Bff.	V/st
	Size	Len.			Set #		spm	bbl/min	
	Size	Len.			Set #		Tot. Vol./min	502 gpm	12.0 bbl
	Size	Len.			Set #		BU Time	17	TC Time 68

MUD PROPERTIES				MUD TREATMENTS			
Primary		2		3			
Source	Pits, Circ	Flowline		Program	Essential	Maintain volume & properties with addition of premix. Lost approx 40 bbls downhole (squeezed into formation after coal pack off) while reaming last stand to bottom during wiper trip. Raised mud weight to 9.3 ppg to help stabilise coals. Treated active with 5 ppb each of BARACARB 25 & BARACARB 100 to prevent further seepage losses. Maintaining BARACARB concentrations with regular additions. Maintaining excess sulfites with BARACOR-129. BARAZAN D-Plus used to maintain 6 rpm. KCl Content : 3.2 %	
Time	22:00	13:00		Targets	Program		
FL Temp	Deg C	42	42	*=Excep	Properties		
Depth	m	1323.0	1230.0	P 2 3	784.9 1654.1		
Weight	ppg	9.3	9.3		9.0 9.5		
FV @ 42 Deg C	sec/qt	42	42				
PV @ 49 Deg C	cP	14	15		< 30		
YP	lbs/100 ft2	23	20				
Gels	lbs/100 ft2	5/8	4/7				
API Filt.	ml/30 min	3.6	3.8		< 6.0		
HTHP @ 121 Deg C	ml/30 min	10.6	10.8		< 15.0		
Cake API/HTHP	32nd in	1/2	1/2				
Corr.Solids % by vol		4.3	4.1				
Oil/Water % by vol		0.0/94.4	0.0/94.6				
Sand % by vol		0.25	0.25				
HBT		0.6	0.6				
pH MEISER @ 20 Deg C		8.5	8.5		8.5 9.2		
Alk. Mud (Pm)		0.20	0.10				
Alk. Filt. (PF/ME)		0.01/0.16	0.01/0.19				
Chlorides mg/l		22000	22000				
Hard. Ca mg/l		300	320				
Low Gravity Solids ppb		26.12	22.48		< 91.00		
6 rpm		6	6		6.00 10.00		
KCl Content ppb		11	12		11.00 14.00		
Excess sulfite mg/l		100	100				

RIG ACTIVITY			
Drill from 1070 - 1095 m. Circulate bottoms up, working pipe. Drop single shot survey. POOH to shoe @ 779 m. Retrieve survey. Service TDS. RIH. Lose circulation 1 std off bottom. Work pipe. Begin to increase mud weight to 9.3 ppg. Drill ahead to 1335 m.			

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BAPACARB 100 - 25 KG. SACK	96	1382.40				Shkr #1	Scalper	10	20
BAPACARB 25 - 25 KG. BAG	96	1108.80				Shkr #2	Scalper	10	20
BARACOR 129 - 25 KG. DRUM	9	539.82				Shkr #3	Sweco LM3	150 x 3	20
BARAZAN-D PLUS - 25 KG. BAG	4	1439.92				Shkr #4	Sweco LM3	150 x 3	20
EZ-MUD DP - 50 LB. BAG	4	457.66				Shkr #5	Sweco LM3	150 x 3	20
barite - 1000 KG. TON	7.200	2319.98				Shkr #6	Sweco LM3	80 x 3	20
potassium hydroxide - 20 KG.	4	176.68				dSndr	Crestex	3 x 10"	4
						dSlt #1	Crestex	16 x 5"	9

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME			
MUD VOLUME	MUD TYPE								
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	51	50	Water Depth	21.7	DRLG	18.50
270	542		300 rpm	37	35	Calc. F. Grad	0.0	CIRC	1.50
Active Volume		MUD CONSUMPTION	200 rpm	30	29	Leak Off Test	13.0	TRIPS	2.00
812		ADDITIONS	100 rpm	21	20	SCD	ppg	SERV. RIG	0.00
Reserve	Total	Oil	6 rpm	6	6	Csg. Shoe	10.0	SURVEY	1.00
111	923	Brine Water	3 rpm	4	4	TD	10.1	FISHING	0.00
Low Grav. vol %	2.9	Drill Water	Pressure Units:	psig		Max. Diff. Press	0	LOGGING	0.00
ppb	26.12	Sea Water	Press Drop. DP	606				RUN CSG	0.00
High Grav. vol %	1.5	Whole Mud	Press Drop. BIT	726		DEVIATION INFO			
ppb	22.05	Barite	Press Drop. ANN	173		MD	1335.0 m	REAMING	0.00
ASG	3.25	Chemicals	Actual Circ. Press	1350		TVD	1335.0 m	TESTING	0.00
Drill Cuttings	2	LOSSES	AV, DP	m/min	74.5	Angle	2.25	OTHER	1.00
Dilution Rate	0.00	Dumped	AV, DC	m/min	125.1	Direction	320	AVERAGE ROP	0.54
Slds Control Bff	0.00	Lost	AV, Riser	m/min		Horiz. Displ	0.0 m		
		VOL GAIN/LOSS							
		-290							

BAROID REPRESENTATIVE Nicholas Doust	OFFICES/HOME Melbourne	TELEPHONE (03) 9621 3311	DAILY COST \$A 7425.26	CUMULATIVE COST \$A 70252.91
	WAREHOUSE Welshpool	TELEPHONE (03) 56 881 445		

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Baroid Australia Pty Ltd  
 DRILLING MUD REPORT  
 ( Cost Modified )

REPORT NUMBER: 11

Date	26/01/98	Depth	1345.0m [MD]
Spud Date	17/01/98	Present Activity	LOGGING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA				DRILLING STRING				CASING				CIRCULATION DATA						
Size	in.	Pipe OD	ID	Len.								Pump Make/Model	Ideco T-1600					
Type		Pipe OD	ID	Len.	in.	m						Size	6.5 X 12	Eff.	97.00	V/st	0.120	
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	spm	0	bbl/min	0.0							
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @	779.0	Pump Make/Model	Ideco T-1600									
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120					
		in. OPEN HOLE				m		Set @		spm	0	bbl/min	0.0					
Tot Noz Area		Size	8.5	Len.	566.0	Set @		Pump Make/Model										
TFA		Size		Len.		Set @		Size		Eff.		V/st						
		Size		Len.		Set @		spm		bbl/min								
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl						
		Size		Len.		Set @		BU Time	0	TC Time	0							

MUD PROPERTIES						MUD TREATMENTS					
Primary		2		3		Program		Essential		Lost approximately 100 bbls downhole when backreaming out of hole due to coal sloughing.	
Source	Pits, Circ					Targets	Program	Properties			
Time	14:00					*=Excep					
FL Temp	Deg C	42				P 2 3	784.9	1654.1			
Depth	m	1345.0					9.0	9.5			Built 200 bbls of new premix to maintain mud volume.
Weight	ppg	9.4									BARAZAN-D Plus used to make hi-vis sweeps.
FV @ 42 Deg C	sec/qt	44									No new shakers screens used on Broadbill 1.
PV @ 49 Deg C	cP	16									KCl content : 3 %
YP	lbs/100 ft2	22									
Gels	lbs/100 ft2	6/9									
API Filt.	ml/30 min	3.6									
HHP @ 121 Deg C	ml/30 min	10.5									
Cake API/HHP	32nd in	1/2									
Corr.Solids % by vol		4.3									
Oil/Water % by vol		0.0/94.4									
Sand % by vol		0.5									
MBT		0.6									
pH METER @ 20 Deg C		8.5							8.5	9.2	
Alk. Mud (Pm)		0.15									
Alk. Filt. (PF/ME)		0.01/0.16									
Chlorides mg/l		22000									
Hard. Ca mg/l		300									
Low Gravity Solids ppb		19.29									
6 rpm		7							6.00	10.00	
KCl Content	ppb	11							11.00	14.00	
Excess sulfite	mg/l	100									

MATERIALS USED						SOLIDS EQUIPMENT			
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrm	HR
BARACOR 129 - 25 KG. DRUM	3	179.94				Shkr #1	Scalper	10	13
BARAZAN-D PLUS - 25 KG. BAG	6	2159.88				Shkr #2	Scalper	10	13
DEXTRID LT - 25 KG. BAG	15	781.05				Shkr #3	Sweco LM3	150 x 3	13
EZ-MUD DP - 50 LB. BAG	9	1026.36				Shkr #4	Sweco LM3	150 x 3	13
PAC-L - 25 KG. BAG	2	293.67				Shkr #5	Sweco LM3	150 x 3	13
barite - 1000 KG. TON	4.400	1417.77				Shkr #6	Sweco LM3	80 x 3	13
potassium chloride - 1000 KG.	1	419.21				dSndr	Crestex	3 x 10"	
potassium hydroxide - 20 KG.	3	132.51				dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT				TIME	
MUD VOLUME		MUD TYPE											
Hole	Pits	KCL/EZ MUD/POLYMER		600 rpm	54	Water Depth	21.7	DRLG	2.00				
317	446	MUD CONSUMPTION		300 rpm	38	Calc. F. Grad	0.0	CIRC	3.00				
Active Volume		ADDITIONS		200 rpm	31	Leak Off Test	13.0	TRIPS	4.00				
763		Oil		100 rpm	23	ECD	ppg	SERV. RIG	0.50				
Reserve		Brine Water		6 rpm	7	Cog. Shoe	9.3	SURVEY	1.00				
118		Drill Water		3 rpm	5	TD	9.3	FISHING	0.00				
Low Grav. vol %		Sea Water		Pressure Units:	psig	Max. Diff. Press	0	LOGGING	0.00				
ppb		Whole Mud		Press Drop. DP	0			RUN CSG	0.00				
High Grav. vol %		Barite		Press Drop. BIT	0			CORE	0.00				
ppb		Chemicals		6 Press Drop. AMN	0			BACK REAM	7.50				
ASG		LOSSES		Actual Circ. Press	0	DEVIATION INFO							
Drill Cuttings		Dumped		AV, DP	m/min	MD	1345.0 m	REAMING	0.00				
Dilution Rate		Lost		AV, DC	m/min	TVD	1345.0 m	TESTING	0.00				
Slids Control Eff		VOL GAIN/LOSS		AV, Riser	m/min	Angle	3.25	OTHER	6.00				
						Direction	45	AVERAGE ROP	0.00				
						Horiz. Displ	0.0 m						

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 6410.39	\$A 76663.30

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Date	Depth
27/01/98	1345.0m [MD]
Spud Date	Present Activity
17/01/98	PREPARE TO P & A

OPERATOR	CONTRACTOR	RIG NUMBER	
Amity Oil NL	Santa Fe Drilling	Paramswara	
REPORT FOR	REPORT FOR	REGION	
Wally Westman/Chris Roots	Mike Walker/ Blain Wilkie	Victoria	
WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Broadbill 1	VIC P/36	Bass Strait	Austral

BIT DATA				DRILLING STRING				CASING				CIRCULATION DATA			
Size	in.	Pipe OD	ID	Len.								Pump Make/Model	Ideco T-1600		
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00	V/st	0.120			
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	apm	0	bbl/min	0.0				
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @	779.0	Pump Make/Model	Ideco T-1600						
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120		
		in. OPEN HOLE				m	Set @		apm	0	bbl/min	0.0			
Tot Noz Area		Size	8.5	Len.	566.0	Set @		Pump Make/Model							
TFA		Size		Len.		Set @		Size		Eff.		V/st			
		Size		Len.		Set @		apm		bbl/min					
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl			
		Size		Len.		Set @		BU Time	0	TC Time	0				

MUD PROPERTIES						MUD TREATMENTS							
Primary		2		3		Essential		Program		Properties			
Source	Pits, Uncr					Program	Essential		BARAZAN-D Plus used to build 100 bbls of hi-vis spotted on bottom prior to POOH.				
Time	13:00					Targets	Program		Barite used for slugs.				
FL Temp	Deg C	0				*=Excep	Properties		KCl content : 3 %				
Depth	m	1345.0				P	2	3	784.9	1654.1			
Weight	ppg	9.5							9.0	9.5			
FV @ 28	Deg C sec/qt	43							<	30			
FV @ 49	Deg C cP	15							<	15.0			
YP	lbs/100 ft2	24											
Gels	lbs/100 ft2	7/9											
API Filt.	ml/30 min	4.0							<	6.0			
HHP @ 121	Deg C ml/30 min	11.0							<	15.0			
Cake API/HHP	32nd in	1/2											
Corr.Solids % by vol		5.1											
Oil/Water % by vol		0.0/93.7											
Sand % by vol		0.25											
MBI		0.6											
pH METER @ 20	Deg C	8.0				*			8.5	9.2			
Alk. Mud (Pm)		0.10											
Alk. Filt. (PF/MF)		0.01/0.18											
Chlorides mg/l		22000											
Hard. Ca mg/l		300											
Low Gravity Solids ppb		25.30							<	91.00			
6 rpm		7							6.00	10.00			
KCl Content	ppb	11							11.00	14.00			
Excess sulfite	mg/l	80											

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BARAZAN-D PLUS - 25 KG.	BAG	2	719.96			Shkr #1	Scalper	10	4
barite - 1000 KG.	TON	0.600	193.33			Shkr #2	Scalper	10	4
						Shkr #3	Sweco LM3	150 x 3	4
						Shkr #4	Sweco LM3	150 x 3	4
						Shkr #5	Sweco LM3	150 x 3	4
						Shkr #6	Sweco LM3	80 x 3	4
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT TIME			
MUD VOLUME	bbbl	MUD TYPE				Water Depth	21.7	DRLG	0.00
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	54		Calc. F. Grad	0.0	CIRC	1.50
317	509		300 rpm	39		Leak Off Test	13.0	TRIPS	7.25
Active Volume		MUD CONSUMPTION	200 rpm	32		SCD	ppg	SERV. RIG	0.00
826		Oil	100 rpm	24		Cag. Shoe	0.0	SURVEY	0.00
Reserve	Total	Brine Water	6 rpm	7		TD	0.0	FISHING	0.00
	826	Drill Water	3 rpm	5		Max. Diff. Press	0	LOGGING	7.25
Low Grav. vol %	2.8	Sea Water	Pressure Units:	psig				RUN CSG	0.00
ppb	25.30	Whole Mud	Press Drop. DP	0				CORE	0.00
High Grav. vol %	2.3	Barite	Press Drop. BIT	0		DEVIATION INFO			
ppb	33.81	Chemicals	Press Drop. ANN	0		MD	1345.0 m	REAMING	2.00
ASG	3.41	LOSSES	Actual Circ. Press	0		TVD	1345.0 m	TESTING	0.00
Drill Cuttings	0	Dumped	AV, DP	m/min	0.0	Angle	3.25	OTHER	6.00
Dilution Rate	0.00	Lost	AV, DC	m/min	0.0	Direction	45	AVERAGE ROP	0.00
Slids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min		Horiz. Displ	0.0 m		

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 913.25	\$A 77576.59

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	Depth
28/01/98	1345.0m [MD]
Spud Date	Present Activity
17/01/98	PLUG & ABANDON

OPERATOR	CONTRACTOR	RIG NUMBER	
Amity Oil NL	Santa Fe Drilling	Paramswara	
REPORT FOR	REPORT FOR	REGION	
Wally Westman/Chris Roots	Mike Walker/ Blain Wilkie	Victoria	
WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Broadbill 1	VIC P/36	Bass Strait	Austral

BIT DATA				DRILLING STRING		CASING		CIRCULATION DATA					
Size	in.	Pipe OD	ID	Len.	m	in.	m	Pump Make/Model	Size	Eff.	V/st	Ideco	T-1600
Type		Pipe OD	ID	Len.		30	Set @ 106.0	apm	0	bbl/min	0.0		
No. Jets		Pipe OD	ID	Len.		9 5/8	Set @ 779.0	Pump Make/Model		Ideco	T-1600		
Jets 32nd inch		Collar OD	ID	Len.			Set @	Size	6.5 X 12	Eff.	97.00	V/st	0.120
							Set @	apm	0	bbl/min	0.0		
		in. OPEN HOLE											
Tot Noz Area		Size	8.5	Len.	566.0		Set @	Pump Make/Model					
TFA		Size		Len.			Set @	Size		Eff.		V/st	
		Size		Len.			Set @	apm		bbl/min			
		Size		Len.			Set @	Tot. Vol./min	0	gpm	0.0	bbl	
		Size		Len.			Set @	BU Time	0	TC Time	0		

MUD PROPERTIES						MUD TREATMENTS					
		Primary	2	3							
Source		Pits, Uncr			Program	Essential	All chemicals used for P & A. Mud engineer leaves rig.				
Time		22:36			Targets	Program					
FL Temp	Deg C	0			*=Excep	Properties					
Depth	m	1345.0			P 2 3	784.9 1654.1					
Weight	ppg	9.5				9.0 9.5					
FV @ 16 Deg C	sec/qt	28									
FV @ 49 Deg C	cP	1				< 30					
YP	lbs/100 ft2	0									
Gels	lbs/100 ft2	0/0									
API Filt.	ml/30 min	0.0				< 6.0					
HTHP @ 121 Deg C	ml/30 min	0.0				< 15.0					
Cake API/HTHP	32nd in	2/0									
Corr.Solids % by vol		0.0									
Oil/Water % by vol		0.0/0.0									
Sand % by vol											
MBT		0.0									
pH METER @ 20 Deg C		0.0			*	8.5 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				< 91.00					
6 rpm		0			*	6.00 10.00					
KCl Content	ppb				*	11.00 14.00					
Excess sulfite	mg/l										

RIG ACTIVITY

Plug and abandon.

MATERIALS USED

Product	Used	Cost	Product	Used	Cost	SOLIDS EQUIPMENT		
ALDACIDE G - 25 L. CAN	1	203.96				Device	Make	Sz/Scrn HR
BAPACOR 129 - 25 KG. DRUM	6	359.88				Shkr #1	Scalper	10
						Shkr #2	Scalper	10
						Shkr #3	Sweco LM3	150 x 3
						Shkr #4	Sweco LM3	150 x 3
						Shkr #5	Sweco LM3	150 x 3
						Shkr #6	Sweco LM3	80 x 3
						dSndr	Crestex	3 x 10"
						dSlt #1	Crestex	16 x 5"

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME	
MUD VOLUME	bbbl	MUD TYPE								
Hole	Pits	KCL/EZ MUD/POLYMER	500 rpm			Water Depth	21.7	DRLG	0.00	
317	509		300 rpm			Calc. P. Grad	0.0	CIRC	0.00	
Active Volume		MUD CONSUMPTION	200 rpm			Leak Off Test	13.0	TRIPS	0.00	
826		ADDITIONS	100 rpm			ECD	ppg	SERV. RIG	0.00	
Reserve	Total	Oil	6 rpm			Csg. Shoe	0.0	SURVEY	0.00	
	826	Brine Water	3 rpm			TD	0.0	FISHING	0.00	
Low Grav, vol %	0.0	Drill Water	0			Max. Diff. Press	0	LOGGING	0.00	
ppb	0.00	Sea Water	0		Pressure Units: psig			RUN CSG	0.00	
High Grav, vol %	0.0	Whole Mud	0		Press Drop. DP	0		CORE	0.00	
ppb	0.00	Barite	0		Press Drop. BIT	0		BACK REAM	0.00	
ASG	2.60	Chemicals	0		Press Drop. ANN	0		REAMING	0.00	
Drill Cuttings	0	LOSSSES	0		Actual Circ. Press	0		TESTING	0.00	
Dilution Rate	0.00	Dumped	0		AV, DP m/min	0.0		OTHER	24.00	
Slds Control Eff	0.00	Lost	0		AV, DC m/min	0.0		AVERAGE ROP	0.00	
		VOL GAIN/LOSS	0		AV, Riser m/min					

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 961 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 563.84	\$A 78140.43

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



## Interval Summary

Interval #	03
Bit Size	8.5 in.
Mud type(s)	KCl/Polymer
Top of interval	785.0 meters
Bottom of interval	1,345.0 meters
Maximum density	9.50 ppg
Interval start date	23/01/98
Interval end date	28/01/98
Interval days	6
Drilling days	3
Interval TD date	26/01/98
Rotating hours	29.75
Average penetration rate	18.8 meters
Bottomhole static temperature	68° Deg C
Maximum flowline temperature	42° Deg C
Casing size	9 5/8 in.
Major lithology	Claystone, Sands, Coal
Maximum deviation	3.25°
Interval mud cost	\$A 46,956.64
Mud cost per (bbl)	\$A 27.81
Mud cost per meters	\$A 83.85
Total Interval Cost	\$A 46,985.74

Company: Amity Oil NL  
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 Region: Victoria



# Interval Material Consumption

Interval #01 in. Hole Section

Top of Interval 52 meters  
 Bottom of Interval 110 meters

Material	Unit size	Quantity	Total cost (\$A)
AQUAGEL	1000 KG. TON	8.500	4,033.25
caustic soda	25 KG. PAIL	5	216.05
lime	20 KG. BAG	5	42.15
soda ash	25 KG. BAG	1	14.85
Miscellaneous Items			
Cacl2			291.00

Interval mud cost \$A 4,306.30

Interval miscellaneous cost \$A 291.00

Total interval cost \$A 4,597.30

Programmed mud cost \$A 3,851.16

Variance \$A 455.14



Company: Amity Oil NL  
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 Region: Victoria



# Interval Material Consumption

Interval #02 12.25 in. Hole Section

Top of Interval 110 meters  
 Bottom of Interval 785 meters

Material	Unit size	Quantity	Total cost (\$A)
AQUAGEL	25 KG. BAG	56	659.12
AQUAGEL	1000 KG. TON	31.700	15,041.65
BARACARB 100	25 KG. SACK	48	691.20
BARACARB 25	25 KG. BAG	48	554.40
BARACOR 129	25 KG. CAN	21	1,282.05
barite	1000 KG. TON	2.400	773.33
BAROFIBRE	25 LB. BAG	27	1,606.50
caustic soda	25 KG. PAIL	2	86.42
PAC-L	25 KG. BAG	17	2,502.57
PAC-R	25 KG. BAG	25	3,680.25
Miscellaneous Items			
Cacl2			378.30

Interval mud cost \$A 26,877.49

Interval miscellaneous cost \$A 378.30

Total interval cost \$A 27,255.79

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
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 Field: VIC P/36  
 Region: Victoria



# Interval Material Consumption

Interval #03 8.5 in. Hole Section

Top of Interval 785 meters  
 Bottom of Interval 1,345 meters

Material	Unit size	Quantity	Total cost (\$A)
ALDACIDE G	25 L. CAN	4	815.84
BARACARB 100	25 KG. SACK	96	1,382.40
BARACARB 25	25 KG. BAG	96	1,108.80
BARACOR 129	25 KG. CAN	26	1,566.97
BARAZAN-D PLUS	25 KG. BAG	40	14,399.20
barite	1000 KG. TON	21.900	7,056.62
DEXTRID LT	25 KG. BAG	123	6,464.61
EZ-MUD DP	50 LB. BAG	51	5,846.04
PAC-L	25 KG. BAG	24	3,532.29
potassium chloride	1000 KG. BAG	10	4,312.10
potassium hydroxide	20 KG. PAIL	9	397.53
soda ash	25 KG. BAG	5	74.25
Miscellaneous Items			
Cacl2			29.10

Interval mud cost \$A 46,956.65

Interval miscellaneous cost \$A 29.10

Total interval cost \$A 46,985.75

Programmed mud cost \$A 37,605.01

Variance \$A 9,351.64

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE:in.

MUD TYPE:No Mud

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
16/01/98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: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	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
17/01/98	0	0	0	879	0	21	900	900	662	0	662	662	0	238	238	0	0

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE:in.

MUD TYPE: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
18/01/98	238	0	0	0	0	0	0	0	0	0	0	0	0	281	281	0	0

Company: Arnly Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: 12.25 in.

MUD TYPE: Gel/Polymer

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
19/01/98	281	0	0	1,300	0	40	1,430	1,430	340	0	340	340	0	1,371	281	572	518
20/01/98	1,371	0	0	1,042	0	39	1,081	2,511	684	700	1,284	1,624	0	1,168	441	419	308
21/01/98	1,168	0	0	385	0	9	394	2,905	217	24	241	1,865	0	1,321	500	523	208
22/01/98	1,321	0	0	0	0	0	0	2,905	1,015	0	1,015	2,880	0	300	100	0	116

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE:8.5 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	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
23/01/98	300	0	0	1,371	0	47	1,418	1,418	0	0	0	0	0	1,724	100	0	1,534
24/01/98	1,724	0	0	0	15	3	18	1,430	459	70	529	529	0	1,213	215	467	531
25/01/98	1,213	0	0	0	11	12	23	1,459	273	40	313	842	0	923	270	542	111
26/01/98	923	0	0	194	7	0	207	1,660	140	100	240	1,091	0	881	317	448	118
27/01/98	881	0	0	0	2	0	2	1,668	57	0	57	1,148	0	826	317	509	0
28/01/98	826	0	0	0	0	0	0	1,668	0	0	0	1,148	0	826	317	509	0

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
16/01/98	52	<b>OFFLOADING BOAT</b>  Baroid Engineer arrived on rig.  Offloading boats.
17/01/98	110	<b>POOH TO RUN 30" CSG</b>  Built 400 bbls of flocculated spud mud for 1 hi-vis sweeps and 500 bbls of pre-hydrated 1 AQUAGEL for filling hole. Built 1066 bbls of 1 pre-hydrated AQUAGEL for 12-1/4" section - 1 will charge of 12-1/4" mud costs tomorrow. Total mud built : 1966 bbls.  Actual AQUAGEL stock remaining : 16.4 MT. Initial Barite on board: 19.64 MT (432 sxs) All material ordered in loadout 1 rec'd.  Continue to offload boat. Make up 36" BHA. 1 RIH. Tag seabed @ 52.4 m. Drill ahead with 1 seawater pumping 40 bbl hi-vis AQUAGEL 1 sweeps every 5 - 10 m. Drill to 110.4 m. 1 Pump 80 bbl hi-vis sweep. Circulate out 1 sweep. Pump 35 bbl hi-vis mud. Displace hole 1 to unflocculated pre-hydrated AQUAGEL. POOH. 1 RIH. Displace hole to unflocculated 1 pre-hydrated AQUAGEL. POOH to run 30" 1 conductor.
18/01/98	110	<b>INSTALL DIVERTER</b>  Calcium Chloride used for cementing. To be 1 charged as non-drilling cost.  Will charge off 12-1/4" mud costs tomorrow.  Total 12-1/4" mud built to date : 1182 bbls.  Rig up and run 30" conductor to 106 m. Pick 1 up 2-7/8" tubing and run with 30" conductor. 1 Cut conductor joint. Cement casing. Install 1 12-1/4" diverter.
19/01/98	110	<b>PICK UP 12-1/4" BHA</b>  Calcium chloride used for cementing to be charged as 'non-drilling cost'.  Built total of 1430 bbls of seawater/AQUAGEL/Polymer mud for 12-1/4" hole.  Expect API filtrate to decrease with incorporation of drill solids and more PAC-R once drilling commences.  Continue to install diverter and riser. Function flowline, seals and overboard 1 lines. Run wear bushing. Cement top of 30" 1 conductor via 2-7/8" tubing. Pick up 5" 1 drill pipe. Make up 17-1/2" BHA to drill 1 cement out. RIH. Drill cement, shoe track 1 and rathole. Displace hole to 1 seawater/AQUAGEL/PAC mud system. POOH. Pick 1 up and make up 12-1/4" BHA.



Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

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Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
20/01/98	545	<p><b>DRILLING</b></p> <p>Built 1070 bbls of new mud. Heavy mud losses experienced through coarse sands (approx 700 bbls). Adding PAC-R to maintain API filtrate and BARACOR-129 to maintain Excess Sulfite.</p> <p>LCM Sweeps : BARACARB 25 : 18 ppb      BARACARB 100: 21 ppb BAROFIBRE : 4.5 ppb      AQUAGEL : 20 ppb Running all solids control equipment. Building 30 bbls pumpable KCl/EZ-MUD/Polymer mud for spotting across Lakes Entrance.</p> <p>PROBLEM : Seepage losses</p> <p>Seepage losses occurring through coarse sands. Pumped LCM pill/sweep of : BARACARB 25 : 18 ppb BARACARB 100 : 21 ppb AQUAGEL : 20 ppb BAROFIBRE (reg): 4.5 ppb</p> <p>Continue to pick up 8" drill collars. Drill 7 m of 12-1/4" hole. Pick up last 8" drill collar. Unable to circulate - plugged above float. POOH. Unblock float. RIH. Drill ahead to 117 m - Incurring downhole losses. Pump 25 bbl hi-vis sweep. Circulate bottoms up. Pump 25 bbl hi-vis. Drill ahead to 227 m at reduced pump strokes (120 spm). Pump 50 bbl LCM pill (as above) before connection - losses halted/red'd. Drill to 399 m. Circ b/u. Spot 100 bbl LCM pill (as precaution) before conducting survey. Drill ahead.</p>
21/01/98	785	<p><b>R/U TO LOG / LOG</b></p> <p>Maintained treatment of active system with PAC-R to hold API filtrate. Diluted active with seawater/PAC-L to control mud viscosity increase from drilling claystone. BARACOR-129 used to maintain excess sulfites. Building KCl/EZ-MUD/Polymer mud for 8-1/2" hole. Ran desander and desilter non-stop.</p> <p>Reports have been cost modified to reflect updated mud material prices. No new shakers screens used to date.</p> <p>PROBLEM : Seepage losses</p> <p>Hole not taking correct volume when POOH. Slight seepage losses of 4-6 bbl/hr prior to logging.</p> <p>Continue to drill ahead to 701 m. Circulate bottoms up. Conduct Hofco survey. Drill ahead to 785 m. Circulate bottoms up. Conduct multishot survey. POOH. Some tight hole on first 6 stands (hole took 6 bls). POOH to 30" conductor @ 110 m. Conduct top drive service (hole took 12 bbls). RIH. Hole good. Circulate hole clean. POOH. Rig up to run Schlumberger logs. Hole drink rate currently 4-6 bbls/hr.</p>

Company: Amity Oil NL  
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Contractor: Santa Fe Drilling  
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Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
22/01/98	785	<p><b>WOC</b></p> <p>Mixing 3% KCl/EZ-MUD/Polymer mud. Costs/volume to be included tomorrow.</p> <p>Three shakers changed to coarser 80 mesh size screens to prevent/reduce initial losses of unsheared mud. Scalpers changed to 10 mesh. No new screens used to date.</p> <p>Dumping and cleaning pits at report time.</p> <p>AQUAGEL and Calcium Chloride used in cement job - to be charged as non-drilling cost.</p> <p>Rig up Schlumberger. Log 12-1/4" hole -BHC-LDL-CNL-DLL-MSPL-GR-CALI-SP. Rig down Schlumberger. Pull diverter bag. Retrieve wear bushing &amp; laydown running tool. Rig up &amp; run 9-5/8" casing to 779 m. Circulate casing while waiting on chemicals. Cement as per program. WOC.</p>
23/01/98	785	<p><b>RUN WEAR BUSHING</b></p> <p>Built total of 1418 bbls of KCl/EZ-MUD/Poly for 8-1/2" section. Mud built contains only 0.75 ppb EZ-MUD to reduce mud losses over shakers upon displacement.</p> <p>Mud check is on reserve mud. Mud mixed with 1 KCl content of 4 % to allow for depletion 1 through Lakes Entrance Formation.</p> <p>WOC. Cut off 9-5/8" casing. Rig up &amp; pull diverter. o/shot &amp; riser &amp; lay don. Install adapter ring. Test flange to 2000 psi. Lower BOP's &amp; nipple up. Pressure test BOP's. Run 1 wear bushing.</p>
24/01/98	1,070	<p><b>DRILLING</b></p> <p>Mud dumped is gel mud in hole &amp; pit. Raised EZ-MUD concentration to programmed value after displacing. Adding BARACOR-129 to 1 maintain excess sulphites. Weighed up mud to 1 9.1 ppg @ 865 m for extra hole stability 1 while drilling coal seams. Lost approx 70 1 bbls downhole while drilling coal seams. 1 Treated active with additional BARAZAN 1 D-Plus to combat thinning of the mud from 1 coal. Running desander/desilter.Changed 1 shakers to finer 150 mesh screens. No new screens used to date. KCl content : 3 %</p> <p>Lay down 8" drill collars. Pick up &amp; make up 1 8-1/2" BHA. Pick up 5 " drill pipe. RIH. Tag 1 cement @ 745 m. Drill out cement &amp; float to 1 775 with seawater. Pump 100 bbl sweep of old 1 mud. Displace hole to KCl/EZ-MUD/Polymer 1 mud. Perform LOT @ 788 m to 13 ppg EMW (564 psi). Drill ahead to 865 m. Circulate 1 out coal. Drill ahead to 1070 m.</p>

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Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
25/01/98	1,335	<p><b>DRILLING</b></p> <p>Maintain volume &amp; properties with addition of premix. Lost approx 40 bbls downhole (squeezed into formation after coal pack off) while reaming last stand to bottom during wiper trip. Raised mud weight to 9.3 ppg to help stabilise coals. Treated active with 5 ppb each of BARACARB 25 &amp; BARACARB 100 to prevent further seepage losses. Maintaining BARACARB concentrations with regular additions. Maintaining excess sulfites with BARACOR-129. BARAZAN D-Plus used to maintain 6 rpm. KCl Content : 3.2 %</p> <p>Drill from 1070 - 1095 m. Circulate bottoms up, working pipe. Drop Single shot survey. POOH to shoe @ 779 m. Retrieve survey. Service TDS. RIH. Lose circulation 1 std off bottom. Work pipe. Begin to increase mud weight to 9.3 ppg. Drill ahead to 1335 m.</p>
26/01/98	1,345	<p><b>LOGGING</b></p> <p>Lost approximately 100 bbls downhole when backreaming out of hole due to coal sloughing.</p> <p>Built 200 bbls of new premix to maintain mud volume.</p> <p>BARAZAN-D Plus used to make hi-vis sweeps.</p> <p>No new shakers screens used on Broadbill 1.</p> <p>KCl content : 3 %</p> <p>Drill ahead from 1335 to 1345 m. Circulate bottoms up. Drop survey. POOH 1 stand. Backream out of tight hole (coal sloughing, mud losses occurring) from 1326 to 9-5/8" casing shoe @ 779 m. Circulate bottoms up. Retrieve survey. Service TDS. RIH to 1018 m &amp; ream to TD. Circulate &amp; work pipe. Pump 70 bbl 10 ppg hi-vis sweep. Circulate hole clean, some downhole losses. Spot 100 bbls hi-vis on bottom. POOH - no problem. Rig up &amp; log 8-1/2" hole.</p>
27/01/98	1,345	<p><b>PREPARE TO P &amp; A</b></p> <p>BARAZAN-D Plus used to build 100 bbls of hi-vis spotted on bottom prior to POOH.</p> <p>Barite used for slugs.</p> <p>KCl content : 3 %</p> <p>Logs unable to get past 1029 m. Rig down Schlumberger. Pick up 8-1/2" BHA. RIH. Wash &amp; ream from 880 - 982 m &amp; 1027 - 1095 m. RIH. Circulate &amp; condition mud @ 1191 m. RIH to TD. Circulate bottoms up. Pump hi-vis sweep. POOH - no problem. Rig up &amp; log. Logs unable to get past 869 m. Change logging tool configuration - still unable to get further. Rig down. Break &amp; laydown excess drillpipe. Prepare to P &amp; A.</p>

Company: Amity Oil NL  
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Rig: Paramswara

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Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
28/01/98	1,345	PLUG & ABANDON  All chemicals used for P & A.  Mud engineer leaves rig.  Plug and abandon.

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
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 Field: VIC P/36  
 Region: Victoria



# Bit and Hydraulic Record

DATE IN	BIT NO.	BIT SIZE in.	BIT MAKE	BIT TYPE	JETS or TFA	DEPTH OUT meters	DRILLED meters	HOURS RUN	CUM HOURS	WEIGHT ON BIT lb/1000	BIT RPM	PUMP OUTPUT gpm	ANN. VEL DP/DC m/min	PUMP PRESSURE psig	MUD WEIGHT ppg	BIT GRADING	MUD TYPE, LITHOLOGY, REMARKS
/ /		0.00									0		0/0				
17/01/98	1	36.00	VAREL	L3AB	3 X 22	110	58	1	1		0	924	0/0		9	1-1-NO-A-0	Seawater/AQUAGEL sweeps. Nitr
20/01/97	2	17.50	HUGHES	R1	3 X 20						0	924	0/0		9	1-1-NO-A-0	Cement
20/01/97	3	12.25	HUGHES	MAX-GT1	3 X 16	785	675	22	22	20	0	840	16/140	2420	9	1-2-NO-A-2	Seawater/AQUAGEL/Polymer, Mucous Sand, siltstone, claystone.
24/01/97	4	8.50	HUGHES	ATM GT18	2 X 16, 14	1345	560	27	43	15	140	504	74/125	1350	9	4-5-IN GAU	KCl/E2-MUD/Polymer, Sandstone, coal

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
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 Region: Victoria



# Mud Property Recap: Water-Based Mud

DATE	DEPTH meters	F/L TEMP Deg C	DENSITY ppg	FUN VIS sec/qt	RHEOLOGY @ 120°F			pH	FILTRATION				FILTRATE ANALYSIS					SAND % by vol	RETORT ANALYSIS				MBT me/ml mud	RHEOMETER DIAL READINGS			
					PV cP	YP lbs/100 ft2	GELS		API ml/30 ml	HTHP ml/30 min	Cake 32nd In	Temp Deg C	Fm ml	Pf ml	MI ml	Cl mg/L	Total Hardness mg/L		Corr Solids % by vol	LGS % by vol	Oil % by vol	Water % by vol		600/300	200/100	6/3	
16/01/98	52		8.3	28	1.0		/				2/0	121													/	/	/
17/01/98	110		0.0		1.0		/				2/0	121													/	/	/
18/01/98	110		0.0		1.0		/				2/0	121													/	/	/
19/01/98	110		8.9	38	7.0	8.0	3.0/ 4.0		12.0		1/0	121													22 / 15	11 / 7	3 / 2
20/01/98	545	36	8.9	38	10.0	20.0	17.0/ 21.0	8.50	8.2	22.00	1/0	121	0.30	0.01	0.05	20,500	600.0	0.5	3.22	3.22		95.80	4.00	58 / 39	31 / 24	15 / 14	
21/01/98	785	46	9.0	85	15.0	23.0	17.0/ 30.0	8.20	8.0	22.80	1/2	121	0.40	0.02	0.06	21,000	600.0	tr	3.90	3.90		94.90	5.00	53 / 38	32 / 26	16 / 13	
22/01/98	785	46	9.2	44	14.0	20.0	15.0/ 23.0	8.20	7.8	22.00	1/2	121	0.30	0.01	0.06	21,000	680.0	tr	5.41	5.41		93.40	5.50	48 / 34	29 / 25	14 / 12	
23/01/98	785		8.9	55	10.0	15.0	4.0/ 8.0	8.20	5.0	12.50	1/1	121	0.20	0.07	0.11	43,000	380.0		1.87	1.87		95.80		35 / 25	20 / 14	6 / 3	
24/01/98	1070	40	8.9	44	13.0	18.0	4.0/ 8.0	9.00	4.7	12.40	1/2	121	0.22	0.02	0.18	24,000	320.0	1.0	2.91	2.91		95.70	0.20	44 / 31	25 / 18	6 / 4	
25/01/98	1335	42	9.3	42	14.0	23.0	5.0/ 8.0	8.50	3.6	10.60	1/2	121	0.20	0.01	0.16	22,000	300.0	0.25	4.34	2.87		94.40	0.60	51 / 37	30 / 21	6 / 4	
26/01/98	1345	42	9.4	44	16.0	22.0	6.0/ 9.0	8.50	3.6	10.50	1/2	121	0.15	0.01	0.16	22,000	300.0	0.5	4.34	2.12		94.40	0.60	54 / 38	31 / 23	7 / 5	
27/01/98	1345		9.5	43	15.0	24.0	7.0/ 9.0	8.00	4.0	11.00	1/2	121	0.10	0.01	0.18	22,000	300.0	0.25	5.05	2.78		93.70	0.80	54 / 30	32 / 24	/ / 5	
28/01/98	1345		9.5	28	1.0		/				2/0	121													/	/	/

REPORT NUMBER: 1	
Date	Depth
16/01/98	52.4 m (MD)
Spud Date	Present Activity
17/01/98	OFFLOADING BCAT

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA			
Size	in.	Pipe OD	ID	Len.	in.	m	Pump Make/Model	Size	Eff.	Visc
Type		Pipe OD	ID	Len.	Set @		opm			
No. Jets		Pipe OD	ID	Len.	Set @		bbbl/min			
Jets 32nd inch		Collar OD	ID	Len.	Set @		Pump Make/Model			
		Collar OD	ID	Len.	Set @		Size	Eff.	Visc	
		in. OPEN HOLE			Set @		spm	bbbl/min		
Tot Noz Area		Size	Len.		Set @		Pump Make/Model			
TFA		Size	Len.		Set @		Size	Eff.	Visc	
		Size	Len.		Set @		spm	bbbl/min		
		Size	Len.		Set @		Tot. Vol./min	0 gpm	0.0	bbbl
		Size	Len.		Set @		BU Time	0	TC Time	0

MUD PROPERTIES							MUD TREATMENTS				
	Primary	2	3	Program	Essential		Baroid Engineer arrived on rig.				
Source	Flowline			Targets	Program						
Time	10:54			**Excep	Properties						
FL Temp	Deg C	0		P 2 3							
Depth	m	0.0									
Weight	ppg	8.3									
FV @ 16 Deg C	sec/qt	28									
PV @ 49 Deg C	cP	1									
YP	lbs/100 ft <sup>2</sup>	0									
Gels	lbs/100 ft <sup>2</sup>	0/0									
API Filt.	ml/30 min	0.0									
HHP @ 121 Deg C	ml/30 min	0.0									
Cake API/HHP	32nd in	2/0									
Corr. Solids % by vol		0.0									
Oil/Water % by vol		0.0/0.0									
Sand % by vol											
HBT		0.0									
pH STRIP		0.0									
Alk. Mud (Pm)		0.00									
Alk. Filtr. (PF/ME)		0.00/0.00									
Chlorides mg/l		0									
Hard. Ca mg/l		0									
Low Gravity Solids ppb		0.00									

RIG ACTIVITY

Offloading boats.

MATERIALS USED

NO INVENTORY USED ON THIS REPORT

SOLIDS EQUIPMENT

Device	Make	Sz/Scrm	HR

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME		
MUD VOLUME	bbbl	MUD TYPE			Water Depth	21.7	DRLG	0.00	
Hole	Pits	No Mud	600 rpm		Calc. F. Grad	0.0	CIRC	0.00	
0	0		300 rpm		Leak Off Test	0.0	TRIPS	0.00	
Active Volume		MUD CONSUMPTION	200 rpm		SCD	ppg	SERV. RIG	0.00	
0		Oil	100 rpm		Csg. Shoe	0.0	SURVEY	0.00	
Reserve	Total	Brine Water	6 rpm		TD	0.0	FISHING	0.00	
0		Drill Water	3 rpm		Max. Diff. Press	0	LOGGING	0.00	
Low Grav. vol %	0.0	Sea Water	Pressure Units:	psig			RUN CSG	0.00	
ppb	0.00	Whole Mud	Press Drop. DP	0			CORE	0.00	
High Grav. vol %	0.0	Barite	Press Drop. BIT	0			BACK REAM	0.00	
ppb	0.00	Chemicals	Press Drop. ANN	0	DEVIATION INFO			REAMING	0.00
ASG	2.60	LOSSES	Actual Circ. Press	0	HD	52.4	m	TESTING	0.00
Drill Cuttings	0	Dumped	AV, DP	m/min	0.0	Angle	0.00	OTHER	0.00
Dilution Rate	0.00	Lost	AV, DC	m/min	0.0	Direction		AVERAGE ROP	0.00
Slids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min		Horiz. Displ	0.0	m	
BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3111	DAILY COST		CUMULATIVE COST		
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A	0.00	\$A	0.00	

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara	
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria	
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait	COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600	
Type	Pipe OD	ID	Len.	in.	m	Size 6.5 X 12	Eff. 97.00	V/st	0.120
No. Jets	Pipe OD	ID	Len.			Set @	spm	0	bbl/min 0.0
Jets 32nd inch	Collar OD	ID	Len.			Set @	Pump Make/Model	Ideco T-1600	
	Collar OD	ID	Len.			Set @	Size 6.5 X 12	Eff. 97.00	V/st 0.120
	in. OPEN HOLE			m		Set @	spm	0	bbl/min 0.0
Tot Not Area	Size 36	Len. 57.6				Set @	Pump Make/Model		
TFA	Size	Len.				Set @	Size	Eff.	V/st
	Size	Len.				Set @	spm	bbl/min	
	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	Essential
Source	Flowline	10:57			Targets	Program
Time					*=Excep	Properties
FL Temp	Deg C	0			P 2 3	
Depth	m	110.0				
Weight	ppg	0.0				
FV @ 16 Deg C	sec/qt	0				
PV @ 49 Deg C	cP	1				
YP	lbs/100 ft2	0				
Gels	lbs/100 ft2	0/0				
API Filt.	ml/30 min	0.0				
HTHP @ 121 Deg C	ml/30 min	0.0				
Cake API/HTHP	32nd in	2/0				
Corr. Solids % by vol		0.0				
Oil/Water % by vol		0.0/0.0				
Sand % by vol						
NBT		0.0				
pH STRIP		0.0				
Alk. Mud (Pm)		0.00				
Alk. Filtr. (Pf/Hf)		0.00/0.00				
Chlorides mg/l		0				
Hard. Ca mg/l		0				
Low Gravity Solids ppb		0.00				

**MUD TREATMENTS**  
 Built 400 bbls of flocculated spud mud for hi-vis sweeps and 500 bbls of pre-hydrated AQUAGEL for filling hole. Built 1066 bbls of pre-hydrated AQUAGEL for 12-1/4" section - will charge of 12-1/4" mud costs tomorrow. Total mud built : 1966 bbls.  
 Actual AQUAGEL stock remaining : 16.4 MT.  
 Initial Barite on board: 19.64 MT (432 sxs)  
 All material ordered in loadout 1 rec'd.

**RIG ACTIVITY**  
 Continue to offload boat. Make up 36" BHA. RIH. Tag seabed @ 52.4 m. Drill ahead with seawater pumping 40 bbl hi-vis AQUAGEL sweeps every 5 - 10 m. Drill to 110.4 m. Pump 80 bbl hi-vis sweep. Circulate out sweep. Pump 35 bbl hi-vis mud. Displace hole to unflocculated pre-hydrated AQUAGEL. POOH. RIH. Displace hole to unflocculated pre-hydrated AQUAGEL. POOH to run 30" conductor.

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	8.500	4033.25				Shkr #1	Scalper		
caustic soda - 25 KG. PAIL	5	216.05				Shkr #2	Scalper		
lime - 20 KG. BAG	5	42.15				Shkr #3	Sweco LM3		
soda ash - 25 KG. BAG	1	14.85				Shkr #4	Sweco LM3		
						Shkr #5	Sweco LM3		
						Shkr #6	Sweco LM3		
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD VOLUME		MUD TYPE		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME	
Hole	Pits	SEAWATER/HI VIS SWEEPS	600 rpm	Water Depth	21.7	DRIG	3.00		
238	0	MUD CONSUMPTION	300 rpm	Calc. F. Grad	0.0	CIRC	2.00		
Active Volume		ADDITIONS	200 rpm	Leak Off Test	0.0	TRIPS	2.50		
238		Oil	0 100 rpm	BCD	ppg	SERV. RIG	0.00		
Reserve	Total	Brine Water	0 6 rpm	Cog. Shoe	0.0	SURVEY	0.00		
	238	Drill Water	629 3 rpm	TD	0.0	FISHING	0.00		
Low Grav. vol %	0.0	Sea Water	250	Max. Diff. Press	0	LOGGING	0.00		
ppb	0.00	Whole Mud	0	Pressure Units:	paig	RUN CSG	0.00		
High Grav. vol %	0.0	Barite	0	Press Drop. DP	0	CORE	0.00		
ppb	0.00	Chemicals	21	Press Drop. BIT	0	BACK REAM	0.00		
ASG		LOSSES	bbl	Press Drop. ANN	0	REAMING	0.00		
Drill Cuttings	0	Dumped	662	Actual Circ. Press	0	TESTING	0.00		
Dilution Rate	0.00	Lost	0	AV, DP m/min	0.0	OTHER	16.50		
Slids Control Eff	0.00	VOL GAIN/LOSS	238	AV, DC m/min	0.0	AVERAGE ROP	0.00		
				AV, Riser m/min					

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 4306.30	\$A 4306.30

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
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Date	18/01/98	Depth	110.0 m [MD]
Spud Date	17/01/98	Present Activity	INSTALL DIVERTER

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600	
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff. 97.00 V/st 0.120
No. Jets		Pipe OD	ID	Len.	30	Set @ 106.0	spm	0	bbl/min 0.0
Jets 32nd inch		Collar OD	ID	Len.		Set @	Pump Make/Model	Ideco T-1600	
		collar OD	ID	Len.		Set @	Size	6.5 X 12	Eff. 97.00 V/st 0.120
		in. OPEN HOLE			m	Set @	spm	0	bbl/min 0.0
Tot Noz Area		Size	36	Len.	4.0	Set @	Pump Make/Model		
TFA		Size		Len.		Set @	Size		Eff. V/st
		Size		Len.		Set @	spm		bbl/min
		Size		Len.		Set @	Tot. Vol./min	0	gpm 0.0 bbl
		Size		Len.		Set @	BU Time	0	TC Time 0

MUD PROPERTIES						MUD TREATMENTS	
	Primary	2	3	Program	Essential		
Source	Flowline			Targets	Program	Calcium Chloride used for cementing. To be charged as non-drilling cost.	
Time	19:37			*=Excep	Properties	Will charge off 12-1/4" mud costs tomorrow.	
FL Temp	Deg C	0		P 2 3		Total 12-1/4" mud built to date : 1182 bbls.	
Depth	m	110.0					
Weight	ppg	0.0					
FV @ 16	Deg C sec/qt	0					
PV @ 49	Deg C cP	1					
YP	lbs/100 ft2	0					
Gels	lbs/100 ft2	0/0					
API Filt.	ml/30 min	0.0					
HTHP @ 121	Deg C ml/30 min	0.0					
Cake API/HTHP	32nd in	2/0					
Corr.Solids % by vol		0.0					
Oil/Water % by vol		0.0/0.0					
Sand % by vol							
NBT		0.0					
pH STRIP		0.0					
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					

MATERIALS USED						RIG ACTIVITY	
						Rig up and run 30" conductor to 106 m. Pick up 2-7/8" tubing and run with 30" conductor. Cut conductor joint. Cement casing. Install 12-1/4" diverter.	

MATERIALS USED				SOLIDS EQUIPMENT			
NO INVENTORY USED ON THIS REPORT				Device	Make	Sz/Scrn	HR
				Shkr #1	Scalper	20	
				Shkr #2	Scalper	20	
				Shkr #3	Sweco LM3	150 x 3	
				Shkr #4	Sweco LM3	150 x 3	
				Shkr #5	Sweco LM3	150 x 3	
				Shkr #6	Sweco LM3	150 x 3	
				dSndr	Crestex	3 x 10"	
				dSlit #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT TIME		
MUD VOLUME	bb1	MUD TYPE					
Hole	Pits	Seawater	600 rpm	Water Depth	21.7	DRLG	0.00
281	0		300 rpm	Calc. P. Grad	0.0	CIRC	0.00
Active Volume		MUD CONSUMPTION	200 rpm	Leak Off Test	0.0	TRIPS	0.00
281		ADDITIONS	100 rpm	ECD	ppg	SERV. RIG	0.00
Reserve	Total	Oil	6 rpm	Cog. Shoe	0.0	SURVEY	0.00
	281	Brine Water	3 rpm	TD	0.0	FISHING	0.00
Low Grav. vol %	0.0	Drill Water	0	Max. Diff. Press	0	LOGGING	0.00
ppb	0.00	Sea Water	0	Pressure Units	paig	RUN CSG	14.00
High Grav. vol %	0.0	Whole Mud	0	Press Drop. DP	0	CORE	0.00
ppb	0.00	Barite	0	Press Drop. BIT	0	DEVIATION INFO	
ASG		Chemicals	0	Press Drop. ANN	0	MD	110.0 m
Drill Cuttings	0	LOSSES	0	Actual Circ. Press	0	TVD	110.0 m
Dilution Rate	0.00	Dumped	0	AV, DP	m/min 0.0	Angle	0.00
Slds Control Eff	0.00	Lost	0	AV, DC	m/min 0.0	Direction	
		VOL GAIN/LOSS	0	AV, Riser	m/min	Horiz. Displ	0.0 m

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST		CUMULATIVE COST	
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A	0.00	\$A	4306.30

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	19/01/98	Depth	110.0 m [MD]
Spud Date	17/01/98	Present Activity	PICK UP 12-1/4" BHA

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara	
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria	
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait	COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	in.	Pipe OD	ID	Len.	in.	m	Pump Make/Model	Ideco T-1600	
Type		Pipe OD	ID	Len.			Size 6.5 X 12	Eff. 97.00	V/st 0.120
No. Jets		Pipe OD	ID	Len.	30	Set @ 106.0	spm 0	bbl/min 0.0	
Jets 32nd inch		Collar OD	ID	Len.		Set @	Pump Make/Model	Ideco T-1600	
		Collar OD	ID	Len.		Set @	Size 6.5 X 12	Eff. 97.00	V/st 0.120
		in. OPEN HOLE				Set @	spm 0	bbl/min 0.0	
Tot Hoz Area	Size 36	Len. 4.0				Set @	Pump Make/Model		
TFA	Size	Len.				Set @	Size	Eff.	V/st
	Size	Len.				Set @	spm	bbl/min	
	Size	Len.				Set @	Tot. Vol./min 0	gpm 0.0	bbl
	Size	Len.				Set @	BU Time 0	TC Time 0	

MUD PROPERTIES					MUD TREATMENTS					
		Primary		2	3					
Source		Pits, Circ				Program	Essential	Calcium chloride used for cementing to be charged as 'non-drilling cost'.		
Time		20:45				Targets	Program			
FL Temp	Deg C	0				*=Excep	Properties			
Depth	m	110.0				P 2 3		Built total of 1430 bbls of seawater/AQUAGEL/Polymer mud for 12-1/4" hole.		
Weight	ppg	8.9						Expect API filtrate to decrease with incorporation of drill solids and more PAC-R once drilling commences.		
FV @ 18 Deg C	sec/qt	38								
PV @ 49 Deg C	cP	7								
YP	lbs/100 ft <sup>2</sup>	8								
Gels	lbs/100 ft <sup>2</sup>	3/4								
API Filt.	ml/30 min	12.0								
HHP @ 121 Deg C	ml/30 min	0.0								
Cake API/HHP	32nd in	1/0								
Corr.Solids % by vol		0.0								
Oil/Water % by vol		0.0/0.0								
Sand % by vol										
MBT		0.0								
pH STRIP		0.0								
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								
Excess sulfite mg/l										

MATERIALS USED					SOLIDS EQUIPMENT				
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	17.100	8113.95				Shkr #1	Scalper	20	1
PAC-L - 25 KG. BAG	14	2060.94				Shkr #2	Scalper	20	1
PAC-R - 25 KG. BAG	2	294.42				Shkr #3	Sweco LM3	150 x 3	
						Shkr #4	Sweco LM3	150 x 3	
						Shkr #5	Sweco LM3	150 x 3	
						Shkr #6	Sweco LM3	150 x 3	
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME	
MUD VOLUME	bbbl	MUD TYPE								
Hole	Pits	GEL/SEAWATER/POLYMER	600 rpm	22	Water Depth	21.7	DRLG	0.00		
281	572	MUD CONSUMPTION	300 rpm	15	Calc. F. Grad	0.0	CIRC	0.75		
Active Volume		ADDITIONS	200 rpm	11	Leak Off Test	0.0	TRIPS	0.00		
853		Oil	100 rpm	7	ECD	ppg	SERV. RIG	0.00		
Preserve	Total	Brine Water	6 rpm	3	Cag. Shoe	0.0	SURVEY	0.00		
518	1371	Drill Water	3 rpm	2	TD	0.0	FISHING	0.00		
Low Grav. vol %	0.0	Sea Water	Pressure Units:	psig	Max. Diff. Press	0	LOGGING	0.00		
ppb	0.00	Whole Mud	Press Drop. DP	0			RUN CSG	0.00		
High Grav. vol %	0.0	Barite	Press Drop. BIT	0	DEVIATION INFO			CORE	0.00	
ppb	0.00	Chemicals	Press Drop. ANN	0	MD	110.0 m	BACK RSAM	0.00		
ASG		LOSSES	Actual Circ. Press	0	TVD	110.0 m	REAMING	0.00		
Drill Cuttings	0	Dumped	AV, DP	m/min 0.0	Angle	0.00	TESTING	0.00		
Dilution Rate	0.00	Lost	AV, DC	m/min 0.0	Direction		OTHER	23.25		
Slde Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min	Horiz. Displ	0.0 m	AVERAGE ROP	0.00		

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 10469.31	\$A 14775.61

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	20/01/98	Depth	545.0 m [MD]
Spud Date	17/01/98	Present Activity	DRILLING

OPERATOR	CONTRACTOR	RIG NUMBER	
Amity Oil NL	Santa Fe Drilling	Paramswara	
REPORT FOR	REPORT FOR	REGION	
Wally Westman/Murray Jackson	Santa Fe Drilling	Victoria	
WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Broadbill 1	VIC P/36	Bass Strait	Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size 12.25 in.	Pipe OD 5	ID 4.276	Len. 314.2				Pump Make/Model	Ideco T-1600	
Type MAX GT1	Pipe OD 5	ID 3.000	Len. 112.4	in.	m	Size 6.5 X 12	Eff. 97.00	V/st	0.120
No. Jets	Pipe OD	ID	Len.	30	Set @ 106.0	spm 80	bbl/min	9.6	
Jets 32nd inch	Collar OD 8	ID 2.75	Len. 118.4		Set @	Pump Make/Model	Ideco T-1600		
16	16	16	Collar OD	ID	Len.	Set @	Size 6.5 X 12	Eff. 97.00	V/st 0.120
				in. OPEN HOLE			Set @	spm 80	bbl/min 9.6
Tot Noz Area	Size 12.25	Len. 439.0			Set @	Pump Make/Model			
TFA	Size	Len.			Set @	Size	Eff.	V/st	
	Size	Len.			Set @	spm	bbl/min		
	Size	Len.			Set @	Tot. Vol./min	803 gpm	19.1 bbl	
	Size	Len.			Set @	BU Time	22	TC Time	45

MUD PROPERTIES					MUD TREATMENTS				
		Primary	2	3					
Source	Pits, Circ	Flowline			Program	Essential	Built 1070 bbls of new mud. Heavy mud losses experienced through coarse sands (approx 700 bbls). Adding PAC-R to maintain API filtrate and BARACOR-129 to maintain Excess Sulfite.  LCM Sweeps : BARACARB 25 : 18 ppb BARACARB 100: 21 ppb BAROFIBRE : 4.5 ppb AQUAGEL : 20 ppb  Running all solids control equipment. Building 30 bbls pumpable KCl/EZ-MUD/Polymer mud for spotting across Lakes Entrance.		
Time	08:00	20:00			Targets	Program			
FL Temp	Deg C	36	44		*=Excep	Properties			
Depth	m	165.0	420.0		P 2 3	110.0 784.9			
Weight	ppg	8.9	9.0			< 9.3			
FV @ 44 Deg C	sec/gt	39	44			35 45			
FV @ 49 Deg C	cP	19	17						
YP	lbs/100 ft <sup>2</sup>	20	26						
Gels	lbs/100 ft <sup>2</sup>	17/21	16/21						
API Filtr.	ml/30 min	8.2	8.0		*	< 8.0			
HHP @ 121 Deg C	ml/30 min	22.0	21.0						
Cake API/HHP	32nd in	1/0	1/0						
Corr.Solids % by vol		3.2	4.1						
Oil/Water % by vol		0.0/95.6	0.0/94.7						
Sand % by vol		0.5	0.5						
HBT		4.0	4.2						
pH METER @ 20 Deg C		8.5	8.5						
Alk. Mud (Pm)		0.30	0.36						
Alk. Filtr. (PE/ME)		0.01/0.05	0.01/0.07						
Chlorides mg/l		20500	21000						
Hard. Ca mg/l		600	620						
Low Gravity Solids ppb		29.30	37.31						
Excess sulfite mg/l		100	100						

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	12.400	5883.80				Shkr #1	Scalper	10	17
BARACARB 100 - 25 KG. SACK	48	691.20				Shkr #2	Scalper	20	17
BARACARB 25 - 25 KG. BAG	48	554.40				Shkr #3	Sweco LM3	150 x 3	17
BARACOR 129 - 25 KG. DRUM	19	1159.95				Shkr #4	Sweco LM3	150 x 3	17
BAROFIBRE - 25 LB. SACK	27	1606.50				Shkr #5	Sweco LM3	150 x 3	17
PAC-R - 25 KG. BAG	19	2796.99				Shkr #6	Sweco LM3	150 x 3	17
caustic soda - 25 KG. PAIL	2	86.42				dSndr	Crestex	3 x 10"	17
						dSlrt #1	Crestex	16 x 5"	17

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME			
MUD VOLUME	bbl	MUD TYPE										
Hole	Pits	GEL/SEAWATER/POLYMER	500 rpm	58	60	Water Depth	21.7	DRLG	15.00			
441	419		300 rpm	39	43	Calc. F. Grad	0.0	CIRC	3.00			
Active Volume		MUD CONSUMPTION	200 rpm	31	37	Leak Off Test	0.0	TRIPS	4.75			
860		ADDITIONS	100 rpm	24	29	ECD	ppg	SERV. RIG	0.00			
Reserve	Total	Oil	6 rpm	15	16	Cog. Shoe	9.0	SURVEY	0.50			
308	1168	Brine Water	3 rpm	14	15	TD	9.2	FISHING	0.00			
Low Grav, vol %	3.2	Drill Water	759			Max. Diff. Press	0	LOGGING	0.00			
ppb	29.30	Sea Water	283			Pressure Units:		RUN CSG	0.00			
High Grav, vol %	0.0	Whole Mud	0			Press Drop. DP	953	CORB	0.00			
ppb	0.00	Barite	0			Press Drop. BIT	1512	BACK REAM	0.00			
ASG	2.58	Chemicals	39			Press Drop. ANN	28	REAMING	0.00			
Drill Cuttings	12	LOSSES	bbl			Actual Circ. Press	2420	TESTING	0.00			
Dilution Rate	16.83	Dumped	40			AV, DP	m/min 7.9	OTHER	0.75			
Slids Control Eff	0.00	Lost	1244			AV, DC	m/min 69.7	AVERAGE ROP	0.00			
		VOL GAIN/LOSS	-203			AV, Riser	m/min					

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WARRHOUSE	Welspool	TELEPHONE	(03) 56 881 445	\$A 12779.26	\$A 27554.87

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA			
Size in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600		
Type	Pipe OD	ID	Len.		in.	m	Size 6.5 X 12	Eff. 97.00	V/st	0.120
No. Jets	Pipe OD	ID	Len.		30	Set @ 106.0	spm 0	bbl/min	0.0	
Jets 32nd inch	Collar OD	ID	Len.			Set @	Pump Make/Model	Ideco T-1600		
	Collar OD	ID	Len.			Set @	Size 6.5 X 12	Eff. 97.00	V/st	0.120
		in. OPEN HOLE			m		Set @	spm 0	bbl/min	0.0
Tot Noz Area	Size	12.25	Len.	679.0		Set @	Pump Make/Model			
IFA	Size		Len.			Set @	Size	Eff.	V/st	
	Size		Len.			Set @	spm	bbl/min		
	Size		Len.			Set @	Tot. Vol./min	0 gpm	0.0	bbl
	Size		Len.			Set @	BU Time	0	TC Time	0

MUD PROPERTIES						MUD TREATMENTS					
		Primary	2	3							
Source		Pits, Circ	Flowline		Program	Essential	Maintained treatment of active system with PAC-R to hold API filtrate. Diluted active with seawater/PAC-L to control mud viscosity; increase from drilling claystone. BARACOR-129 used to maintain excess sulfites. Building KCl/EZ-MUD/Polymer mud for 8-1/2" hole. Ran desander and desilter non-stop.  Reports have been cost modified to reflect updated mud material prices. No new shakers screens used to date.				
Time		06:00	13:00		Targets	Program					
FL Temp	Deg C	46	46		**Excep	Properties					
Depth	m	701.0	785.0		P 2 3	110.0 784.9					
Weight	ppg	9.0	9.2			< 9.3					
FV @ 46 Deg C	sec/qt	85	70		*	35 45					
PV @ 49 Deg C	cP	15	15								
YP	lbs/100 ft <sup>2</sup>	23	21								
Gels	lbs/100 ft <sup>2</sup>	17/30	17/29								
API Filtr.	ml/30 min	8.0	7.8		*	< 8.0					
HTHP @ 121 Deg C	ml/30 min	22.8	21.0		*						
Cake API/HTHP	32nd in	1/2	1/2								
Corr.Solids % by vol		3.9	5.4								
Oil/Water % by vol		0.0/94.9	0.0/93.4								
Sand % by vol		tr	tr								
HBI		5.0	5.5								
pH METER @ 20 Deg C		8.2	8.2		*						
Alk. Mud (Pm)		0.40	0.45								
Alk. Filtr. (PF/ME)		0.02/0.06	0.02/0.07								
Chlorides mg/l		21000	21000								
Hard. Ca mg/l		600	600								
Low Gravity Solids	ppb	35.49	49.23								
Excess sulfite	mg/l	120	100								

MATERIALS USED				SOLIDS EQUIPMENT			
Product	Used	Cost		Product	Used	Cost	
AQUAGEL - 1000 KG. TON	2.200	1043.90		Shkr #1	Scalper	10	13
BAPACOR 129 - 25 KG. DRUM	2	122.10		Shkr #2	Scalper	20	13
PAC-L - 25 KG. BAG	3	441.63		Shkr #3	Sweco LM3	150 x 3	13
PAC-R - 25 KG. BAG	4	588.84		Shkr #4	Sweco LM3	150 x 3	13
barite - 1000 KG. TON	2.400	773.33		Shkr #5	Sweco LM3	150 x 3	13
				Shkr #6	Sweco LM3	150 x 3	13
				dSndr	Crestex	3 x 10"	13
				dSlt #1	Crestex	15 x 5"	13

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME		
MUD VOLUME	bbl					Water Depth	21.7		DRLG	10.75	
Hole	Pits		GEL/SEAWATER/POLYMER	600 rpm	53 51	Calc. F. Grad	0.0		CIRC	2.25	
590	523		MUD CONSUMPTION	300 rpm	38 36	Leak Off Test	0.0		TRIPS	7.00	
Active Volume			ADDITIONS	200 rpm	32 31	BCD	ppg		SRV. RIG	0.00	
1113			Oil	100 rpm	26 25	Cog. Shoe	9.1		SURVEY	1.25	
Peccarre	Total		Brine Water	6 rpm	16 15	TD	9.3		FISHING	0.00	
208	1321		Drill Water	3 rpm	13 13	Max. Diff. Press	0		LOGGING	0.00	
Low Grav. vol %	3.9		Sea Water	Pressure Units:	psig				RUN CSG	0.00	
ppb	35.49		Whole Mud	Press Drop. DP	0				CORE	0.00	
High Grav. vol %	0.0		Barite	Press Drop. BIT	0				BACK REAM	0.00	
ppb	0.00		Chemicals	Press Drop. ANN	0				REAMING	0.00	
ASG	2.60		LOSSES	Actual Circ. Press	0				TESTING	0.00	
Drill Cuttings	0		Dumped	AV, DP	m/min	0.0			OTHER	2.75	
Dilution Rate	0.00		Lost	AV, DC	m/min	0.0			AVERAGE ROP	0.00	
Slds Control Eff	0.00		VOL GAIN/LOSS	AV, Riser	m/min						

BAROID REPRESENTATIVE Nicholas Doust	OFFICE/HOME WAREHOUSE	Melbourne Walahpool	TELEPHONE (03) 9621 3311	(03) 56 881 445	DAILY COST \$A 2969.80	CUMULATIVE COST \$A 30524.67
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NOTES: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
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OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING			CIRCULATION DATA				
Size in.	Pipe OD	ID	Len.	in.	m	Pump Make/Model	Size	6.5 X 12	Eff.	97.00	V/st	0.120
Type	Pipe OD	ID	Len.	in.	m	spm	0	bbl/min	0.0			
No. Jets	Pipe OD	ID	Len.	30	Set @ 106.0	spm	0	bbl/min	0.0			
Jets 32nd inch	Collar OD	ID	Len.	9 5/8	Set @ 779.0	Pump Make/Model	Ideco T-1600					
	Collar OD	ID	Len.		Set @	Size	6.5 X 12	Eff.	97.00	V/st	0.120	
		in. OPEN HOLE			m	Set @	spm	0	bbl/min	0.0		
Tot Noz Area	Size	12.25	Len.	6.0	Set @	Pump Make/Model						
TFA	Size	Len.			Set @	Size	Eff.	V/st				
	Size	Len.			Set @	spm	bbl/min					
	Size	Len.			Set @	Tot. Vol./min		0	gpm	0.0 bbl		
	Size	Len.			Set @	BU Time	0	TC Time	0			

MUD PROPERTIES						MUD TREATMENTS					
		Primary	2	3							
Source	Pits, Circ				Program	Essential	Mixing 3% KCl/EZ-MUD/Polymer mud.				
Time	15:30				Targets	Program	Costs/volume to be included tomorrow.				
FL Temp	Deg C	46			*=Excep	Properties	Three shakers changed to coarser 80 mesh size screens to prevent/reduce initial losses of unheared mud. Scalpers changed to 10 mesh. No new screens used to date.				
Depth	m	785.0			P 2 3	784.9 1654.1	Dumping and cleaning pits at report time.				
Weight	ppg	9.2				9.0 9.5	AQUAGEL and Calcium Chloride used in cement job - to be charged as non-drilling cost.				
FV @ 46	Deg C sec/qt	44					RIG ACTIVITY				
PV @ 49	Deg C cP	14				< 30	Rig up Schlumberger. Log 12-1/4" hole -BHC-LDL-CNL-DLL-MSPL-GR-CALI-SP. Rig down Schlumberger. Pull diverter bag. Retrieve wear bushing & laydown running tool. Rig up & run 9-5/8" casing to 779 m. Circulate casing while waiting on chemicals. Cement as per program. WOC.				
YP	lbs/100 ft2	20									
Gels	lbs/100 ft2	15/23									
API Filtr.	ml/30 min	7.8			*	< 6.0					
HTHP @ 121	Deg C ml/30 min	22.0			*	< 15.0					
Cake API/HTHP	32nd in	1/2									
Corr.Solids % by vol		5.4									
Oil/Water % by vol		0.0/93.4									
Sand % by vol		tr									
NBT		5.5									
pH METER @ 20	Deg C	8.2			*	8.5 9.2					
Alk. Mud (Fm)		0.30									
Alk. Filtr. (PE/ME)		0.01/0.06									
Chlorides mg/l		21000									
Hard. Ca mg/l		580									
Low Gravity Solids ppb		49.23				< 91.00					
ε rpm		14			*	6.00 10.00					
KCl Content	ppb				*	11.00 14.00					

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 25 KG. BAG	56	659.12				Shkr #1	Scalper	10	5
						Shkr #2	Scalper	10	5
						Shkr #3	Sweco LM3	150 x 3	5
						Shkr #4	Sweco LM3	80 x 3	5
						Shkr #5	Sweco LM3	80 x 3	5
						Shkr #6	Sweco LM3	80 x 3	5
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME		
MUD VOLUME	bbbl	MUD TYPE				Water Depth	21.7	DRLG	0.00		
Hole	Pits	GEL/SEAWATER/POLYMER	600 rpm	48		Calc. F. Grad	0.0	CIRC	5.00		
190	0	MUD CONSUMPTION	300 rpm	34		Leak Off Test	0.0	TRIPS	0.00		
Active Volume		ADDITIONS	200 rpm	29		RCD	ppg	SERV. RIG	0.00		
190		Oil	100 rpm	25		Cog. Shoe	0.0	SURVEY	0.00		
Reserve	Total	Brine Water	6 rpm	14		TD	0.0	FISHING	0.00		
116	306	Drill Water	3 rpm	12		Max. Diff. Press	0	LOGGING	6.50		
Low Grav. vol %	5.4	Sea Water	Pressure Units: psig					RUN CSG	9.50		
ppb	49.23	Whole Mud	Press Drop. DP	0				CORB	0.00		
High Grav. vol %	0.0	Barite	Press Drop. BIT	0		DEVIATION INFO			0.00		
ppb	0.00	Chemicals	Press Drop. ANN	0		MD	785.0 m	BACK REAM	0.00		
ASG	2.60	LOSSES	Actual Circ. Press	0		TVD	785.0 m	REAMING	0.00		
Drill Cuttings	0	Dumped	AV, DP	m/min	0.0	Angle	0.25	TESTING	0.00		
Dilution Rate	0.00	Lost	AV, DC	m/min	0.0	Direction	320	OTHER	3.00		
Slds Control Eff	0.00	VOL GAIN/LOSS	-1015	AV, Riser	m/min	Horiz. Displ	0.5 m	AVERAGE ROP	0.00		

BAROID REPRESENTATIVE Nicholas Doust	OFFICE/HOME Melbourne	TELEPHONE (03) 9621 3311	DAILY COST \$A 659.12	CUMULATIVE COST \$A 31183.79
	WAREHOUSE Weshpool	TELEPHONE (03) 56 881 445		

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Baroid Australia Pty Ltd  
 DRILLING MUD REPORT  
 ( Cost Modified )

REPORT NUMBER: S	
Date 23/01/98	Depth 785.0 m [MD]
Spud Date 17/01/98	Present Activity RUN WEAR BUSHING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	Pipe OD	ID	Len.		in.	m	Pump Make/Model	Ideco T-1600	
Type	Pipe OD	ID	Len.		30	Set @ 106.0	Size 6.5 X 12	Eff.	97.00 V/st 0.120
No. Jets	Pipe OD	ID	Len.		9 5/8	Set @ 779.0	spm	0	bbl/min 0.0
Jets 32nd inch	Collar OD	ID	Len.				Pump Make/Model	Ideco T-1600	
	Collar OD	ID	Len.			Set @	Size 6.5 X 12	Eff.	97.00 V/st 0.120
			in.	OPEN HOLE	m	Set @	spm	0	bbl/min 0.0
Tot Noz Area	Size	12.25	Len.	6.0		Set @	Pump Make/Model		
TFA	Size		Len.			Set @	Size	Eff.	V/st
	Size		Len.			Set @	spm	bbl/min	
	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	Essential
Source	Pits, Circ				Targets	Program
Time	20:07				*=Excep	Properties
FL Temp	Deg C	0			P 2 3	784.9 1654.1
Depth	m	785.0				
Weight	ppg	8.9			*	9.0 9.5
FV % 20 Deg C	sec/qt	55				
PV % 49 Deg C	cP	10				< 30
YP	lbs/100 ft <sup>2</sup>	15				
Gels	lbs/100 ft <sup>2</sup>	4/8				
API Filt.	ml/30 min	5.0				< 6.0
HTHP % 121 Deg C	ml/30 min	12.5				< 15.0
Cake API/HTHP	32nd in	1/1				
Corr.Solids % by vol		1.7				
Oil/Water % by vol		0.0/95.8				
Sand % by vol						
HBT		0.0				
pH METER @ 20 Deg C		8.2			*	8.5 9.2
Alk. Mud (Pm)		0.20				
Alk. Filt. (Pf/Mf)		0.07/0.11				
Chlorides mg/l		43000				
Hard. Ca mg/l		380				
Low Gravity Solids ppb		15.20				< 91.00
6 rpm		6				6.00 10.00
KCl Content	ppb	14				11.00 14.00
KCl	% by vol	4				

**MUD TREATMENTS**

Built total of 1418 bbls of KCl/EZ-MUD/Poly for 8-1/2" section. Mud built contains only 0.75 ppb EZ-MUD to reduce mud losses over shakers upon displacement.

Mud check is on reserve mud. Mud mixed with KCl content of 4 % to allow for depletion through Lakes Entrance Formation.

MATERIALS USED		SOLIDS EQUIPMENT	
Product	Used Cost	Product	Used Cost
ALDACIDE G - 25 L. CAN	3 611.88	Shkr #1	Scalper 10
BARAZAN-D PLUS - 25 KG. BAG	23 8279.54	Shkr #2	Scalper 10
DEXTRID LT - 25 KG. BAG	107 5631.49	Shkr #3	Sweco LM3 150 x 3
EZ-MUD DP - 50 LB. BAG	24 2754.96	Shkr #4	Sweco LM3 80 x 3
PAC-L - 25 KG. BAG	22 3238.62	Shkr #5	Sweco LM3 80 x 3
potassium chloride - 1000 KG.	9 3892.89	Shkr #6	Sweco LM3 80 x 3
soda ash - 25 KG. BAG	5 74.25	dSndr	Crestex 3 x 10"
		dSlt #1	Crestex 16 x 5"

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT TIME	
MUD VOLUME bbl	MUD TYPE			Water Depth	21.7
Hole	KCL/EZ MUD/POLYMER	600 rpm	35	Calc. F. Grad	0.0
190		300 rpm	25	Leak Off Test	0.0
Active Volume	MUD CONSUMPTION	200 rpm	20	ECD	ppg
190	Oil	100 rpm	14	Cog. Shoe	0.0
Reserve	Brine Water	6 rpm	6	TD	0.0
1534	Drill Water	3 rpm	3	Max. Diff. Press	0
Low Grav. vol %	Sea Water	Pressure Units:	psig		
ppb	Whole Mud	Press Drop. DP	0		
High Grav. vol %	Barite	Press Drop. BIT	0		
ppb	Chemicals	47			
ASG	LOSSES	Actual Circ. Press	0		
Drill Cuttings	Dumped	AV, DP	m/min 0.0		
Dilution Rate	Lost	AV, DC	m/min 0.0		
Slids Control Eff	VOL GAIN/LOSS	AV, Riser m/min			
	1418				

BAROID REPRESENTATIVE		OFFICE/HOME	TELEPHONE	DAILY COST	CUMULATIVE COST
Nicholas Doust		Melbourne	(03) 9621 3311	\$A 24483.63	\$A 55667.42
WAREHOUSE		Welshepool	(03) 56 881 445		

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	24/01/98	Depth	1070.0m [MD]
Spud Date	17/01/98	Present Activity	DRILLING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara	
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria	
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait	COUNTRY Austral

BIT DATA		DRILLING STRING			CASING			CIRCULATION DATA		
Size 8.5 in.	Pipe OD	5	ID 4.276	Len. 811.0			Pump Make/Model	Ideco T-1600		
Type ATHGTI&D	Pipe OD	5	ID 3.000	Len. 112.5	in.	m	Size 6.5 X 12	Bff. 97.00	V/st	0.120
No. Jets	Pipe OD		ID	Len.	30	Set @ 106.0	spm	50	bbl/min	6.0
Jets 32nd inch	Collar OD	6.5	ID 2.75	Len. 146.5	9 5/8	Set @ 779.0	Pump Make/Model	Ideco T-1600		
16	Collar OD		ID	Len.		Set @	Size 6.5 X 12	Bff. 97.00	V/st	0.120
							spm	50	bbl/min	6.0
in. OPEN HOLE										
Tot Noz Area	Size 8.5	Len. 291.0				Set @	Pump Make/Model			
TFA	Size	Len.				Set @	Size	Bff.	V/st	
	Size	Len.				Set @	spm	bbl/min		
	Size	Len.				Set @	Tot. Vol./min	502 gpm	12.0	bbl
	Size	Len.				Set @	BU Time	13	TC Time	57

MUD PROPERTIES					MUD TREATMENTS					
Primary					3					
Source	Pits, Circ	Flowline			Program	Essential				
Time	17:00	22:30			Targets	Program				
FL Temp	Deg C	40	40		*=Excep	Properties				
Depth	m	865.0	1032.0		P 2 3	784.9	1654.1			
Weight	ppg	8.9	9.1		*		9.0	9.5		
FV @ 40 Deg C	sec/qt	44	40							
PV @ 49 Deg C	cP	13	14				<	30		
YP	lbs/100 ft <sup>2</sup>	18	22							
Gels	lbs/100 ft <sup>2</sup>	4/6	4/7							
API Filt.	ml/30 min	4.7	4.2				<	6.0		
HTHP @ 121 Deg C	ml/30 min	12.4	11.2				<	15.0		
Cake API/HTHP	32nd in	1/2	1/2							
Corr. Solids % by vol		2.9	3.2							
Oil/Water % by vol		0.0/95.7	0.0/95.5							
Sand % by vol		1.0	0.5							
MBT		0.2	0.2							
pH METER @ 20 Deg C		9.0	9.2				8.5	9.2		
Alk. Mud (Pm)		0.22	0.28							
Alk. Filtr. (PE/ME)		0.02/0.18	0.05/0.18							
Chlorides mg/l		24000	23000							
Hard. Ca mg/l		320	225							
Low Gravity Solids ppb		26.48	19.20				<	91.00		
6 rpm		6	6				6.00	10.00		
KCl Content	ppb	12	11				11.00	14.00		
Excess sulfite	mg/l	100	100							

Mud dumped is gel mud in hole & pit. Raised EZ-MUD concentration to programmed value after displacing. Adding BARACOR-129 to maintain excess sulphites. Weighed up mud to 9.1 ppg @ 865 m for extra hole stability while drilling coal seams. Lost approx 70 bbls downhole while drilling coal seams. Treated active with additional BARAZAN D-Plus to combat thinning of the mud from coal. Running desander/desilter. Changed shakers to finer 150 mesh screens. No new screens used to date. KCl content : 3 %

**RIG ACTIVITY**  
 Lay down 8" drill collars. Pick up & make up 8-1/2" BHA. Pick up 5" drill pipe. RIH. Tag cement @ 745 m. Drill out cement & float to 775 with seawater. Pump 100 bbl sweep of old mud. Displace hole to KCl/EZ-MUD/Polymer mud. Perform LOT @ 788 m to 13 ppg EMW (564 psi). Drill ahead to 865 m. Circulate out coal. Drill ahead to 1070 m.

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BAPACOR 129 - 25 KG. DRUM	8	487.33				Shkr #1	Scalper	10	10
BAPAZAN-D PLUS - 25 KG. BAG	5	1799.90				Shkr #2	Scalper	10	10
DEXTRID LT - 25 KG. BAG	1	52.07				Shkr #3	Sweco LM3	150 x 3	10
EZ-MUD DP - 50 LB. BAG	14	1607.06				Shkr #4	Sweco LM3	150 x 3	10
barite - 1000 KG. TON	9.700	3125.53				Shkr #5	Sweco LM3	150 x 3	10
potassium hydroxide - 20 KG.	2	88.34				Shkr #6	Sweco LM3	80 x 3	10
						dSndr	Crestex	3 x 10"	5
						dSlit #1	Crestex	16 x 5"	6

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT TIME			
MUD VOLUME	bbl	MUD TYPE				Water Depth	21.7	DRLG	9.25
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	44	50	Calc. F. Grad	0.0	CIRC	1.50
215	467		300 rpm	31	36	Leak Off Test	13.0	TRIPS	4.75
Active Volume		MUD CONSUMPTION	200 rpm	25	30	ECD	ppg	SRV. RIG	0.00
582		Oil	100 rpm	18	20	Cag. Shoe	9.4	SURVEY	0.00
Reserve	Total	Brine Water	6 rpm	6	6	TD	9.5	FISHING	0.00
531	1213	Sea Water	3 rpm	4	4	Max. Diff. Press	0	LOGGING	0.00
Low Grav. vol %	2.9	Pressure Units:	psig						
ppb	26.48	Whole Mud	Press Drop. DP	524					
High Grav. vol %	0.0	Barite	Press Drop. BIT	695					
ppb	0.00	Chemicals	Press Drop. AIR	116					
ASG	2.61	LOSSES	Actual Circ. Press	1200					
Drill Cuttings	0	Dumped	AV, DP	m/min	74.5				
Dilution Rate	0.00	Lost	AV, DC	m/min	125.1				
Slids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min					
BAROID REPRESENTATIVE			OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST	
Nicholas Doust			WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 7160.23	\$A 62827.65	

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
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OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING				CASING				CIRCULATION DATA			
Size 8.5 in.	Pipe OD 5	ID 4.276	Len. 1076.0						Pump Make/Model	Ideco T-1600			
Type ATMG118D	Pipe OD 5	ID 3.000	Len. 112.5		in.	m			Size 6.5 X 12	Eff. 97.00	V/st 0.120		
No. Jets	Pipe OD	ID	Len.		30	Set @ 106.0			spm 50	bbl/min 6.0			
Jets 32nd inch	Collar OD 6.5	ID 2.75	Len. 146.5		9 5/8	Set @ 779.0			Pump Make/Model	Ideco T-1600			
16	16	14	Collar OD	ID	Len.				Size 6.5 X 12	Eff. 97.00	V/st 0.120		
			in. OPEN HOLE						spm 50	bbl/min 6.0			
Tot Noz Area	Size 8.5	Len. 556.0				Set @			Pump Make/Model				
TFA	Size	Len.				Set @			Size	Eff.	V/st		
	Size	Len.				Set @			spm	bbl/min			
	Size	Len.				Set @			Tot. Vol./min	502 gpm	12.0 bbl		
	Size	Len.				Set @			BU Time 17	TC Time 68			

MUD PROPERTIES						MUD TREATMENTS						
		Primary	2	3								
Source		Pits, Circ	Flowline		Program	Essential	Maintain volume & properties with addition of premix. Lost approx 40 bbls downhole (squeezed into formation after coal pack off) while reaming last stand to bottom during wiper trip. Raised mud weight to 9.3 ppg to help stabilise coals. Treated active with 5 ppb each of BARACARB 25 & BARACARB 100 to prevent further seepage losses.					
Time		22:00	13:00		Targets	Program	of premix. Lost approx 40 bbls downhole (squeezed into formation after coal pack off) while reaming last stand to bottom during wiper trip. Raised mud weight to 9.3 ppg to help stabilise coals. Treated active with 5 ppb each of BARACARB 25 & BARACARB 100 to prevent further seepage losses.					
FL Temp	Deg C	42	42		*=Excep	Properties	Maintaining BARACARB concentrations with regular additions. Maintaining excess sulfites with BARACOR-129. BARAZAN D-Plus used to maintain 6 rpm. KCl Content : 3.2 %					
Depth	m	1323.0	1230.0		P 2 3	784.9 1654.1	used to maintain 6 rpm. KCl Content : 3.2 %					
Weight	ppg	9.3	9.3			9.0 9.5	RIG ACTIVITY					
FV @ 42 Deg C	sec/gt	42	42				Drill from 1070 - 1095 m. Circulate bottoms up, working pipe. Drop Single shot survey. POOH to shoe @ 779 m. Retrieve survey.					
PV @ 49 Deg C	cP	14	15				Service TDS. RIH. Lose circulation 1 std off bottom. Work pipe. Begin to increase mud weight to 9.3 ppg. Drill ahead to 1335 m.					
YP	lbs/100 ft2	23	20									
Gels	lbs/100 ft2	5/8	4/7									
API Filt.	ml/30 min	3.6	3.8			< 6.0						
HTHP @ 121 Deg C	ml/30 min	10.6	10.8			< 15.0						
Cake API/HTHP	32nd in	1/2	1/2									
Corr.Solids % by vol		4.3	4.1									
Oil/Water % by vol		0.0/94.4	0.0/94.6									
Sand % by vol		0.25	0.25									
NBT		0.6	0.6									
pH METER @ 20 Deg C		8.5	8.5			8.5 9.2						
Alk. Mud (Pm)		0.20	0.10									
Alk. Filtr. (Pf/Mf)		0.01/0.16	0.01/0.19									
Chlorides mg/l		22000	22000									
Hard. Ca mg/l		300	320									
Low Gravity Solids ppb		26.12	22.48			< 91.00						
6 rpm		6	6			6.00 10.00						
KCl Content	ppb	11	12			11.00 14.00						
Excess sulfite	mg/l	100	100									

MATERIALS USED						SOLIDS EQUIPMENT			
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BARACARB 100 - 25 KG. SACK	96	1382.40				Shkr #1	Scalper	10	20
BARACARB 25 - 25 KG. BAG	96	1108.80				Shkr #2	Scalper	10	20
BARACOR 129 - 25 KG. DRUM	9	539.82				Shkr #3	Sweco LM3	150 x 3	20
BARAZAN-D PLUS - 25 KG. BAG	4	1439.92				Shkr #4	Sweco LM3	150 x 3	20
EZ-MUD DP - 50 LB. BAG	4	457.66				Shkr #5	Sweco LM3	150 x 3	20
barite - 1000 KG. TON	7.200	2319.98				Shkr #6	Sweco LM3	80 x 3	20
potassium hydroxide - 20 KG.	4	176.68				dSndr	Crestex	3 x 10"	4
						dSlt #1	Crestex	16 x 5"	9

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT		TIME	
MUD VOLUME	bbbl	MUD TYPE					Water Depth	21.7	DRLG	18.50
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	51	50	Calc. F. Grad	0.0	CIRC	1.50	
270	542		300 rpm	37	35	Leak Off Test	13.0	TRIPS	2.00	
Active Volume		MUD CONSUMPTION	200 rpm	30	29	ECD	ppg	SSRV. RIG	0.00	
812		Oil	100 rpm	21	20	Cog. Shoe	10.0	SURVEY	1.00	
Reserve	Total	Brine Water	6 rpm	6	6	TD	10.1	FISHING	0.00	
111	923	Drill Water	3 rpm	4	4	Max. Diff. Press	0	LOGGING	0.00	
Low Grav. vol %	2.9	Sea Water	Pressure Units:	paig				RUN CSG	0.00	
ppb	26.12	Whole Mud	Press Drop. DP	606				CORE	0.00	
High Grav. vol %	1.5	Barite	Press Drop. BIT	726				BACK REAM	0.00	
ppb	22.05	Chemicals	Press Drop. ANN	173				REAMING	0.00	
ASG	3.25	LOSSES	Actual Circ. Press	1350				TESTING	0.00	
Drill Cuttings	2	Dumped	AV, DP	m/min	74.5			OTHER	1.00	
Dilution Rate	0.00	Lost	AV, DC	m/min	125.1			AVERAGE POP	0.54	
Slds Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min						
			-290							

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 7425.24	\$A 70252.91

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Date	26/01/98	Depth	1345.0m [MD]
Spud Date	17/01/98	Present Activity	LOGGING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600	
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff. 97.00 V/st 0.120
No. Jets		Pipe OD	ID	Len.	30	Set @ 106.0	spm	0	bbl/min 0.0
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @ 779.0	Pump Make/Model	Ideco T-1600	
		Collar OD	ID	Len.		Set @	Size	6.5 X 12	Eff. 97.00 V/st 0.120
		in. OPEN HOLE			m	Set @	spm	0	bbl/min 0.0
Tot Noz Area		Size	8.5	Len.	566.0	Set @	Pump Make/Model		
TFA		Size		Len.		Set @	Size	Eff.	V/st
		Size		Len.		Set @	spm	bbl/min	
		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	Essential
Source		Pits, Circ			Targets	Program
Time		14:00			*=Excep	Properties
FL Temp	Deg C	42			P 2 3	784.9 1654.1
Depth	m	1345.0				9.0 9.5
Weight	ppg	9.4				
FV @ 42 Deg C	sec/qt	44				
PV @ 49 Deg C	cP	16				< 30
YP	lbs/100 ft2	22				
Gels	lbs/100 ft2	6/9				
API Filt.	ml/30 min	3.6				< 6.0
HTHP @ 121 Deg C	ml/30 min	10.5				< 15.0
Cake API/HTHP	32nd in	1/2				
Corr.Solids % by vol		4.3				
Oil/Water % by vol		0.0/94.4				
Sand % by vol		0.5				
HBT		0.6				
pH METER @ 20 Deg C		8.5				8.5 9.2
Alk. Mud (Pm)		0.15				
Alk. Filt. (PF/ME)		0.01/0.16				
Chlorides mg/l		22000				
Hard. Ca mg/l		300				
Low Gravity Solids ppb		19.29				< 91.00
6 rpm		7				6.00 10.00
KCl Content	ppb	11				11.00 14.00
Excess sulfite	mg/l	100				

**MUD TREATMENTS**

Lost approximately 100 bbls downhole when backreaming out of hole due to coal sloughing.

Built 200 bbls of new premix to maintain mud volume.

BARAZAN-D Plus used to make hi-vis sweeps.

No new shakers screens used on Broadbill 1.

KCl content : 3 %

**RIG ACTIVITY**

Drill ahead from 1335 to 1345 m. Circulate bottoms up. Drop survey. POOH 1 stand.

Backream out of tight hole (coal sloughing, mud losses occurring) from 1326 to 9-5/8" casing shoe @ 779 m. Circulate bottoms up.

Retrieve survey. Service TDS. RIH to 1018 m & ream to TD. Circulate & work pipe. Pump 70 bbl 10 ppg hi-vis sweep. Circulate hole clean, some downhole losses. Spot 100 bbls hi-vis on bottom. POOH - no problem. Rig up & log 8-1/2" hole.

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BARACOR 129 - 25 KG. DRUM	3	179.94				Shkr #1	Scalper	10	13
BAPAZAN-D PLUS - 25 KG. BAG	6	2159.88				Shkr #2	Scalper	10	13
DSXTRID LT - 25 KG. BAG	15	781.05				Shkr #3	Sweco LM3	150 x 3	13
EZ-MUD DP - 50 LB. BAG	9	1026.36				Shkr #4	Sweco LM3	150 x 3	13
PAC-L - 25 KG. BAG	2	293.67				Shkr #5	Sweco LM3	150 x 3	13
barite - 1000 KG. TON	4.400	1417.77				Shkr #6	Sweco LM3	80 x 3	13
potassium chloride - 1000 KG.	1	419.21				dSndr	Crestex	3 x 10"	
potassium hydroxide - 20 KG.	3	132.51				dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT		TIME	
MUD VOLUME	bbbl	MUD TYPE				Water Depth	21.7	DRLG	2.00
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	54		Calc. F. Grad	0.0	CIRC	3.00
317	446		300 rpm	38		Leak Off Test	13.0	TRIPS	4.00
Active Volume		MUD CONSUMPTION	200 rpm	31		ECD	ppg	SERV. RIG	0.50
763		Oil	100 rpm	23		Cog. Shoe	9.3	SURVEY	1.00
Reserve	Total	Brine Water	6 rpm	7		TD	9.3	FISHING	0.00
118	881	Drill Water	3 rpm	5		Max. Diff. Press	0	LOGGING	0.00
Low Grav. vol %	2.1	Sea Water	Pressure Units:	poig				RUN CSG	0.00
ppb	19.29	Whole Mud	Press Drop. DP	0				CORE	0.00
High Grav. vol %	2.2	Barite	Press Drop. BIT	0		<b>DEVIATION INFO</b>		BACK REAM	7.50
ppb	32.34	Chemicals	Press Drop. AMN	0		MD	1345.0 m	REAMING	0.00
ASG	3.52	LOSSES	Actual Circ. Press	0		TVD	1345.0 m	TESTING	0.00
Drill Cuttings	0	Dumped	AV, DP	m/min 0.0		Angle	3.25	OTHER	6.00
Dilution Rate	0.00	Lost	AV, DC	m/min 0.0		Direction	45	AVERAGE ROP	0.00
Slds Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min		Horiz. Displ	0.0 m		

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST		CUMULATIVE COST	
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A	6410.35	\$A	76663.30

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Baroid Australia Pty Ltd  
DRILLING MUD REPORT  
( Cost Modified )

REPORT NUMBER: 12

Date	27/01/98	Depth	1345.0m [MD]
Spud Date	17/01/98	Present Activity	PREPARE TO P & A
OPERATOR Amity Oil NL		CONTRACTOR Santa Fe Drilling	
REPORT FOR Wally Westman/Chris Roots		REPORT FOR Mike Walker/ Blain Wilkie	
WELL NAME AND NUMBER Broadbill 1		FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		RIG NUMBER Paramswara	
		REGION Victoria	
		COUNTRY Austral	

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600	
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff. 97.00
No. Jets		Pipe OD	ID	Len.	30	Set @ 106.0	spm	0	bbl/min 0.0
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @ 779.0	Pump Make/Model	Ideco T-1600	
		Collar OD	ID	Len.		Set @	Size	6.5 X 12	Eff. 97.00
		in. OPEN HOLE			m	Set @	spm	0	bbl/min 0.0
Tot Horz Area		Size	8.5	Len.	566.0	Set @	Pump Make/Model		
TFA		Size		Len.		Set @	Size		Eff. v/st
		Size		Len.		Set @	spm	bbl/min	
		Size		Len.		Set @	Tot. Vol./min 0 gpm 0.0 bbl		
		Size		Len.		Set @	BU Time	0	TC Time 0

MUD PROPERTIES					MUD TREATMENTS				
		Primary	2	3					
Source		Pits, Unchr			Program	Essential	BARAZAN-D Plus used to build 100 bbls of hi-vis spotted on bottom prior to POOH.  Barite used for slugs.  KCl content : 3 %		
Time		13:00			Targets	Program			
FL Temp	Deg C	0			*=Excep	Properties			
Depth	m	1345.0			P 2 3	784.9 1654.1			
Weight	ppg	9.5				9.0 9.5			
FV @ 28	Deg C sec/qt	43							
PV @ 49	Deg C cP	15				< 30			
YP	lbs/100 ft2	24							
Gels	lbs/100 ft2	7/9							
API Filt.	ml/30 min	4.0				< 6.0			
HTHP @ 121	Deg C ml/30 min	11.0				< 15.0			
Cake API/HTHP	32nd in	1/2							
Corr. Solids % by vol		5.1							
Oil/Water % by vol		0.0/93.7							
Sand % by vol		0.25							
NBT		0.6							
pH MSTER @ 20	Deg C	8.0			*	8.5 9.2			
Alk. Mud (Pm)		0.10							
Alk. Filtr. (Pf/Mf)		0.01/0.18							
Chlorides mg/l		22000							
Hard. Ca mg/l		300							
Low Gravity Solids ppb		25.30				< 91.00			
6 rpa		7				6.00 10.00			
KCl Content ppb		11				11.00 14.00			
Excess sulfite mg/l		80							

MATERIALS USED					SOLIDS EQUIPMENT				
		Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn HR
BARAZAN-D PLUS - 25 KG. BAG		2	719.96				Shkr #1	Scalper	10 4
barite - 1000 KG. TON		0.600	193.33				Shkr #2	Scalper	10 4
							Shkr #3	Sweco LM3	150 x 3 4
							Shkr #4	Sweco LM3	150 x 3 4
							Shkr #5	Sweco LM3	150 x 3 4
							Shkr #6	Sweco LM3	80 x 3 4
							dSndr	Crestex	3 x 10"
							dSlt #1	Crestex	16 x 5"

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME	
MUD VOLUME		MUD TYPE								
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	54	Water Depth	21.7	DRLG	0.00		
317	509		300 rpm	39	Calc. F. Grad	0.0	CIRC	1.50		
Active Volume		MUD CONSUMPTION	200 rpm	32	Leak Off Test	13.0	TRIPS	7.25		
826		ADDITIONS	Oil	0 100 rpm 24	ECD	ppg	SERV. RIG	0.00		
Reserve		Brine Water	0	6 rpm 7	Cag. Shoe	0.0	SURVEY	0.00		
Total		Drill Water	0	3 rpm 5	TD	0.0	FISHING	0.00		
826		Sea Water	0	Pressure Units: psig	Max. Diff. Press	0	LOGGING	7.25		
Low Grav. vol %	2.8	Whole Mud	0	Press Drop, DP	0		RUN CSG	0.00		
ppb	25.30	Barite	2	Press Drop, BIT	0		CORE	0.00		
High Grav. vol %	2.3	Chemicals	0	Press Drop, ANN	0		BACK REAM	0.00		
ppb	33.81	LOSSES	bbl	Actual Circ. Press	0		REAMING	2.00		
ASG	3.41	Dumped	38	AV, DP m/min	0.0		TESTING	0.00		
Drill Cuttings	0	Lost	19	AV, DC m/min	0.0		OTHER	6.00		
Dilution Rate	0.00	VOL GAIN/LOSS	-55	AV, Riser m/min			AVERAGE ROP	0.00		
Slids Control Eff	0.00									

BAROID REPRESENTATIVE		OFFICE/HOME		TELEPHONE		DAILY COST		CUMULATIVE COST	
Nicholas Doust		Melbourne		(03) 9621 3311		\$A 913.25		\$A 77576.59	
		WAREHOUSE		Welshpool					
				(03) 56 881 445					

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Date	Depth
28/01/98	1345.0m [MD]
Spud Date	Present Activity
17/01/98	PLUG & ABANDON

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA				DRILLING STRING		CASING		CIRCULATION DATA					
Size	in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600				
Type		Pipe OD	ID	Len.	in.	m		Size	6.5 X 12	Eff.	97.00	V/st	0.120
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	gpm	0	bbl/min	0.0		
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @	779.0	Pump Make/Model	Ideco T-1600				
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120
		in. OPEN HOLE			m	Set @		gpm	0	bbl/min	0.0		
Tot Noz Area		Size	8.5	Len.	566.0	Set @		Pump Make/Model					
TFA		Size		Len.		Set @		Size		Eff.		V/st	
		Size		Len.		Set @		gpm		bbl/min			
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl	
		Size		Len.		Set @		BU Time	0	TC Time	0		

MUD PROPERTIES				MUD TREATMENTS							
Primary				2				3			
Source		Pits, Unchr				Program	Essential	All chemicals used for P & A.			
Time		22:36				Targets	Program	Mud engineer leaves rig.			
FL Temp	Deg C	0				**Excep	Properties				
Depth	m	1345.0				P 2 3	784.9 1654.1				
Weight	ppg	9.5					9.0 9.5				
FV @ 16	Deg C sec/qt	28									
FV @ 49	Deg C cP	1					< 30				
YP	lbs/100 ft2	0									
Gels	lbs/100 ft2	0/0									
API Filt.	ml/30 min	0.0					< 6.0				
HHP @ 121	Deg C ml/30 min	0.0					< 15.0				
Cake API/HHP	32nd in	2/0									
Corr.Solids % by vol		0.0									
Oil/Water % by vol		0.0/0.0									
Sand % by vol											
MBT		0.0									
pH METER @ 20	Deg C	0.0				*	8.5 9.2				
Alk. Mud (Pm)		0.00									
Alk. Filtr. (PF/ME)		0.00/0.00									
Chlorides mg/l		0									
Hard. Ca mg/l		0									
Low Gravity Solids ppb		0.00					< 91.00				
6 rpm		0				*	6.00 10.00				
KCl Content ppb						*	11.00 14.00				
Excess sulfite mg/l											

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scr	HR
ALDACIDE G - 25 L. CAN	1	203.96				Shkr #1	Scalper	10	
BARACOR 129 - 25 KG. DRUM	6	359.88				Shkr #2	Scalper	10	
						Shkr #3	Sweco LM3	150 x 3	
						Shkr #4	Sweco LM3	150 x 3	
						Shkr #5	Sweco LM3	150 x 3	
						Shkr #6	Sweco LM3	80 x 3	
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT				TIME			
MUD VOLUME		MUD TYPE						Water Depth				DRLG			
Hole	Pits	KCL/EZ MUD/POLYMER		600 rpm				21.7				0.00			
317	509	MUD CONSUMPTION		300 rpm				Calc. F. Grad				CIRC			
Active Volume		ADDITIONS		200 rpm				Leak Off Test				TRIPS			
826		Oil		100 rpm				ECD				SERV. RIG			
Reserve	Total	Brine Water		6 rpm				Csg. Shoe				SURVEY			
	826	Drill Water		3 rpm				TD				FISHING			
Low Grav, vol %	0.0	Sea Water		Pressure Units: psig				Max. Diff. Press				LOGGING			
ppb	0.00	Whole Mud		Press Drop. DP								RUN CSG			
High Grav, vol %	0.0	Barite		Press Drop. BIT								CORE			
ppb	0.00	Chemicals		Press Drop. ANN								BACK REAM			
ASG	2.60	LOSSES		Actual Circ. Press				DEVIATION INFO				REAMING			
Drill Cuttings	0	Dumped		AV, DP m/min				MD				TESTING			
Dilution Rate	0.00	Lost		AV, DC m/min				TVD				OTHER			
Slds Control Eff	0.00	VOL GAIN/LOSS		AV, Riser m/min				Direction				AVERAGE ROP			
								Horiz. Displ				0.0 m			

BAROID REPRESENTATIVE		OFFICE/HOME		TELEPHONE		DAILY COST		CUMULATIVE COST	
Nicholas Doust		Melbourne		(03) 9621 3311		\$A 563.84		\$A 78140.43	
		WAREHOUSE		Welsphool					

NOTES: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



## Interval Summary

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Interval #	03
Bit Size	8.5 in.
Mud type(s)	KCl/Polymer
Top of interval	785.0 meters
Bottom of interval	1,345.0 meters
Maximum density	9.50 ppg
Interval start date	23/01/98
Interval end date	28/01/98
Interval days	6
Drilling days	3
Interval TD date	26/01/98
Rotating hours	29.75
Average penetration rate	18.8 meters
Bottomhole static temperature	68° Deg C
Maximum flowline temperature	42° Deg C
Casing size	9 5/8 in.
Major lithology	Claystone, Sands, Coal
Maximum deviation	3.25°
Interval mud cost	\$A 46,956.64
Mud cost per (bbl)	\$A 27.81
Mud cost per meters	\$A 83.85
Total Interval Cost	\$A 46,985.74

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Interval Material Consumption

Interval #01 in. Hole Section

Top of Interval 52 meters  
 Bottom of Interval 110 meters

Material	Unit size	Quantity	Total cost (\$A)
AQUAGEL	1000 KG. TON	8.500	4,033.25
caustic soda	25 KG. PAIL	5	216.05
lime	20 KG. BAG	5	42.15
soda ash	25 KG. BAG	1	14.85
<b>Miscellaneous Items</b>			
Cacl2			291.00

Interval mud cost \$A 4,306.30

Interval miscellaneous cost \$A 291.00

Total interval cost \$A 4,597.30

Programmed mud cost \$A 3,851.16

Variance \$A 455.14

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Interval Material Consumption

Interval #02 12.25 in. Hole Section

Top of Interval 110 meters  
 Bottom of Interval 785 meters

Material	Unit size	Quantity	Total cost (\$A)
AQUAGEL	25 KG. BAG	56	659.12
AQUAGEL	1000 KG. TON	31.700	15,041.65
BARACARB 100	25 KG. SACK	48	691.20
BARACARB 25	25 KG. BAG	48	554.40
BARACOR 129	25 KG. CAN	21	1,282.05
barite	1000 KG. TON	2.400	773.33
BAROFIBRE	25 LB. BAG	27	1,606.50
caustic soda	25 KG. PAIL	2	86.42
PAC-L	25 KG. BAG	17	2,502.57
PAC-R	25 KG. BAG	25	3,680.25
Miscellaneous Items			
Cacl2			378.30

Interval mud cost \$A 26,877.49

Interval miscellaneous cost \$A 378.30

Total interval cost \$A 27,255.79

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Interval Material Consumption

Interval #03 8.5 in. Hole Section

Top of Interval 785 meters  
 Bottom of Interval 1,345 meters

Material	Unit size	Quantity	Total cost (\$A)
ALDACIDE G.	25 L. CAN	4	815.84
BARACARB 100	25 KG. SACK	96	1,382.40
BARACARB 25	25 KG. BAG	96	1,108.80
BARACOR 129	25 KG. CAN	26	1,566.97
BARAZAN-D PLUS	25 KG. BAG	40	14,399.20
barite	1000 KG. TON	21.900	7,056.62
DEXTRID LT	25 KG. BAG	123	6,464.61
EZ-MUD DP	50 LB. BAG	51	5,846.04
PAC-L	25 KG. BAG	24	3,532.29
potassium chloride	1000 KG. BAG	10	4,312.10
potassium hydroxide	20 KG. PAIL	9	397.53
soda ash	25 KG. BAG	5	74.25
<b>Miscellaneous Items</b>			
Cacl2			29.10

Interval mud cost \$A 46,956.65

Interval miscellaneous cost \$A 29.10

Total interval cost \$A 46,985.75

Programmed mud cost \$A 37,605.01

Variance \$A 9,351.64

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE:in.

MUD TYPE:No Mud

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
16/01/98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: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	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
17/01/98	0	0	0	879	0	21	900	900	682	0	682	682	0	238	238	0	0

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE:in.

MUD TYPE:Seawater

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
18/01/98	238	0	0	0	0	0	0	0	0	0	0	0	0	281	281	0	0

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: 12.25 in.

MUD TYPE: Gel/Polymer

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
19/01/98	281	0	0	1,390	0	40	1,430	1,430	340	0	340	340	0	1,371	281	572	518
20/01/98	1,371	0	0	1,042	0	39	1,081	2,511	584	700	1,284	1,624	0	1,168	441	419	308
21/01/98	1,168	0	0	385	0	9	394	2,905	217	24	241	1,865	0	1,321	600	523	208
22/01/98	1,321	0	0	0	0	0	0	2,905	1,015	0	1,015	2,880	0	308	190	0	116

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Daily Mud Volume Record

HOLE SIZE: 8.5 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	CUMULATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMULATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
23/01/98	306	0	0	1,371	0	47	1,418	1,418	0	0	0	0	0	1,724	190	0	1,534
24/01/98	1,724	0	0	0	15	3	18	1,438	459	70	529	529	0	1,213	215	467	531
25/01/98	1,213	0	0	0	11	12	23	1,459	273	40	313	842	0	923	270	542	111
26/01/98	923	0	0	194	7	8	207	1,668	149	100	249	1,091	0	881	317	448	118
27/01/98	881	0	0	0	2	0	2	1,668	57	0	57	1,148	0	826	317	509	0
28/01/98	826	0	0	0	0	0	0	1,668	0	0	0	1,148	0	826	317	509	0

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
16/01/98	52	<b>OFFLOADING BOAT</b>  Baroid Engineer arrived on rig.  Offloading boats.
17/01/98	110	<b>POOH TO RUN 30" CSG</b>  Built 400 bbls of flocculated spud mud for 1 hi-vis sweeps and 500 bbls of pre-hydrated 1 AQUAGEL for filling hole. Built 1066 bbls of 1 pre-hydrated AQUAGEL for 12-1/4" section - 1 will charge of 12-1/4" mud costs tomorrow. Total mud built : 1966 bbls.  Actual AQUAGEL stock remaining : 16.4 MT. Initial Barite on board: 19.64 MT (432 sxs) All material ordered in loadout 1 rec'd.  Continue to offload boat. Make up 36" BHA. 1 RIH. Tag seabed @ 52.4 m. Drill ahead with 1 seawater pumping 40 bbl hi-vis AQUAGEL 1 sweeps every 5 - 10 m. Drill to 110.4 m. 1 Pump 80 bbl hi-vis sweep. Circulate out 1 sweep. Pump 35 bbl hi-vis mud. Displace hole 1 to unflocculated pre-hydrated AQUAGEL. POOH. 1 RIH. Displace hole to unflocculated 1 pre-hydrated AQUAGEL. POOH to run 30" 1 conductor.
18/01/98	110	<b>INSTALL DIVERTER</b>  Calcium Chloride used for cementing. To be 1 charged as non-drilling cost.  Will charge off 12-1/4" mud costs tomorrow.  Total 12-1/4" mud built to date : 1182 bbls.  Rig up and run 30" conductor to 106 m. Pick 1 up 2-7/8" tubing and run with 30" conductor. 1 Cut conductor joint. Cement casing. Install 1 12-1/4" diverter.
19/01/98	110	<b>PICK UP 12-1/4" BHA</b>  Calcium chloride used for cementing to be charged as 'non-drilling cost'.  Built total of 1430 bbls of seawater/AQUAGEL/Polymer mud for 12-1/4" hole.  Expect API filtrate to decrease with incorporation of drill solids and more PAC-R once drilling commences.  Continue to install diverter and riser. Function flowline, seals and overboard 1 lines. Run wear bushing. Cement top of 30" 1 conductor via 2-7/8" tubing. Pick up 5" 1 drill pipe. Make up 17-1/2" BHA to drill 1 cement out. RIH. Drill cement, shoe track 1 and rathole. Displace hole to 1 seawater/AQUAGEL/PAC mud system. POOH. Pick 1 up and make up 12-1/4" BHA.

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
20/01/98	545	<p><b>DRILLING</b></p> <p>Built 1070 bbls of new mud. Heavy mud losses experienced through coarse sands (approx 700 bbls). Adding PAC-R to maintain API filtrate and BARACOR-129 to maintain Excess Sulfite.</p> <p>LCM Sweeps : BARACARB 25 : 18 ppb      BARACARB 100: 21 ppb BAROFIBRE : 4.5 ppb      AQUAGEL : 20 ppb      Running all solids control equipment. Building 30 bbls pumpable KCl/EZ-MUD/Polymer mud for spotting across Lakes Entrance.</p> <p>PROBLEM : Seepage losses</p> <p>Seepage losses occurring through coarse sands. Pumped LCM pill/sweep of : BARACARB 25 : 18 ppb BARACARB 100 : 21 ppb AQUAGEL : 20 ppb BAROFIBRE (reg): 4.5 ppb</p> <p>Continue to pick up 8" drill collars. Drill 7 m of 12-1/4" hole. Pick up last 8" drill collar. Unable to circulate - plugged above float. POOH. Unblock float. RIH. Drill ahead to 117 m - Incurring downhole losses. Pump 25 bbl hi-vis sweep. Circulate bottoms up. Pump 25 bbl hi-vis. Drill ahead to 227 m at reduced pump strokes (120 spm). Pump 50 bbl LCM pill (as above) before connection - losses halted/red'd. Drill to 399 m. Circ b/u. Spot 100 bbl LCM pill (as precaution) before conducting survey. Drill ahead.</p>
21/01/98	785	<p><b>R/U TO LOG / LOG</b></p> <p>Maintained treatment of active system with PAC-R to hold API filtrate. Diluted active with seawater/PAC-L to control mud viscosity increase from drilling claystone. BARACOR-129 used to maintain excess sulfites. Building KCl/EZ-MUD/Polymer mud for 8-1/2" hole. Ran desander and desilter in non-stop.</p> <p>Reports have been cost modified to reflect updated mud material prices. No new shakers screens used to date.</p> <p>PROBLEM : Seepage losses</p> <p>Hole not taking correct volume when POOH. Slight seepage losses of 4-6 bbl/hr prior to logging.</p> <p>Continue to drill ahead to 701 m. Circulate bottoms up. Conduct Hofco survey. Drill ahead to 785 m. Circulate bottoms up. Conduct multishot survey. POOH. Some tight hole on first 6 stands (hole took 6 bls). POOH to 30" conductor @ 110 m. Conduct top drive service (hole took 12 bbls). RIH. Hole in good. Circulate hole clean. POOH. Rig up to run Schlumberger logs. Hole drink rate in currently 4-6 bbls/hr.</p>

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
22/01/98	785	<b>WOC</b>  Mixing 3% KCl/EZ-MUD/Polymer mud. Costs/volume to be included tomorrow.  Three shakers changed to coarser 80 mesh size screens to prevent/reduce initial losses of unsheared mud. Scalpers changed to 10 mesh. No new screens used to date.  Dumping and cleaning pits at report time.  AQUAGEL and Calcium Chloride used in cement job - to be charged as non-drilling cost.  Rig up Schlumberger. Log 12-1/4" hole -BHC-LDL-CNL-DLL-MSPL-GR-CALI-SP. Rig down Schlumberger. Pull diverter bag. Retrieve wear bushing & laydown running tool. Rig up & run 9-5/8" casing to 779 m. Circulate casing while waiting on chemicals. Cement as per program. WOC.
23/01/98	785	<b>RUN WEAR BUSHING</b>  Built total of 1418 bbls of KCl/EZ-MUD/Poly for 8-1/2" section. Mud built contains only 0.75 ppb EZ-MUD to reduce mud losses over shakers upon displacement.  Mud check is on reserve mud. Mud mixed with 1 KCl content of 4 % to allow for depletion 1 through Lakes Entrance Formation.  WOC. Cut off 9-5/8" casing. Rig up & pull diverter. o/shot & riser & lay don. Install adapter ring. Test flange to 2000 psi. Lower BOP's & nipple up. Pressure test BOP's. Run 1 wear bushing.
24/01/98	1,070	<b>DRILLING</b>  Mud dumped is gel mud in hole & pit. Raised EZ-MUD concentration to programmed value after displacing. Adding BARACOR-129 to 1 maintain excess sulphites. Weighed up mud to 1 9.1 ppg @ 865 m for extra hole stability 1 while drilling coal seams. Lost approx 70 1 bbls downhole while drilling coal seams. 1 Treated active with additional BARAZAN 1 D-Plus to combat thinning of the mud from 1 coal. Running desander/desilter.Changed 1 shakers to finer 150 mesh screens. No new screens used to date. KCl content : 3 %  Lay down 8" drill collars. Pick up & make up 1 8-1/2" BHA. Pick up 5 " drill pipe. RIH. Tag 1 cement @ 745 m. Drill out cement & float to 1 775 with seawater. Pump 100 bbl sweep of old 1 mud. Displace hole to KCl/EZ-MUD/Polymer 1 mud. Perform LOT @ 788 m to 13 ppg EMW (564 psi). Drill ahead to 865 m. Circulate 1 out coal. Drill ahead to 1070 m.

Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
25/01/98	1,335	<b>DRILLING</b>  Maintain volume & properties with addition of premix. Lost approx 40 bbls downhole (squeezed into formation after coal pack off) while reaming last stand to bottom during wiper trip. Raised mud weight to 9.3 ppg to help stabilise coals. Treated active with 5 ppb each of BARACARB 25 & BARACARB 100 to prevent further seepage losses. Maintaining BARACARB concentrations with regular additions. Maintaining excess sulfites with BARACOR-129. BARAZAN D-Plus used to maintain 6 rpm. KCl Content : 3.2 %  Drill from 1070 - 1095 m. Circulate bottoms up, working pipe. Drop Single shot survey. POOH to shoe @ 779 m. Retrieve survey. Service TDS. RIH. Lose circulation 1 std off bottom. Work pipe. Begin to increase mud weight to 9.3 ppg. Drill ahead to 1335 m.
26/01/98	1,345	<b>LOGGING</b>  Lost approximately 100 bbls downhole when backreaming out of hole due to coal sloughing.  Built 200 bbls of new premix to maintain mud volume.  BARAZAN-D Plus used to make hi-vis sweeps.  No new shakers screens used on Broadbill 1.  KCl content : 3 %  Drill ahead from 1335 to 1345 m. Circulate bottoms up. Drop survey. POOH 1 stand. Backream out of tight hole (coal sloughing, mud losses occurring) from 1326 to 9-5/8" casing shoe @ 779 m. Circulate bottoms up. Retrieve survey. Service TDS. RIH to 1018 m & ream to TD. Circulate & work pipe. Pump 70 bbl 10 ppg hi-vis sweep. Circulate hole clean, some downhole losses. Spot 100 bbls hi-vis on bottom. POOH - no problem. Rig up & log 8-1/2" hole.
27/01/98	1,345	<b>PREPARE TO P &amp; A</b>  BARAZAN-D Plus used to build 100 bbls of hi-vis spotted on bottom prior to POOH.  Barite used for slugs.  KCl content : 3 %  Logs unable to get past 1029 m. Rig down Schlumberger. Pick up 8-1/2" BHA. RIH. Wash & ream from 880 - 982 m & 1027 - 1095 m. RIH. Circulate & condition mud @ 1191 m. RIH to TD. Circulate bottoms up. Pump hi-vis sweep. POOH - no problem. Rig up & log. Logs unable to get past 869 m. Change logging tool configuration - still unable to get further. Rig down. Break & laydown excess drillpipe. Prepare to P & A.



Company: Amity Oil NL  
Well Name: Broadbill 1  
Contractor: Santa Fe Drilling  
Rig: Paramswara

Country: AUSTRALIA  
Geo Area: BASS STRAIT  
Field: VIC P/36  
Region: Victoria



# Daily Operations Log

DATE	DEPTH meters	OPERATION
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28/01/98	1,345	<b>PLUG &amp; ABANDON</b>  All chemicals used for P & A. Mud engineer leaves rig. Plug and abandon.
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Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Bit and Hydraulic Record

DATE IN	BIT NO.	BIT SIZE in.	BIT MAKE	BIT TYPE	JETS or TFA	DEPTH OUT meters	DRILLED meters	HOURS RUN	CUM HOURS	WEIGHT ON BIT lb/1000	BIT RPM	PUMP OUTPUT gpm	ANN. VEL DP/DC m/min	PUMP PRESSURE psig	MUD WEIGHT ppg	BIT GRADING	MUD TYPE, LITHOLOGY, REMARKS
/ /		0.00									0		0/0				
17/01/98	1	36.00	VAREL	L3AB	3 X 22	110	58	1	1		0	924	0/0		9	1-1-NO-A-0	Sea water/AQUAGEL sweeps. Mart
20/01/97	2	17.50	HUGHES	R1	3 X 20						0	924	0/0		9	1-1-NO-A-0	Cement
20/01/97	3	12.25	HUGHES	MAX-GT1	3 X 16	785	675	22	22	20	0	840	16/140	2420	9	1-2-NO-A-2	Sea water/AQUAGEL/Polymer, Miscella Sand, siltstone, claystone
24/01/97	4	8.50	HUGHES	ATM GT18	2 X 16, 14	1345	560	27	43	15	140	504	74/125	1350	9	4-5-IN GAU	KCl/EZ-MUD/Polymer, Sandstone, coal

Company: Amity Oil NL  
 Well Name: Broadbill 1  
 Contractor: Santa Fe Drilling  
 Rig: Paramswara

Country: AUSTRALIA  
 Geo Area: BASS STRAIT  
 Field: VIC P/36  
 Region: Victoria



# Mud Property Recap: Water-Based Mud

DATE	DEPTH meters	F/L TEMP Deg C	DENSITY ppg	FUN VIS sec/qt	RHEOLOGY @ 120°F			pH	FILTRATION				FILTRATE ANALYSIS					SAND % by vol	RETORT ANALYSIS				MBT me/ml mud	RHEOMETER DIAL READINGS			
					PV cP	YP lbs/100 ft2	GELS		API ml/30 ml	HTHP ml/30 min	Cake 32nd in	Temp Deg C	Pm ml	Pf ml	Mf ml	Cl mg/L	Total Hardness mg/L		Corr Solids % by vol	LGS % by vol	Oil % by vol	Water % by vol		600/300	200/100	6/3	
16/01/98	52		8.3	28	1.0	/					2/0	121													/	/	/
17/01/98	110		8.0		1.0	/					2/0	121													/	/	/
18/01/98	110		8.0		1.0	/					2/0	121													/	/	/
19/01/98	110		8.9	38	7.0	8.0	3.0/ 4.0		12.0		1/0	121													22 / 15	11 / 7	3 / 2
20/01/98	545	36	8.9	39	19.0	20.0	17.0/ 21.0	8.50	8.2	22.00	1/0	121	0.30	0.01	0.06	20,500	600.0	0.5	3.22	3.22		95.60	4.00	58 / 39	31 / 24	15 / 14	
21/01/98	785	46	9.0	85	15.0	23.0	17.0/ 30.0	8.20	8.0	22.80	1/2	121	0.40	0.02	0.08	21,000	600.0	tr	3.90	3.90		94.90	5.00	53 / 38	32 / 26	16 / 13	
22/01/98	785	46	9.2	44	14.0	20.0	15.0/ 23.0	8.20	7.8	22.00	1/2	121	0.30	0.01	0.06	21,000	580.0	tr	5.41	5.41		93.40	5.50	48 / 34	29 / 25	14 / 12	
23/01/98	785		8.9	55	10.0	15.0	4.0/ 8.0	8.20	5.0	12.50	1/1	121	0.20	0.07	0.11	43,000	380.0		1.67	1.67		95.80		35 / 25	20 / 14	6 / 3	
24/01/98	1070	40	8.9	44	13.0	18.0	4.0/ 6.0	9.00	4.7	12.40	1/2	121	0.22	0.02	0.18	24,000	320.0	1.0	2.91	2.91		95.70	0.20	44 / 31	25 / 18	6 / 4	
25/01/98	1335	42	9.3	42	14.0	23.0	5.0/ 8.0	8.50	3.6	10.60	1/2	121	0.20	0.01	0.16	22,000	300.0	0.25	4.34	2.87		94.40	0.60	51 / 37	30 / 21	6 / 4	
26/01/98	1345	42	9.4	44	16.0	22.0	6.0/ 9.0	8.50	3.6	10.50	1/2	121	0.15	0.01	0.16	22,000	300.0	0.5	4.34	2.12		94.40	0.60	54 / 38	31 / 23	7 / 5	
27/01/98	1345		9.5	43	15.0	24.0	7.0/ 8.0	8.00	4.0	11.00	1/2	121	0.10	0.01	0.18	22,000	300.0	0.25	5.05	2.78		93.70	0.60	54 / 30	32 / 24	/ / 5	
28/01/98	1345		9.5	28	1.0	/					2/0	121													/	/	/

Date	16/01/98	Depth	52.4 m [MD]
Spud Date	17/01/98	Present Activity	OFFLOADING BOAT

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara	
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria	
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait	COUNTRY Austral

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

MUD PROPERTIES				MUD TREATMENTS			
Source	Flowline	2	3	Program	Essential	Baroid Engineer arrived on rig.	
Time	10:54			Targets	Program		
FL Temp Deg C	0			*-Excep	Properties		
Depth m	0.0			P 2 3			
Weight ppg	8.3						
FV @ 16 Deg C sec/qt	28						
FV @ 49 Deg C cP	1						
YP lbs/100 ft <sup>2</sup>	0						
Gels lbs/100 ft <sup>2</sup>	0/0						
API Filt. ml/30 min	0.0						
HTHP @ 121 Deg C ml/30 min	0.0						
Cake API/HTHP 32nd in	2/0						
Corr.Solids % by vol	0.0						
Oil/Water % by vol	0.0/0.0						
Sand % by vol							
MBT	0.0						
pH STRIP	0.0						
Alk. Mud (Pm)	0.00						
Alk. Filtr. (PF/ME)	0.00/0.00						
Chlorides mg/l	0						
Hard. Ca mg/l	0						
Low Gravity Solids ppb	0.00						

MATERIALS USED		SOLIDS EQUIPMENT			
NO INVENTORY USED ON THIS REPORT		Device	Make	Sz/Scrn	HR

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME	
MUD VOLUME bbl	MUD TYPE			Water Depth	21.7	DRLG	0.00
Hole	No Mud	600 rpm		Calc. F. Grad	0.0	CIRC	0.00
0		300 rpm		Leak Off Test	0.0	TRIPS	0.00
Pits	MUD CONSUMPTION	200 rpm		ECD	ppg	SERV. RIG	0.00
0	Oil	100 rpm		Cog. Shoe	0.0	SURVEY	0.00
Active Volume	Brine Water	6 rpm		TD	0.0	FISHING	0.00
0	Drill Water	3 rpm		Max. Diff. Press	0	LOGGING	0.00
Reserve	Sea Water	Pressure Units: paig				RUN CSG	0.00
Total	Whole Mud	Press Drop. DP	0			CORB	0.00
0	Barite	Press Drop. BIT	0	DEVIATION INFO		BACK REAM	0.00
Low Grav. vol %	Chemicals	Press Drop. ANN	0	MD	52.4 m	REAHING	0.00
0.00	LOSSES	Actual Circ. Press	0	TVD	52.4 m	TESTING	0.00
ppb	Dumped	AV, DP m/min	0.0	Angle	0.00	OTHER	0.00
High Grav. vol %	Loot	AV, DC m/min	0.0	Direction		AVERAGE ROP	0.00
0.00	VOL GAIN/LOSS	AV, Riser m/min		Horiz. Displ	0.0 m		
ppb							
ASG							
2.60							
Drill Cuttings							
0							
Dilution Rate							
0.00							
Slds Control Eff							
0.00							

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3111	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 0.00	\$A 0.00

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	17/01/98	Depth	110.0 m [MD]
Spud Date	17/01/98	Present Activity	POOH TO RUN 30" CSG
OPERATOR	Amity Oil NL	CONTRACTOR	Santa Fe Drilling
REPORT FOR	Wally Westman/Murray Jackson	REPORT FOR	Santa Fe Drilling
WELL NAME AND NUMBER	Broadbill 1	FIELD OR BLOCK	VIC P/36
		GEOGRAPHIC AREA	Bass Strait
		COUNTRY	Austral
		RIG NUMBER	Paramswara
		REGION	Victoria

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600	
Type	Pipe OD	ID	Len.	in.	m		Size 6.5 X 12	Eff.	97.00 V/st 0.120
No. Jets	Pipe OD	ID	Len.	Set @		apm	0	bbl/min	0.0
Jets 32nd inch	Collar OD	ID	Len.	Set @		Pump Make/Model	Ideco T-1600		
	Collar OD	ID	Len.	Set @		Size 6.5 X 12	Eff.	97.00 V/st	0.120
	in. OPEN HOLE			m	Set #	apm	0	bbl/min	0.0
Tot Noz Area	Size	36	Len.	57.6	Set @	Pump Make/Model			
TFA	Size		Len.		Set @	Size	Eff.	V/st	
	Size		Len.		Set @	apm	bbl/min		
	Size		Len.		Set @	Tot. Vol./min	0 gpm	0.0	bbl
	Size		Len.		Set @	BU Time	0	TC Time	0

MUD PROPERTIES				MUD TREATMENTS			
Source	Flowline	2	3	Program	Essential	Built 400 bbls of flocculated spud mud for hi-vis sweeps and 500 bbls of pre-hydrated AQUAGEL for filling hole. Built 1066 bbls of pre-hydrated AQUAGEL for 12-1/4" section - will charge of 12-1/4" mud costs tomorrow. Total mud built : 1966 bbls.  Actual AQUAGEL stock remaining : 16.4 MT. Initial Barite on board: 19.64 MT (432 sxs) All material ordered in loadout 1 rec'd.	
Time	10:57			Targets	Program		
FL Temp	Deg C	0		*=Excep	Properties		
Depth	m	110.0		P	2 3		
Weight	ppg	0.0					
FV @ 16	Deg C sec/qt	0					
PV @ 49	Deg C cP	1					
YP	lbs/100 ft2	0					
Gelo	lbs/100 ft2	0/0					
API Filt.	ml/30 min	0.0					
HHP @ 121	Deg C ml/30 min	0.0					
cake API/HHP	32nd in	2/0					
Corr.Solids % by vol		0.0					
Oil/Water % by vol		0.0/0.0					
Sand % by vol							
NBT		0.0					
pH STRIP		0.0					
Alk. Mud (Pm)		0.00					
Alk. Filtr. (PE/ME)		0.00/0.00					
Chlorides mg/l		0					
Hard. Ca mg/l		0					
Low Gravity Solids ppb		0.00					

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Coat	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	8.500	4033.25				Shkr #1	Scalper		
caustic soda - 25 KG. PAIL	5	216.05				Shkr #2	Scalper		
lime - 20 KG. BAG	5	42.15				Shkr #3	Sweco LM3		
soda ash - 25 KG. BAG	1	14.85				Shkr #4	Sweco LM3		
						Shkr #5	Sweco LM3		
						Shkr #6	Sweco LM3		
						dSndr	Crestex	3 x 10"	
						dSlit #1	Crestex	16 x 5"	

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME	
MUD VOLUME	bbbl	MUD TYPE		Water Depth	21.7	DRLG		3.00	
Hole	Pits	SEAWATER/HI VIS SWERPS	600 rpm	Calc. F. Grad	0.0	CIRC		2.00	
238	0	MUD CONSUMPTION	300 rpm	Leak Off Test	0.0	TRIPS		2.50	
Active Volume		ADDITIONS	200 rpm	ECD	ppg	SRV. RIG		0.00	
238		Oil	100 rpm	Csg. Shoe	0.0	SURVEY		0.00	
Reserve	Total	Brine Water	6 rpm	TD	0.0	FISHING		0.00	
	238	Drill Water	3 rpm	Max. Diff. Press	0	LOGGING		0.00	
Low Grav, vol %	0.0	Sea Water	250	Pressure Units:	paig	RUN CSG		0.00	
ppb	0.00	Whole Mud	0	Press Drop. DP	0	CORE		0.00	
High Grav, vol %	0.0	Barite	0	Press Drop. BIT	0	BACK REAM		0.00	
ppb	0.00	Chemicals	21	Press Drop. ANN	0	REAMING		0.00	
ASG		LOGSES	bbbl	Actual Circ. Press	0	TESTING		0.00	
Drill Cuttings	0	Dumped	662	AV, DP	m/min 0.0	OTHER		16.50	
Dilution Rate	0.00	Lost	0	AV, DC	m/min 0.0	AVERAGE ROP		0.00	
Slids Control Eff	0.00	VOL GAIN/LOSS	238	AV, Riser	m/min				

BAROID REPRESENTATIVE		OFFICE/HOME		TELEPHONE		DAILY COST		CUMULATIVE COST	
Nicholas Doust		Melbourne		(03) 9621 3311		\$A	4306.30	\$A	4306.20
		Welshpool		(03) 56 881 445					

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Baroid Australia Pty Ltd  
DRILLING MUD REPORT  
( Cost Modified )

REPORT NUMBER: 3

Date	18/01/98	Depth	110.0 m [MD]
Spud Date	17/01/98	Present Activity	INSTALL DIVERTER

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA					
Size in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600				
Type	Pipe OD	ID	Len.	in.	m		Size	6.5 X 12	Eff.	97.00	V/st	0.120
No. Jets	Pipe OD	ID	Len.	30	Set @	106.0	spm	0	bbl/min	0.0		
Jets 12nd inch	Collar OD	ID	Len.		Set @		Pump Make/Model	Ideco T-1600				
	Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120
	in. OPEN HOLE			m	Set @		spm	0	bbl/min	0.0		
Tot Noz Area	Size	36	Len.	4.0	Set @		Pump Make/Model					
TFA	Size		Len.		Set @		Size		Eff.		V/st	
	Size		Len.		Set @		spm		bbl/min			
	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	Essential
Source	Flowline				Targets	Program
Time	19:37				*=Excep	Properties
FL Temp	Deg C	0			P 2 3	
Depth	m	110.0				
Weight	ppg	0.0				
FV @ 16	Deg C sec/qt	0				
PV @ 49	Deg C cP	1				
YP	lbs/100 ft2	0				
Gels	lbs/100 ft2	0/0				
API Filt.	ml/30 min	0.0				
HTHP @ 121	Deg C ml/30 min	0.0				
Cake API/HTHP	32nd in	2/0				
Corr.Solids % by vol		0.0				
Oil/Water % by vol		0.0/0.0				
Sand % by vol						
MBT		0.0				
pH STRIP		0.0				
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				

MUD TREATMENTS	
Calcium Chloride used for cementing. To be charged as non-drilling cost.	
Will charge off 12-1/4" mud costs tomorrow.	
Total 12-1/4" mud built to date : 1182 bbls.	

RIG ACTIVITY	
Rig up and run 30" conductor to 106 m. Pick up 2-7/8" tubing and run with 30" conductor. Cut conductor joint. Cement casing. Install 12-1/4" diverter.	

MATERIALS USED

NO INVENTORY USED ON THIS REPORT

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Scalper	20	
Shkr #2	Scalper	20	
Shkr #3	Sweco LM3	150 x 3	
Shkr #4	Sweco LM3	150 x 3	
Shkr #5	Sweco LM3	150 x 3	
Shkr #6	Sweco LM3	150 x 3	
dSndr	Crestex	3 x 10"	
dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT		MUD TYPE		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME		
Hole	Pits	Seawater		600 rpm	Water Depth	21.7	DRLG	0.00		
281	0			300 rpm	Calc. F. Grad	0.0	CIRC	0.00		
Active Volume		MUD CONSUMPTION		200 rpm	Leak Off Test	0.0	TRIPS	0.00		
281		ADDITIONS	bbl	100 rpm	RCD	ppg	SERV. RIG	0.00		
Reserve	Total	Oil	0	6 rpm	Cog. Shoe	0.0	SURVEY	0.00		
281		Brine Water	0	3 rpm	TD	0.0	FISHING	0.00		
Low Grav. vol %	0.0	Drill Water	0		Max. Diff. Press	0	LOGGING	0.00		
ppb	0.00	Sea Water	0	Pressure Units:			RUN CSG	14.00		
High Grav. vol %	0.0	Whole Mud	0	Press Drop. DP	0		CORE	0.00		
ppb	0.00	Barite	0	Press Drop. BIT	0	DEVIATION INFO		BACK REAM	0.00	
ASG		Chemicals	0	Press Drop. ANN	0	MD	110.0	REAMING	0.00	
Drill Cuttings	0	LOSSES	bbl	Actual Circ. Press	0	TVD	110.0	TESTING	0.00	
Dilution Rate	0.00	Dumped	0	AV, DP	m/min	0.0	Angle	0.00	OTHER	10.00
Slds Control Eff	0.00	Lost	0	AV, DC	m/min	0.0	Direction		AVERAGE ROP	0.00
		VOL GAIN/LOSS	0	AV, Riser	m/min		Horiz. Displ	0.0	m	
BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST		CUMULATIVE COST			
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A	0.00	\$A	4306.30		

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	Depth
19/01/98	110.0 m [MD]
Spud Date	Present Activity
17/01/98	PICK UP 12-1/4" BHA

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600	
Type	Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00 V/st 0.120
No. Jets	Pipe OD	ID	Len.	30	Set @ 106.0	spm	0	bbl/min	0.0
Jets 32nd inch	Collar OD	ID	Len.		Set @	Pump Make/Model	Ideco T-1600		
	Collar OD	ID	Len.		Set @	Size	6.5 X 12	Eff.	97.00 V/st 0.120
	in. OPEN HOLE			m	Set @	spm	0	bbl/min	0.0
Tot Noz Area	Size	36	Len.	4.0	Set @	Pump Make/Model			
TFA	Size		Len.		Set @	Size		Eff.	V/st
	Size		Len.		Set @	spm		bbl/min	
	Size		Len.		Set @	Tot. Vol./min	0	gpm	0.0 bbl
	Size		Len.		Set @	BU Time	0	TC Time	0

MUD PROPERTIES				MUD TREATMENTS			
Source	Pits, Circ			Program	Essential	Calcium chloride used for cementing to be charged as 'non-drilling cost'.	
Time	20:45			Targets	Program		
FL Temp	Deg C	0		*=Excep	Properties		
Depth	m	110.0		P	2 3	Built total of 1430 bbls of seawater/AQUAGEL/Polymer mud for 12-1/4" hole.	
Weight	ppg	8.9				Expect API filtrate to decrease with incorporation of drill solids and more PAC-R once drilling commences.	
FV @ 18	Deg C sec/qt	38					
PV @ 49	Deg C cP	7					
YP	lbs/100 ft2	8					
Gels	lbs/100 ft2	3/4					
API Filt.	ml/30 min	12.0					
HTHP @ 121	Deg C ml/30 min	0.0					
Cake API/HTHP	32nd in	1/0					
Corr.Solids % by vol		0.0					
Oil/Water % by vol		0.0/0.0					
Sand % by vol							
NBT		0.0					
pH STRIP		0.0					
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					
Excess sulfite mg/l							

RIG ACTIVITY

Continue to install diverter and riser. Function flowline, seals and overboard lines. Run wear bushing. Cement top of 30" conductor via 2-7/8" tubing. Pick up 5" drill pipe. Make up 17-1/2" BHA to drill cement out. R.I.H. Drill cement, shoe track and rathole. Displace hole to seawater/AQUAGEL/PAC mud system. POOH. Pick up and make up 12-1/4" BHA.

MATERIALS USED

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	17.100	8113.95				Shkr #1	Scalper	20	1
PAC-L - 25 KG. BAG	14	2060.94				Shkr #2	Scalper	20	1
PAC-P - 25 KG. BAG	2	294.42				Shkr #3	Sweco LM3	150 x 3	
						Shkr #4	Sweco LM3	150 x 3	
						Shkr #5	Sweco LM3	150 x 3	
						Shkr #6	Sweco LM3	150 x 3	
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD VOLUME		MUD TYPE		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT TIME				
Hole	Pits	GEL/SEAWATER/POLYMER		600 rpm	22	Water Depth	21.7	DRLG	0.00	
281	572	MUD CONSUMPTION		300 rpm	15	Calc. F. Grad	0.0	CIRC	0.75	
Active Volume		ADDITIONS	bbl	200 rpm	11	Leak Off Test	0.0	TRIPS	0.00	
853		Oil	0	100 rpm	7	BCD	ppg	SERV. RIG	0.00	
Reserve	Total	Brine Water	0	6 rpm	3	Cog. Shoe	0.0	SURVEY	0.00	
518	1371	Drill Water	1026	3 rpm	2	TD	0.0	FISHING	0.00	
Low Grav. vol %	0.0	Sea Water	364	Pressure Units:	psig	Max. Diff. Press	0	LOGGING	0.00	
ppb	0.00	Whole Mud	0	Press Drop. DP	0			RUN CSG	0.00	
High Grav. vol %	0.0	Barite	0	Press Drop. BIT	0	DEVIATION INFO				
ppb	0.00	Chemicals	40	Press Drop. ANN	0	MD	110.0	m	REAMING	0.00
ASG		LOSSES	bbl	Actual Circ. Press	0	TVD	110.0	m	TESTING	0.00
Drill Cuttings	0	Dumped	281	AV, DP	m/min	Angle	0.00		OTHER	23.25
Dilution Rate	0.00	Lost	59	AV, DC	m/min	Direction			AVERAGE ROP	0.00
Slds Control Eff	0.00	VOL GAIN/LOSS	1090	AV, Riser	m/min	Horiz. Displ	0.0	m		

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST		CUMULATIVE COST	
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A	10469.31	\$A	14775.61

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING		CASING		CIRCULATION DATA	
Size 12.25 in.	Pipe OD 5	ID 4.276	Len. 314.2			Pump Make/Model	Ideco T-1600
Type MAX GT1	Pipe OD 5	ID 3.000	Len. 112.4	in.	m	Size 6.5 X 12	Eff. 97.00 V/st 0.120
No. Jets	Pipe OD	ID	Len.	30	Set @ 106.0	spm 80	bbl/min 9.6
Jets 32nd inch	Collar OD 8	ID 2.75	Len. 118.4		Set @	Pump Make/Model	Ideco T-1600
16	16	16	Collar OD	ID	Len.	Size 6.5 X 12	Eff. 97.00 V/st 0.120
			in. OPEN HOLE		m	Set @	spm 80 bbl/min 9.6
Tot Nor Area	Size 12.25	Len. 439.0			Set @	Pump Make/Model	
TFA	Size	Len.			Set @	Size	Eff. V/at
	Size	Len.			Set @	spm	bbl/min
	Size	Len.			Set @	Tot. Vol./min	803 gpm 19.1 bbl
	Size	Len.			Set @	BU Time 22	TC Time 45

MUD PROPERTIES				MUD TREATMENTS			
	Primary	2	3				
Source	Pits, Circ	Flowline		Program	Essential	Built 1070 bbls of new mud. Heavy mud losses experienced through coarse sands (approx 700 bbls). Adding PAC-R to maintain API filtrate and BARACOR-129 to maintain Excess Sulfite.	
Time	08:00	20:00		Targets	Program	LCM Sweeps : BARACARB 25 : 18 ppb	
FL Temp	Deg C	36	44	*=Excep	Properties	BARACARB 100: 21 ppb	
Depth	m	165.0	420.0	P 2 3	110.0 784.9	BAROFIBRE : 4.5 ppb	
Weight	ppg	8.9	9.0			AQUAGEL : 20 ppb	
FV @ 44 Deg C	sec/qt	39	44			Running all solids control equipment.	
PV @ 49 Deg C	cP	19	17			Building 30 bbls pumpable KCl/EZ-MUD/Polymer mud for spotting across Lakes Entrance.	
YP	lbs/100 ft2	20	26			RIG ACTIVITY	
Gels	lbs/100 ft2	17/21	16/21			Continue to pick up 8" drill collars. Drill 7 m of 12-1/4" hole. Pick up last 8" drill collar. Unable to circulate - plugged above float. POOH. Unblock float. RIH. Drill ahead to 117 m - Incurring downhole losses. Pump 25 bbl hi-vis sweep. Circulate bottoms up. Pump 25 bbl hi-vis. Drill ahead to 227 m at reduced pump strokes (120 spm). Pump 50 bbl LCM pill (as above) before connection - losses halted/red'd. Drill to 399 m. Circ b/u. Spot 100 bbl LCM pill (as precaution) before conducting survey. Drill ahead.	
API Filt.	ml/30 min	8.2	8.0				
HHP @ 121 Deg C	ml/30 min	22.0	21.0				
Cake API/HHP	32nd in	1/0	1/0				
Corr.Solids % by vol		3.2	4.1				
Oil/Water % by vol		0.0/95.6	0.0/94.7				
Sand % by vol		0.5	0.5				
HBT		4.0	4.2				
pH METER @ 20 Deg C		8.5	8.5				
Alk. Mud (Pm)		0.30	0.36				
Alk. Filtr. (PF/MF)		0.01/0.05	0.01/0.07				
Chlorides mg/l		20500	21000				
Hard. Ca mg/l		600	620				
Low Gravity Solids ppb		29.30	37.31				
Excess sulfite mg/l		100	100				

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 1000 KG. TON	12.400	5883.80				Shkr #1	Scalper	10	17
BARACARB 100 - 25 KG. SACK	48	691.20				Shkr #2	Scalper	20	17
BARACARB 25 - 25 KG. BAG	48	554.40				Shkr #3	Sweco LM3	150 x 3	17
BARACOR 129 - 25 KG. DRUM	19	1159.95				Shkr #4	Sweco LM3	150 x 3	17
BAROFIBRE - 25 LB. SACK	27	1606.50				Shkr #5	Sweco LM3	150 x 3	17
PAC-R - 25 KG. BAG	19	2796.99				Shkr #6	Sweco LM3	150 x 3	17
caustic soda - 25 KG. PAIL	2	86.42				dSndr	Crestex	3 x 10"	17
						dSlt #1	Crestex	16 x 5"	17

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT TIME			
MUD VOLUME	MUD TYPE			Water Depth	21.7	DRLG	15.00
Hole	Pits			Calc. F. Grad	0.0	CIRC	3.00
441	419			Leak Off Test	0.0	TRIPS	4.75
Active Volume				ECD	ppg	SERV. RIG	0.00
860				Ceg. Shoe	9.0	SURVEY	0.50
Reserve	Total			TD	9.2	FISHING	0.00
308	1168			Max. Diff. Press	0	LOGGING	0.00
Low Grav. vol %	3.2					RUN CSG	0.00
ppb	29.30					CORE	0.00
High Grav. vol %	0.0			DEVIATION INFO			
ppb	0.00			MD	545.0 m	REAMING	0.00
ASG	2.58			TVD	545.0 m	TESTING	0.00
Drill Cuttings	12			Angle	0.15	OTHER	0.75
Dilution Rate	16.83			Direction	354	AVERAGE ROP	0.00
Slds Control Eff	0.00			Horiz. Displ	0.0 m		

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 12779.26	\$A 27554.87

NOTES: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR  
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Date	Depth
21/01/98	785.0 m [MD]
Spud Date	Present Activity
17/01/98	R/U TO LOG / LOG

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Murray Jackson	REPORT FOR Santa Fe Drilling	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA					
Size in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600				
Type	Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00	V/st	0.120	
No. Jets	Pipe OD	ID	Len.	30	Set @	106.0	spm	0	bbl/min	0.0		
Jets 32nd inch	Collar OD	ID	Len.		Set @		Pump Make/Model	Ideco T-1600				
	Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120
	in. OPEN HOLE			m	Set @		spm	0	bbl/min	0.0		
Tot Noz Area	Size	12.25	Len.	679.0	Set @		Pump Make/Model					
TFA	Size		Len.		Set @		Size		Eff.		V/st	
	Size		Len.		Set @		spm		bbl/min			
	Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl	
	Size		Len.		Set @		BU Time	0	TC Time	0		

MUD PROPERTIES						MUD TREATMENTS					
		Primary	2	3							
Source	Pits, Circ	Flowline			Program	Essential	Maintained treatment of active system with PAC-R to hold API filtrate. Diluted active with seawater/PAC-L to control mud viscosity increase from drilling claystone. BARACOR-129 used to maintain excess sulfites. Building KCl/EZ-MUD/Polymer mud for 8-1/2" hole. Ran desander and desilter non-stop.  Reports have been cost modified to reflect updated mud material prices.  No new shakers screens used to date.				
Time	06:00	13:00			Targets	Program					
FL Temp	Deg C	46	46		*=Excep	Properties					
Depth	m	701.0	785.0		P 2 3	110.0 784.9					
Weight	ppg	9.0	9.2			< 9.3					
FV @ 46 Deg C	sec/qt	85	70		*	35 45					
PV @ 49 Deg C	cP	15	15								
YP	lbs/100 ft2	23	21								
Gels	lbs/100 ft2	17/30	17/29								
API Filt.	ml/30 min	8.0	7.8		*	< 8.0					
HTHP @ 121 Deg C	ml/30 min	22.8	21.0		*						
Cake API/HTHP	32nd in	1/2	1/2								
Corr.Solids % by vol		3.9	5.4								
Oil/Water % by vol		0.0/94.9	0.0/93.4								
Sand % by vol		tr	tr								
NBT		5.0	5.5								
pH MEISER @ 20 Deg C		8.2	8.2		*						
Alk. Mud (Pm)		0.40	0.45								
Alk. Filtr. (PE/MF)		0.02/0.06	0.02/0.07								
Chlorides mg/l		21000	21000								
Hard. Ca mg/l		600	600								
Low Gravity Solids ppb		35.49	49.23								
Excess sulfite mg/l		120	100								

**RIG ACTIVITY**  
Continue to drill ahead to 701 m. Circulate bottoms up. Conduct Hofco survey. Drill ahead to 785 m. Circulate bottoms up. Conduct multishot survey. POOH. Some tight hole on first 6 stands (hole took 6 bls). POOH to 30" conductor @ 110 m. Conduct top drive service (hole took 12 bbls). RIH. Hole good. Circulate hole clean. POOH. Rig up to run Schlumberger logs. Hole drink rate currently 4-6 bbls/hr.

MATERIALS USED						SOLIDS EQUIPMENT			
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrm	HR
AQUAGEL - 1000 KG. TON	2.200	1043.90				Shkr #1	Scalper	10	13
BARACOR 129 - 25 KG. DRUM	2	122.10				Shkr #2	Scalper	20	13
PAC-L - 25 KG. BAG	3	441.63				Shkr #3	Sweco LM3	150 x 3	13
PAC-R - 25 KG. BAG	4	588.84				Shkr #4	Sweco LM3	150 x 3	13
barite - 1000 KG. TON	2.400	773.33				Shkr #5	Sweco LM3	150 x 3	13
						Shkr #6	Sweco LM3	150 x 3	13
						dSndr	Crestex	3 x 10"	13
						dSlt #1	Crestex	16 x 5"	13

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT TIME				
MUD VOLUME	bbbl	MUD TYPE			Water Depth	21.7	DRIG	10.75		
Hole	Pits	GEL/SEAWATER/POLYMER	600 rpm	53	51	Calc. F. Grad	0.0	CIRC	2.25	
590	523	MUD CONSUMPTION	300 rpm	38	36	Leak Off Test	0.0	TRIPS	7.00	
Active Volume		ADDITIONS	200 rpm	32	31	ECD	ppg	SERV. RIG	0.00	
1113		Oil	0	100 rpm	26	25	Csg. Shoe	9.1	SURVEY	1.25
Reserve	Total	Brine Water	0	6 rpm	16	15	TD	9.3	FISHING	0.00
208	1321	Drill Water	0	3 rpm	13	13	Max. Diff. Press	0	LOGGING	0.00
Low Grav, vol %	3.9	Sea Water	385	Pressure Units:	psig			RUN CSG	0.00	
ppb	35.49	Whole Mud	0	Press Drop. DP	0			CORE	0.00	
High Grav, vol %	0.0	Barite	0	Press Drop, BIT	0			BACK REAM	0.00	
ppb	0.00	Chemicals	9	Press Drop, ANN	0			REAMING	0.00	
ASG	2.60	LOSSES	bbbl	Actual Circ. Press	0			TESTING	0.00	
Drill Cuttings	0	Dumped	62	AV, DP	m/min	0.0		OTHER	2.75	
Dilution Rate	0.00	Lost	179	AV, DC	m/min	0.0		AVERAGE ROP	0.00	
Slds Control Eff	0.00	VOL GAIN/LOSS	153	AV, Riser	m/min					

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 2969.80	\$A 30524.67

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	Depth
22/01/98	785.0 m [MD]
Spud Date	Present Activity
17/01/98	WOC

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA					
Size	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600				
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00	V/st	0.120
No. Jets		Pipe OD	ID	Len.	30	Set @ 106.0	spm	0	bbl/min	0.0		
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @ 779.0	Pump Make/Model	Ideco T-1600				
		Collar OD	ID	Len.		Set @	Size	6.5 X 12	Eff.	97.00	V/st	0.120
		in. OPEN HOLE			m	Set @	spm	0	bbl/min	0.0		
Tot Noz Area		Size	12.25	Len.	6.0	Set @	Pump Make/Model					
TFA		Size		Len.		Set @	Size		Eff.		V/st	
		Size		Len.		Set @	spm		bbl/min			
		Size		Len.		Set @	Tot. Vol./min	0	gpm	0.0	bbl	
		Size		Len.		Set @	BU Time	0	TC Time	0		

MUD PROPERTIES						MUD TREATMENTS					
		Primary	2	3							
Source		Pits, Circ			Program	Essential	Mixing 3% KCl/SZ-MUD/Polymer mud.				
Time		15:30			Targets	Program	Coats/volume to be included tomorrow.				
FL Temp	Deg C	46			*=Excep	Properties					
Depth	m	785.0			P 2 3	784.9 1654.1	Three shakers changed to coarser 80 mesh size screens to prevent/reduce initial losses of unsheared mud. Scalpers changed to 10 mesh. No new screens used to date.				
Weight	ppg	9.2				9.0 9.5	Dumping and cleaning pits at report time.				
FV @ 46 Deg C	sec/qt	44					AQUAGEL and Calcium Chloride used in cement job - to be charged as non-drilling cost.				
FV @ 49 Deg C	cp	14				< 30	RIG ACTIVITY				
YP	lbs/100 ft2	20					Rig up Schlumberger. Log 12-1/4" hole -BHC-LDL-CNL-DLL-MSPL-GR-CALI-SP. Rig down Schlumberger. Pull diverter bag. Retrieve wear bushing & laydown running tool. Rig up & run 9-5/8" casing to 779 m. Circulate casing while waiting on chemicals. Cement as per program. WOC.				
Gels	lbs/100 ft2	15/23									
API Filt.	ml/30 min	7.8			*	< 6.0					
HHP @ 121 Deg C	ml/30 min	22.0			*	< 15.0					
Cake API/HHP	32nd in	1/2									
Corr.Solids % by vol		5.4									
Oil/Water % by vol		0.0/93.4									
Sand % by vol		tr									
MBT		5.5									
pH METER @ 20 Deg C		8.2			*	8.5 9.2					
Alk. Mud (Pm)		0.30									
Alk. Filt. (PF/MF)		0.01/0.06									
Chlorides mg/l		21000									
Hard. Ca mg/l		580									
Low Gravity Solids ppb		49.23				< 91.00					
6 rpm		14			*	6.00 10.00					
KCl Content	ppb				*	11.00 14.00					

MATERIALS USED						SOLIDS EQUIPMENT			
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
AQUAGEL - 25 KG. BAG	56	659.12				Shkr #1	Scalper	10	5
						Shkr #2	Scalper	10	5
						Shkr #3	Sweco LM3	150 x 3	5
						Shkr #4	Sweco LM3	80 x 3	5
						Shkr #5	Sweco LM3	80 x 3	5
						Shkr #6	Sweco LM3	80 x 3	5
						dsndr	Crestex	3 x 10"	
						dslt #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT		TIME	
MUD VOLUME	bbbl	MUD TYPE							
Hole	Pits	GEL/SB/AWATER/POLYMER	600 rpm	48	Water Depth	21.7	DRLG	0.00	
190	0		300 rpm	34	Calc. F. Grad	0.0	CIRC	5.00	
Active Volume		MUD CONSUMPTION	200 rpm	29	Leak Off Test	0.0	TRIPS	0.00	
190		ADDITIONS	100 rpm	25	ECD	ppg	SERV. RIG	0.00	
Reserve	Total	Oil	6 rpm	14	Cag. Shoe	0.0	SURVEY	0.00	
116	306	Brine Water	3 rpm	12	TD	0.0	FISHING	0.00	
Low Grav. vol %	5.4	Sea Water	Pressure Units:	psig	Max. Diff. Press	0	LOGGING	6.50	
ppb	49.23	Whole Mud	Press Drop. DP	0			RUN CSG	9.50	
High Grav. vol %	0.0	Barite	Press Drop. BIT	0	DEVIATION INFO		COPE	0.00	
ppb	0.00	Chemicals	Press Drop. ANN	0	MD	785.0 m	BACK REAM	0.00	
ASG	2.60	LOSSES	Actual Circ. Press	0	TVD	785.0 m	REAMING	0.00	
Drill Cuttings	0	Dumped	AV, DP	m/min	0.0	Angle	0.25	TESTING	0.00
Dilution Rate	0.00	Lost	AV, DC	m/min	0.0	Direction	320	OTHER	3.00
Slids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min	0.0	Horiz. Displ	0.5 m	AVERAGE ROP	0.00

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 659.12	\$A 31183.79

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	Depth
23/01/98	785.0 m [MD]
Spud Date	Present Activity
17/01/98	RUN WEAR BUSHING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA		
Size in.	Pipe OD	ID	Len.				Pump Make/Model	Ideco T-1600	
Type	Pipe OD	ID	Len.	in.	m		Size	6.5 X 12	Eff. 97.00 V/st 0.120
No. Jets	Pipe OD	ID	Len.	30	Set @ 106.0		spm	0	bbl/min 0.0
Jets 32nd inch	Collar OD	ID	Len.	9 5/8	Set @ 779.0		Pump Make/Model	Ideco T-1600	
	collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff. 97.00 V/st 0.120
				in.	OPEN HOLE	m	Set @	spm	0 bbl/min 0.0
Tot Noz Area	Size	12.25	Len.	6.0	Set @		Pump Make/Model		
TFA	Size		Len.		Set @		Size		Eff. V/st
	Size		Len.		Set @		spm		bbl/min
	Size		Len.		Set @		Tot. Vol./min	0 gpm	0.0 bbl
	Size		Len.		Set @		BU Time	0	TC Time 0

MUD PROPERTIES					MUD TREATMENTS				
Source	Pits	Circ	Program	Essential	Built total of 1418 bbls of KCl/EZ-MUD/Poly for 8-1/2" section. Mud built contains only 0.75 ppb EZ-MUD to reduce mud losses over shakers upon displacement.  Mud check is on reserve mud. Mud mixed with KCl content of 4 % to allow for depletion through Lakes Entrance Formation.				
Time	20.07		Targets	Program					
FL Temp	Deg C	0	*=Excep	Properties					
Depth	m	785.0	P 2 3	784.9 1654.1					
Weight	ppg	8.9	*	9.0 9.5					
FV @ 20 Deg C	sec/qt	55							
PF @ 49 Deg C	cp	10		< 30					
YP	lbs/100 ft2	15							
Gels	lbs/100 ft2	4/8							
API Filt.	ml/30 min	5.0		< 6.0					
HTHP @ 121 Deg C	ml/30 min	12.5		< 15.0					
Cake API/HTHP	32nd in	1/1							
Corr.Solids % by vol		1.7							

MATERIALS USED					RIG ACTIVITY				
Oil/Water % by vol		0.0/95.8			WOC. Cut off 9-5/8" casing. Rig up & pull diverter. o/shot & riser & lay don. Install adapter ring. Test flange to 2000 psi. Lower BOP's & nipple up. Pressure test BOP's. Run wear bushing.				
Sand % by vol									
MBT		0.0							
pH METER @ 20 Deg C		8.2	*	8.5 9.2					
Alk. Mud (Pm)		0.20							
Alk. Filt. (PF/MF)		0.07/0.11							
Chlorides mg/l		43000							
Hard. Ca mg/l		380							
Low Gravity Solids ppb		15.20		< 91.00					
6 rpm		6		6.00 10.00					
KCl Content	ppb	14		11.00 14.00					
KCl	% by vol	4							

MATERIALS USED					SOLIDS EQUIPMENT				
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
ALDACIDE G - 25 L. CAN	3	611.88				Shkr #1	Scalper	10	
BARAZAN-D PLUS - 25 KG. BAG	23	8279.54				Shkr #2	Scalper	10	
DEXTRID LT - 25 KG. BAG	107	5631.49				Shkr #3	Sweco LM3	150 x 3	
EZ-MUD DP - 50 LB. BAG	24	2754.96				Shkr #4	Sweco LM3	80 x 3	
PAC-L - 25 KG. BAG	22	3238.62				Shkr #5	Sweco LM3	80 x 3	
potassium chloride - 1000 KG.	9	3892.89				Shkr #6	Sweco LM3	80 x 3	
soda ash - 25 KG. BAG	5	74.25				dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT			TIME		
MUD VOLUME	bbl	MUD TYPE				Water Depth	21.7	DRUG		0.00	
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	35		Calc. F. Grad	0.0	CIRC		0.00	
190	0	MUD CONSUMPTION	300 rpm	25		Leak Off Test	0.0	TRIPS		0.00	
Active Volume		ADDITIONS	200 rpm	20		ECD	ppg	SERV. RIG		0.00	
190		Oil	100 rpm	14		Cog. Shoe	0.0	SURVEY		0.00	
Reserve	Total	Brine Water	6 rpm	6		TD	0.0	FISHING		0.00	
1534	1724	Drill Water	3 rpm	3		Max. Diff. Press	0	LOGGING		0.00	
Low Grav. vol %	1.7	Sea Water	Pressure Units:	poig				RUN CSG		0.00	
ppb	15.20	Whole Mud	Press Drop. DP	0				COPE		0.00	
High Grav. vol %	0.0	Barite	Press Drop. BIT	0		DEVIATION INFO			BACK REAM	0.00	
ppb	0.00	Chemicals	Press Drop. ARM	0		MD	785.0 m	REAMING		0.00	
AGG	2.57	LOSSES	Actual Circ. Press	0		TVD	785.0 m	TESTING		0.00	
Drill Cuttings	0	Dumped	AV, DP	m/min	0.0	Angle	0.25	OTHER		24.00	
Dilution Rate	0.00	Lost	AV, DC	m/min	0.0	Direction	320	AVERAGE ROP		0.00	
Slids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser	m/min		Horiz. Displ	0.5 m				

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A 24483.63	\$A 55667.42

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

The recommendations made hereon shall not be construed as authorizing the infringement of any valid patent, and are made without assumption of any liability by BAROID DRILLING FLUIDS, INC. or its agents, and are statements of opinion only.

Date	24/01/98	Depth	1070.0m [MD]
Spud Date	17/01/98	Present Activity	DRILLING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA			
Size 8.5 in.	Pipe OD 5	ID 4.276	Len. 811.0				Pump Make/Model	Ideco T-1600		
Type ATINGT18D	Pipe OD 5	ID 3.000	Len. 112.5				Size 6.5 X 12	Eff. 97.00	V/st 0.120	
No. Jets	Pipe OD	ID	Len.	30	Set @ 106.0		spm 50	bbl/min 6.0		
Jets 32nd inch	Collar OD 6.5	ID 2.75	Len. 146.5	9 5/8	Set @ 779.0		Pump Make/Model Ideco T-1600			
16	16	14	Collar OD	ID	Len.		Size 6.5 X 12	Eff. 97.00	V/st 0.120	
			in. OPEN HOLE				spm 50	bbl/min 6.0		
Tot Noz Area	Size 8.5	Len. 291.0					Pump Make/Model			
TFA	Size	Len.					Size	Eff.	V/st	
	Size	Len.					spm	bbl/min		
	Size	Len.					Tot. Vol./min 502 gpm 12.0 bbl			
	Size	Len.					BU Time 13	TC Time 57		

MUD PROPERTIES				MUD TREATMENTS				
Source	Pits, Circ	Flowline	Program	Essential	Mud dumped is gel mud in hole & pit. Raised EZ-MUD concentration to programmed value after displacing. Adding BARACOR-129 to maintain excess sulphites. Weighed up mud to 9.1 ppg @ 865 m for extra hole stability while drilling coal seams. Lost approx 70 bbls downhole while drilling coal seams. Treated active with additional BARAZAN D-Plus to combat thinning of the mud from coal. Running desander/desilter. Changed shakers to finer 150 mesh screens. No new screens used to date. KCl content : 3 %			
Time	17:00	22:30	Targets	Program				
FL Temp Deg C	40	40	*=Excep	Properties				
Depth m	865.0	1032.0	P 2 3	784.9 1654.1				
Weight ppg	8.9	9.1	*	9.0 9.5				
FV @ 40 Deg C sec/qt	44	40						
PV @ 49 Deg C cP	13	14		< 30				
YP lbs/100 ft <sup>2</sup>	18	22						
Gels lbs/100 ft <sup>2</sup>	4/6	4/7						
API Filtr. ml/30 min	4.7	4.2		< 6.0				
HTHP @ 121 Deg C ml/30 min	12.4	11.2		< 15.0				
Cake API/HTHP 32nd in	1/2	1/2						
Corr.Solids % by vol	2.9	3.2						
Oil/Water % by vol	0.0/95.7	0.0/95.5						
Sand % by vol	1.0	0.5						
MBT	0.2	0.2						
pH METER @ 20 Deg C	9.0	9.2		8.5 9.2				
Alk. Mud (pH)	0.22	0.28						
Alk. Filtr. (PF/ME)	0.02/0.18	0.05/0.18						
Chlorides mg/l	24000	23000						
Hard. Ca mg/l	320	225						
Low Gravity Solids ppb	26.48	19.20		< 91.00				
6 rpm	6	6		6.00 10.00				
KCl Content ppb	12	11		11.00 14.00				
Excess sulfite mg/l	100	100						

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BAPACOR 129 - 25 KG. DRUM	8	487.33				Shkr #1	Scalper	10	10
BARAZAN-D PLUS - 25 KG. BAG	5	1799.90				Shkr #2	Scalper	10	10
DEXTRID LT - 25 KG. BAG	1	52.07				Shkr #3	Sweco LM3	150 x 3	10
EZ-MUD DP - 50 LB. BAG	14	1607.06				Shkr #4	Sweco LM3	150 x 3	10
barite - 1000 KG. TON	9.700	3125.53				Shkr #5	Sweco LM3	150 x 3	10
potassium hydroxide - 20 KG.	2	88.34				Shkr #6	Sweco LM3	80 x 3	10
						dSndr	Crestex	3 x 10"	5
						dSlt #1	Crestex	16 x 5"	6

MUD VOLUME		MUD TYPE		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME	
Hole	Pits	KCL/BZ MUD/POLYMER		600 rpm	44 50	Water Depth	21.7	DRLG	9.25
215	467	MUD CONSUMPTION		300 rpm	31 36	Calc. F. Grad	0.0	CIRC	1.50
Active Volume		ADDITIONS		200 rpm	25 30	Leak Off Test	13.0	TRIPS	4.75
682		Oil	0	100 rpm	18 20	BCD	ppg	SERV. RIG	0.00
Reserve	Total	Brine Water	0	6 rpm	6 6	Cog. Shoe	9.4	SURVEY	0.00
531	1213	Drill Water	0	3 rpm	4 4	TD	9.5	FISHING	0.00
Low Grav. vol %	2.9	Sea Water	0	Pressure Units:	poig	Max. Diff. Press	0	LOGGING	0.00
ppb	26.48	Whole Mud	0	Press Drop. DP	524			RUN CSG	0.00
High Grav. vol %	0.0	Barite	15	Press Drop. BIT	695			CORE	0.00
ppb	0.00	Chemicals	3	Press Drop. AMN	116	DEVIATION INFO			
ASG	2.61	LOSSES	bbl	Actual Circ. Press	1200	MD	1070.0 m	REAMING	0.00
Drill Cuttings	0	Dumped	306	AV, DP m/min	74.5	TVD	1070.0 m	TESTING	2.00
Dilution Rate	0.00	Lost	223	AV, DC m/min	125.1	Angle	0.25	OTHER	6.50
Slids Control Eff	0.00	VOL GAIN/LOSS	-511	AV, Riser m/min		Direction	320	AVERAGE ROP	0.00
						Horiz. Displ	0.5 m		

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST		CUMULATIVE COST	
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A	7160.23	\$A	62827.65

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	25/01/98	Depth	1335.0m [MD]
Spud Date	17/01/98	Present Activity	DRILLING

OPERATOR	CONTRACTOR	RIG NUMBER	
Amity Oil NL	Santa Fe Drilling	Paramswara	
REPORT FOR	REPORT FOR	REGION	
Wally Westman/Chris Roots	Mike Walker/ Blain Wilkie	Victoria	
WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Broadbill 1	VIC P/36	Bass Strait	Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA											
Size	8.5 in.	Pipe OD	5	ID	4.276	Len.	1076.0	Pump Make/Model	Ideco T-1600									
Type	ATNGT18D	Pipe OD	5	ID	3.000	Len.	112.5	in.	m	Size	6.5 X 12	Eff.	97.00	v/st	0.120			
No. Jets		Pipe OD		ID		Len.		30	Set @	106.0	spm	50	bbl/min	6.0				
Jets	32nd inch	Collar OD	6.5	ID	2.75	Len.	146.5	9	5/8	Set @	779.0	Pump Make/Model	Ideco T-1600					
	16		16		14	Collar OD		ID		Len.		Set @	Size	6.5 X 12	Eff.	97.00	v/st	0.120
		in.			OPEN HOLE							Set @	spm	50	bbl/min	6.0		
Tot Noz Area		Size	8.5	Len.	556.0			Set @				Pump Make/Model						
TFA		Size	Len.			Set @				Size	Eff.			v/st				
		Size	Len.			Set @				spm	bbl/min							
		Size	Len.			Set @				Tot. Vol./min	502	gpm	12.0	bbl				
		Size	Len.			Set @				BU Time	17	TC Time	68					

MUD PROPERTIES						MUD TREATMENTS					
		Primary		2		3					
Source		Pits, Circ	Flowline			Program	Essential	Maintain volume & properties with addition of premix. Lost approx 40 bbls downhole (squeezed into formation after coal pack off) while reaming last stand to bottom during wiper trip. Raised mud weight to 9.3 ppg to help stabilise coals. Treated active with 5 ppb each of BARACARB 25 & BARACARB 100 to prevent further seepage losses. Maintaining BARACARB concentrations with regular additions. Maintaining excess sulfites with BARACOR-129. BARAZAN D-Plus used to maintain 6 rpm. KCl Content : 3.2 %			
Time		22:00	13:00			Targets	Program				
FL Temp	Deg C	42	42			*=Excep	Properties				
Depth	m	1323.0	1230.0			P 2 3	784.9 1654.1				
Weight	ppg	9.3	9.3				9.0 9.5				
FV @ 42	Deg C sec/qt	42	42								
PV @ 49	Deg C cP	14	15				< 30				
YP	lbs/100 ft2	23	20								
Gels	lbs/100 ft2	5/8	4/7								
API Filt.	ml/30 min	3.6	3.8				< 6.0				
HTHP @ 121	Deg C ml/30 min	10.6	10.8				< 15.0				
Cake API/HTHP	32nd in	1/2	1/2								
Corr.Solids % by vol		4.3	4.1								
Oil/Water % by vol		0.0/94.4	0.0/94.6								
Sand % by vol		0.25	0.25								
NBT		0.6	0.6								
pH METER @ 20	Deg C	8.5	8.5				8.5 9.2				
Alk. Mud (Pm)		0.20	0.10								
Alk. Filt. (PE/ME)		0.01/0.16	0.01/0.19								
Chlorides mg/l		22000	22000								
Hard. Ca mg/l		300	320								
Low Gravity Solids	ppb	26.12	22.48				< 91.00				
6 rpm		6	6				6.00 10.00				
KCl Content	ppb	11	12				11.00 14.00				
Excess sulfite	mg/l	100	100								

MATERIALS USED						SOLIDS EQUIPMENT			
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BARACARB 100 - 25 KG. SACK	96	1382.40				Shkr #1	Scalper	10	20
BARACARB 25 - 25 KG. BAG	96	1108.80				Shkr #2	Scalper	10	20
BARACOR 129 - 25 KG. DRUM	9	539.82				Shkr #3	Sweco LM3	150 x 3	20
BARAZAN-D PLUS - 25 KG. BAG	4	1439.92				Shkr #4	Sweco LM3	150 x 3	20
EZ-MUD DP - 50 LB. BAG	4	457.66				Shkr #5	Sweco LM3	150 x 3	20
barite - 1000 KG. TON	7.200	2319.98				Shkr #6	Sweco LM3	80 x 3	20
potassium hydroxide - 20 KG.	4	176.68				dSndr	Crestex	3 x 10"	4
						dSlt #1	Crestex	16 x 5"	9

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT TIME				
MUD VOLUME	bbbl	MUD TYPE	KCL/EZ MUD/POLYMER		600 rpm		Water Depth	21.7		DRLG	18.50
Hole	Pits				51	50	Calc. F. Grad	0.0		CIRC	1.50
270	542				37	35	Leak Off Test	13.0		TRIPS	2.00
Active Volume		MUD CONSUMPTION			200 rpm	30	ECD	ppg		SERV. RIG	0.00
812		Oil			100 rpm	21	Cog. Shoe	10.0		SURVEY	1.00
Reserve	Total	Brine Water			6 rpm	6	TD	10.1		FISHING	0.00
111	923	Drill Water			3 rpm	4	Max. Diff. Press	0		LOGGING	0.00
Low Grav, vol %	2.9	Sea Water			Pressure Units:	poig				RUN CSG	0.00
ppb	26.12	Whole Mud			Press Drop. DP	606				CORE	0.00
High Grav, vol %	1.5	Barite			Press Drop. BIT	726	DEVIATION INFO				
ppb	22.05	Chemicals			Press Drop. ANN	173	MD	1335.0 m		BACK REAM	0.00
ASG	3.25	LOSSES			Actual Circ. Press	1350	TVD	1335.0 m		REAMING	0.00
Drill Cuttings	2	Dumped			AV, DP	m/min	Angle	2.25		TESTING	0.00
Dilution Rate	0.00	Lost			AV, DC	m/min	Direction	320		OTHER	1.00
Slds Control Eff	0.00	VOL GAIN/LOSS			AV, Riser	m/min	Horiz. Displ	0.0 m		AVERAGE ROP	0.54

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST
Nicholas Doust	WAREHOUSE	Wahpool	TELEPHONE	(03) 56 881 445	\$A 7425.26	\$A 70252.91

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	26/01/98	Depth	1345.0m [MD]
Spud Date	17/01/98	Present Activity	LOGGING

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA				
Size in.	Pipe OD	ID	Len.		in.	m	Pump Make/Model	Ideco T-1600			
Type	Pipe OD	ID	Len.	30	Set @	106.0	spm	0	bbl/min	0.0	
No. Jets	Pipe OD	ID	Len.	9 5/8	Set @	779.0	Pump Make/Model	Ideco T-1600			
Jets 32nd inch	Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	
	Collar OD	ID	Len.		Set @		v/st	0.120			
		in. OPEN HOLE			m		Set @	spm	0	bbl/min	0.0
Tot Noz Area	Size	8.5	Len.	566.0	Set @		Pump Make/Model				
TFA	Size		Len.		Set @		Size		Eff.	v/st	
	Size		Len.		Set @		spm	bbl/min			
	Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	
	Size		Len.		Set @		BU Time	0	TC Time	0	

MUD PROPERTIES			MUD TREATMENTS		
Source	Primary	2	3	Program	Essential
Time	14:00			Targets	Program
FL Temp Deg C	42			*=Excep	Properties
Depth m	1345.0			P 2 3	784.9 1654.1
Weight ppg	9.4				9.0 9.5
FV @ 42 Deg C sec/qt	44				
FV @ 49 Deg C cP	16				< 30
YP lbs/100 ft2	22				
Gels lbs/100 ft2	6/9				
API Filtr. ml/30 min	3.6				< 6.0
HTHP @ 121 Deg C ml/30 min	10.5				< 15.0
Cake API/HTHP 32nd in	1/2				
Corr.Solids % by vol	4.3				
Oil/Water % by vol	0.0/94.4				
Sand % by vol	0.5				
HBT	0.6				
pH METER @ 20 Deg C	8.5				8.5 9.2
Alk. Mud (Pm)	0.15				
Alk. Filtr. (Pf/Mf)	0.01/0.16				
Chlorides mg/l	22000				
Hard. Ca mg/l	300				
Low Gravity Solids ppb	19.29				< 91.00
6 rpm	7				6.00 10.00
KCl Content ppb	11				11.00 14.00
Excess sulfite mg/l	100				

Lost approximately 100 bbls downhole when backreaming out of hole due to coal sloughing.

Built 200 bbls of new premix to maintain mud volume.

BAPAZAN-D Plus used to make hi-vis sweeps.

No new shakers screens used on Broadbill 1.

KCl content : 3 %

**RIG ACTIVITY**

Drill ahead from 1335 to 1345 m. Circulate bottoms up. Drop survey. POOH 1 stand. Backream out of tight hole (coal sloughing, mud losses occurring) from 1326 to 9-5/8" casing shoe @ 779 m. Circulate bottoms up. Retrieve survey. Service TDS. RIH to 1018 m & ream to TD. Circulate & work pipe. Pump 70 bbl 10 ppg hi-vis sweep. Circulate hole clean, some downhole losses. Spot 100 bbls hi-vis on bottom. POOH - no problem. Rig up & log 8-1/2" hole.

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BARACOR 129 - 25 KG. DRUM	3	179.94		Shkr #1		Scalper		10	13
BAPAZAN-D PLUS - 25 KG. BAG	6	2159.88		Shkr #2		Scalper		10	13
DEXTRID LT - 25 KG. BAG	15	781.05		Shkr #3		Sweco LM3		150 x 3	13
EZ-MUD DP - 50 LB. BAG	9	1026.36		Shkr #4		Sweco LM3		150 x 3	13
PAC-L - 25 KG. BAG	2	293.67		Shkr #5		Sweco LM3		150 x 3	13
barite - 1000 KG. TON	4.400	1417.77		Shkr #6		Sweco LM3		80 x 3	13
potassium chloride - 1000 KG.	1	419.21		dsndr		Crestex		3 x 10"	
potassium hydroxide - 20 KG.	3	132.51		dslt #1		Crestex		16 x 5"	

MUD MANAGEMENT			RHEOLOGY AND HYDRAULICS			FRACTURE GRADIENT		TIME	
MUD VOLUME	bbbl	MUD TYPE			Water Depth	21.7	DRLG	2.00	
Hole	Pits	KCL/EZ MUD/POLYMER	600 rpm	54	Calc. F. Grad	0.0	CIRC	3.00	
317	446		300 rpm	38	Leak Off Test	13.0	TRIPS	4.00	
Active Volume		MUD CONSUMPTION	200 rpm	31	RCD	ppg	SRV. RIG	0.50	
763		Oil	100 rpm	23	Ceg. Shoe	9.3	SURVEY	1.00	
Reserve	Total	Brine Water	6 rpm	7	TD	9.3	FISHING	0.00	
118	881	Drill Water	3 rpm	5	Max. Diff. Press	0	LOGGING	0.00	
Low Grav, vol %	2.1	Sea Water	Pressure Units:	poig			RUN CSG	0.00	
ppb	19.29	Whole Mud	Press Drop. DP	0			CORE	0.00	
High Grav, vol %	2.2	Barite	Press Drop. BIT	0	<b>DEVIATION INFO</b>		BACK REAM	7.50	
ppb	32.34	Chemicals	Press Drop. ANN	0	MD	1345.0 m	REAMING	0.00	
ASG	3.52	LOSSES	Actual Circ. Press	0	TVD	1345.0 m	TESTING	0.00	
Drill Cuttings	0	Dumped	AV, DP m/min	0.0	Angle	3.25	OTHER	6.00	
Dilution Rate	0.00	Lost	AV, DC m/min	0.0	Direction	45	AVERAGE ROP	0.00	
Slids Control Eff	0.00	VOL GAIN/LOSS	AV, Riser m/min		Horiz. Displ	0.0 m			

BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	\$A 6410.35	CUMULATIVE COST	\$A 76663.30
Nicholas Doust	WAREHOUSE	Welshpool	TELEPHONE	(03) 56 881 445				

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Date	27/01/98	Depth	1345.0m [MD]
Spud Date	17/01/98	Present Activity	PREPARE TO P & A

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA						
Size	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600					
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00	v/st	0.120	
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	spm	0	bbl/min	0.0		
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @	779.0	Pump Make/Model	Ideco T-1600				
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	v/st	0.120
		in. OPEN HOLE			m	Set @		spm	0	bbl/min	0.0		
Tot Noz Area		Size	8.5	Len.	566.0	Set @		Pump Make/Model					
TFA		Size		Len.		Set @		Size		Eff.		v/st	
		Size		Len.		Set @		spm		bbl/min			
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl	
		Size		Len.		Set @		BU Time	0	TC Time	0		

MUD PROPERTIES				MUD TREATMENTS			
	Primary	2	3	Program	Essential Program Properties		
Source	Pito, Uncr			Targets			
Time	13:00			*=Excep			
FL Temp	Deg C	0		P	2	3	784.9 1654.1
Depth	m	1345.0					9.0 9.5
Weight	ppg	9.5					< 30
FV @ 28	Deg C sec/qt	43					< 6.0
FV @ 49	Deg C cP	15					< 15.0
YP	lbs/100 ft2	24					
Gels	lbs/100 ft2	7/9					
API Filt.	ml/30 min	4.0					
HTHP @ 121	Deg C ml/30 min	11.0					
Cake API/HTHP	32nd in	1/2					
Corr.Solids % by vol		5.1					
Oil/Water % by vol		0.0/93.7					
Sand % by vol		0.25					
MBT		0.6					
pH METER @ 20	Deg C	8.0		*			8.5 9.2
Alk. Mud (Pm)		0.10					
Alk. Filtr. (PF/ME)		0.01/0.18					
Chlorides	mg/l	22000					
Hard. Ca	mg/l	300					
Low Gravity Solids	ppb	25.30					< 91.00
6 rpm		7					6.00 10.00
KCl Content	ppb	11					11.00 14.00
Excess sulfite	mg/l	80					

BARAZAN-D Plus used to build 100 bbls of hi-vis spotted on bottom prior to POOH.

Barite used for slugs.

KCl content : 3 %

MATERIALS USED				SOLIDS EQUIPMENT					
Product	Used	Cost	Product	Used	Cost	Device	Make	Sz/Scrn	HR
BARAZAN-D PLUS - 25 KG.	BAG	2	719.96			Shkr #1	Scalper	10	4
barite - 1000 KG.	TON	0.600	193.33			Shkr #2	Scalper	10	4
						Shkr #3	Sweco LM3	150 x 3	4
						Shkr #4	Sweco LM3	150 x 3	4
						Shkr #5	Sweco LM3	150 x 3	4
						Shkr #6	Sweco LM3	80 x 3	4
						dSndr	Crestex	3 x 10"	
						dSlt #1	Crestex	16 x 5"	

**RIG ACTIVITY**

Logs unable to get past 1029 m. Rig down Schlumberger. Pick up 8-1/2" BHA. RIH. Wash & ream from 880 - 982 m & 1027 - 1095 m. RIH. Circulate & condition mud @ 1191 m. RIH to TD. Circulate bottoms up. Pump hi-vis sweep. POOH - no problem. Rig up & log. Logs unable to get past 869 m. Change logging tool configuration - still unable to get further. Rig down. Break & laydown excess drillpipe. Prepare to P & A.

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT				TIME	
MUD VOLUME		MUD TYPE											
Hole	Pits	KCL/EZ MUD/POLYMER		600 rpm	54	Water Depth	21.7	DRLG				0.00	
317	509	MUD CONSUMPTION		300 rpm	39	Calc. F. Grad	0.0	CIRC				1.50	
Active Volume				200 rpm	32	Leak Off Test	13.0	TRIPS				7.25	
826		ADDITIONS		100 rpm	24	ECD	ppg	SRV. RIG				0.00	
Reserve		Oil		6 rpm	7	Csg. Shoe	0.0	SURVEY				0.00	
Total		Brine Water		3 rpm	5	TD	0.0	FISHING				0.00	
826		Drill Water		Pressure Units:	psig	Max. Diff. Press	0	LOGGING				7.25	
Low Grav, vol %		Sea Water		0				RUN CSG				0.00	
ppb		Whole Mud		0				CORE				0.00	
25.30		Barite		0				BACK REAM				0.00	
High Grav, vol %		Chemicals		2				REAMING				2.00	
ppb		LOSSES		0				TESTING				0.00	
33.81		Dumped		38				OTHER				6.00	
ASG		Lost		19				AVERAGE ROP				0.00	
3.41		VOL GAIN/LOSS		-55									
Drill Cuttings				AV, DP	m/min	0.0							
0				AV, DC	m/min	0.0							
Dilution Rate				AV, Riser	m/min								
0.00													
Slids Control Eff													
0.00													

MUD MANAGEMENT		RHEOLOGY AND HYDRAULICS		FRACTURE GRADIENT		TIME	
BAROID REPRESENTATIVE	OFFICE/HOME	Melbourne	TELEPHONE	(03) 9621 3311	DAILY COST	CUMULATIVE COST	
Nicholas Doust	WARBHOUSE	Welshpool	TELEPHONE	(03) 56 881 445	\$A	913.29	\$A 77576.59

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

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Baroid Australia Pty Ltd  
 DRILLING MUD REPORT  
 ( Cost Modified )

REPORT NUMBER: 13

Date	28/01/98	Depth	1345.0m [MD]
Spud Date	17/01/98	Present Activity	PLUG & ABANDON

OPERATOR Amity Oil NL	CONTRACTOR Santa Fe Drilling	RIG NUMBER Paramswara
REPORT FOR Wally Westman/Chris Roots	REPORT FOR Mike Walker/ Blain Wilkie	REGION Victoria
WELL NAME AND NUMBER Broadbill 1	FIELD OR BLOCK VIC P/36	GEOGRAPHIC AREA Bass Strait
		COUNTRY Austral

BIT DATA		DRILLING STRING			CASING		CIRCULATION DATA						
Size	in.	Pipe OD	ID	Len.			Pump Make/Model	Ideco T-1600					
Type		Pipe OD	ID	Len.	in.	m	Size	6.5 X 12	Eff.	97.00	V/st	0.120	
No. Jets		Pipe OD	ID	Len.	30	Set @	106.0	opm	0	bbl/min	0.0		
Jets 32nd inch		Collar OD	ID	Len.	9 5/8	Set @	779.0	Pump Make/Model	Ideco T-1600				
		Collar OD	ID	Len.		Set @		Size	6.5 X 12	Eff.	97.00	V/st	0.120
		in. OPEN HOLE			m	Set @		spm	0	bbl/min	0.0		
Tot Noz Area		Size	8.5	Len.	566.0	Set @		Pump Make/Model					
TFA		Size		Len.		Set @		Size		Eff.		V/st	
		Size		Len.		Set @		opm		bbl/min			
		Size		Len.		Set @		Tot. Vol./min	0	gpm	0.0	bbl	
		Size		Len.		Set @		BU Time	0	TC Time	0		

MUD PROPERTIES						MUD TREATMENTS					
		Primary		2	3			All chemicals used for P & A.			
Source		Pits, Unchr				Program	Essential	Mud engineer leaves rig.			
Time		22:36				Targets	Program				
FL Temp	Deg C	0				*=Excep	Properties				
Depth	m	1345.0				P 2 3	784.9 1654.1				
Weight	ppg	9.5					9.0 9.5				
FV @ 16	Deg C sec/qt	28									
PV @ 49	Deg C cP	1					< 30				
YP	lbs/100 ft2	0									
Gels	lbs/100 ft2	0/0									
API Filt.	ml/30 min	0.0					< 6.0				
HTHP @ 121	Deg C ml/30 min	0.0					< 15.0				
Cake API/HTHP	32nd in	2/0									
Corr.Solids % by vol		0.0									
Oil/Water % by vol		0.0/0.0									
Sand % by vol											
NBT		0.0									
pH METSR @ 20	Deg C	0.0				*	8.5 9.2				
Alk. Mud (Pm)		0.00									
Alk. Filtr. (PE/HF)		0.00/0.00									
Chlorides mg/l		0									
Hard. Ca mg/l		0									
Low Gravity Solids ppb		0.00					< 91.00				
6 rpm		0				*	6.00 10.00				
KCl Content	ppb					*	11.00 14.00				
Excess sulfite	mg/l										

MATERIALS USED						SOLIDS EQUIPMENT					
Product		Used	Cost	Product		Used	Cost	Device	Make	Sz/Scrn	HR
ALDACIDS G - 25 L. CAN		1	203.96					Shkr #1	Scalper	10	
BAPACOR 129 - 25 KG. DRUM		6	359.88					Shkr #2	Scalper	10	
								Shkr #3	Sweco LM3	150 x 3	
								Shkr #4	Sweco LM3	150 x 3	
								Shkr #5	Sweco LM3	150 x 3	
								Shkr #6	Sweco LM3	80 x 3	
								dSndr	Crestex	3 x 10"	
								dSlr #1	Crestex	16 x 5"	

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT				TIME		
MUD VOLUME		MUD TYPE												
Hole	317	Pits	509	KCL/EZ MUD/POLYMER				Water Depth	21.7	DRLG		0.00		
				MUD CONSUMPTION				Calc. F. Grad	0.0	CIRC		0.00		
				ADDITIONS				Leak Off Test	13.0	TRIPS		0.00		
Active Volume	826			Oil				ECD	ppg	SERV. RIG		0.00		
				Brine Water				Csg. Shoe	0.0	SURVEY		0.00		
Reserve		Total	826	Drill Water				TD	0.0	FISHING		0.00		
				Sea Water				Max. Diff. Press	0	LOGGING		0.00		
Low Grav, vol %	0.0			Whole Mud				Pressure Units:	psig	RUN CSG		0.00		
ppb	0.00			Barite				Press Drop. DP	0	CORE		0.00		
High Grav, vol %	0.0			Chemicals				Press Drop. BIT	0	BACK REAM		0.00		
ppb	0.00			LOSSES				Press Drop. ANN	0	RAMING		0.00		
ASG	2.60			Dumped				Actual Circ. Press	0	TESTING		0.00		
Drill Cuttings	0			Lost				AV, DP	m/min	0.0	OTHER		24.00	
Dilution Rate	0.00			VOL GAIN/LOSS				AV, DC	m/min	0.0	AVERAGE ROP		0.00	
Slids Control Eff	0.00							AV, Riser	m/min		Horiz. Displ		0.0 m	

MUD MANAGEMENT				RHEOLOGY AND HYDRAULICS				FRACTURE GRADIENT				TIME	
BAROID REPRESENTATIVE		OFFICE/HOME		Melbourne		TELEPHONE		(03) 9621 3311		DAILY COST		CUMULATIVE COST	
Nicholas Doust		WAREHOUSE		Weshpool		TELEPHONE		(03) 56 881 445		\$A 563.84		\$A 78140.43	

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**APPENDIX 5**

**PETROPHYSICAL LOG ANALYSIS**

CROCKER DATA PROCESSING PTY LTD

Company : AMITY OIL NL  
Well Name : BROADBILL-1  
Field : WILDCAT  
Country : AUSTRALIA  
Latitude : 038 35' 25.600" S DMS  
Longitude : 147 01' 17.900" E DMS  
Permanent Datum : MSL  
Elevation of PD : .00 M

Software by Crocker Data Processing Pty Ltd  
Program revision no. 6.20 1 Apr 1998  
Software Licensed to CROCKER DATA PROCESSING PTY LTD

Hole depth M	Temperature C	Gradient Deg C / 100 M
1000.0	45.33	1.8666
.0	26.67	

Log data

Column Position	Logs Available	Logs Used
1	DEPT	DEPT
2	GR	GR
3	DT	DT
4	TNPH	NPHI
5	CALI	CALI
6	PEF	PEF
7	DRHO	DRHO
8	RHOB	RHOB
9	CALS	
10	MSFL	MSFL
11	LLS	LLS
12	LLD	LLD
13	SP	SP
14		
15		
16		
17		
18		
19		
20		

BROADBILL-1  
AMITY OIL NL

Interpretation Results  
28-01-98

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 : LDT  
RHO (H,MA,f) units : g/cc  
Dens. X-plots units : g/cc

Log scaling data

Log Mnemonic	Scaling Option	Coeff. A	Coeff. B
PEF	1	-.60000	1.00000

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

COMPLEX LITHOLOGY RESULTS

Mineral table  
-----

Zone no.	1	2	3
Formation Name			
Top depth	779.983	850.087	779.983
Bottom depth	849.935	963.016	849.935
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	.000	.000	.000
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	.000	.000	.000
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	.000	.000	.000
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	.000	.000	.000
Coal	RHOB	min	-INF	-INF	-INF
Coal	RHOB	max	2.000	2.000	2.000
Coal	PHIN	min	.500	.500	.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	20.000	20.000
Coal	RT	max	+INF	+INF	+INF
Coal	USER	min	-INF	-INF	-INF
Coal	USER	max	.000	.000	.000

Permeability equation used

a) SWirr cutoff <1.0

$K_{oil} = K_{coef} * PHIE ** K_{exp} / SW^{**2}$	Kcoef	Kexp
Computed if SW<=SWirr cutoff	Coates 62500	6.0
	Timur 8581	4.4

b) SWirr cutoff >=1

$K_{oil} = K_{coef} * 10^{**}(PHIE * K_{exp})$

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 :  $VGR = 1.7 - \text{SQRT}(3.38 - (IGR + 0.7) ** 2.0)$

Cementation factor m

-----

1. Linear m = m
2. Shell formula  $m = 1.87 + 0.019 / \text{PHI}$
3. Borai formula  $m = 2.2 - 0.035 / (\text{PHI} + 0.042)$

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

Logging Company	Mud type	Neutron log type	RT Determination Flags by priority
0. Schlumberger	0. NaCl	0. CNL CORR	1. Dual Laterolog - RXO
1. HLS	1. KCl %	1. TNPH	20. PHASOR-SFL
2. Dresser	2. Oil-base	2. SNP	21. PHASOR-RXO
3. BPB	3. Barite	3. N	2. Dual Induction - LL8
4. Sperry MWD		4. HLS DSN2	3. ILD-SFL-RXO
5. Baker MWD		5. CNL PRE 86	10. DIL-SFL
6. Anadril MWD		6. APLU	11. DIL-LL3
		7. FPLU	8. ILD & 16 inch Normal
		8. CDN 6.5"	17. LLD-LLS
		9. CDN 8.0"	18. ID PHASOR
Formation		10. ADN 6.75	4. ILD
Water		11. ATLAS 2435 CN	5. LLD
-----		12. ATLAS 2420 CN	6. LL3 or LL7
0=NaCl		13. ATLAS SNP	7. Dual Laterolog
1=NaHCO3		14. BPB	13. LLS
		15. HLS G	19. IM PHASOR
			14. ILM
			15. LL8
			9. 64 inch Normal Log
			12. SFL
			22. ERT (external RT)
			16. RXO
			0. No RT logs

Zone no.	1	2	3
Formation Name			
Top depth	779.983	850.087	779.983
Bottom depth	849.935	963.016	849.935
Logging Company	0	0	0
Mud type	1	1	1
Formation Water Type	0	0	0
Neutron Log Type	0	0	0

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

Zone no.	1	2	3
Formation			
1. Top depth	779.983	850.087	779.983
2. Bottom depth	849.935	963.016	849.935
3. No logs			
4. RM	.201	.201	.201
5. Temp. RM	21.000	21.000	21.000
6. RMF	.183	.183	.183
7. Temp. RMF	20.000	20.000	20.000
8. RMC	.351	.351	.351
9. Temp. RMC	20.000	20.000	20.000
10. Bit size	12.250	8.500	12.250
11. Mud wt	1.100	1.100	1.100
12. SSP	.000	.000	.000
13. RW (SP)	.076	.075	.076
14. FT=Form temp	41.879	43.589	41.879
15. RW @ FT	.416	3.564	.219
16. RW@75F(23.9C	.581	5.110	.306
17. KPPM (RW)	10.000	1.000	20.000
18. RMF @ FT	.120	.117	.120
19. KPPM (RMF)	39.138	39.138	39.138
20. RM @ FT	.135	.131	.135
21. RHO H	.800	.800	.800
22. RHO F	1.026	1.025	1.026
23. t F	188.990	188.990	188.990
24. RHOMA	2.650	2.650	2.650
25. PHIN min	-.035	-.035	-.035
26. t MA	55.500	55.500	55.500
27. t MA min	48.000	48.000	48.000
28. Sonic option	.000	.000	.000
29. Compact/Over	1.300	1.300	1.300
30. CAL cut off	12.000	12.000	12.000
31. RUGO.cut off	1.000	1.000	1.000
32. DRHO cut off	.060	.040	.060
33. No clay	SP MN SD	SP MN SD	SP MN SD
34. Vclay Flag	.000	.000	.000
35. Vclay type	.000	.000	.000
36. Vclay inpl	.200	.200	.200
37. Vclay out1	.150	.150	.150
38. Vclay inp2	.800	.800	.800
39. Vclay out2	.800	.800	.800
40. Vclay 50%	.500	.500	.500
41. VclayGR type	1.000	1.000	1.000
42. GR clean	30.448	18.765	30.448
43. GR clay	101.258	112.942	101.258



44. GR1	44.610	37.809	44.610
45. VGR1	.100	.100	.100
46. GR2	87.096	91.238	87.096
47. VGR2	.800	.800	.800
48. GR50%	70.000	70.000	70.000
49. R clay	7.645	53.769	7.645
50. R limit	1000.000	1000.000	1000.000
51. Rclay1 flag	.000	.000	.000
52. Rclay1	1.000	1.000	1.000
53. Vcl @ Rclay1	.150	.150	.150
54. RHOB clay	2.007	2.134	2.007
55. PHIN clay	.440	.432	.440
56. t clay	134.260	125.311	134.260
57. M clay	.558	.574	.558
58. N clay	.571	.512	.571
59. PHIN 2.2	.235	.235	.235
60. t 2.2	90.000	90.000	90.000
61. COER (a)	.620	.620	.620
62. MXP (m)	2.150	2.150	2.150
63. m Function	1.000	1.000	1.000
64. SXP (n)	2.000	2.000	2.000
65. Lithomod	1.000	1.000	1.000
66. SXO limit	.200	.200	.200
67. P.II max	.495	.410	.495
68. PHI min c.o.	.0010000	.0010000	.0010000
69. EXPX	1.500	1.500	1.500
70. Clay cut off	.300	.300	.300
71. Por. cut off	.050	.050	.050
72. SV cut off	.500	.500	.500
73. Sat Equation	1.000	1.000	1.000
74. Glauconite	.000	.000	.000
75. SWirr.cutoff	.300	.300	.300
76. Perm Expon.	6.000	6.000	6.000
77. PERM K coef	62500.000	62500.000	62500.000
78. RHOMA 1	2.650	2.650	2.650
79. RHOMA 2	2.742	2.723	2.742
80. RHOMA 3	2.850	2.850	2.850
81. UMA 1	4.800	4.800	4.800
82. UMA 2	24.987	25.817	24.987
83. UMA 3	8.970	8.970	8.970
84. UF	.400	.400	.400
85. UMACL	8.000	8.000	8.000
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

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
779.98	38	1.3	1.5	50.0	1.931	-3.1	2.9	75.0	53.0	37.9	10.7	GR	2.768	75.0	75.0	43.4	2.765	.00	.00	
780.14	38	1.6	1.7	47.7	1.918	-3.1	4.7	70.1	50.6	35.6	11.1	GR	2.718	70.1	70.1	42.6	2.721	.00	.00	
780.29	39	1.8	1.9	45.5	1.905	-3.1		94.7	69.7	33.4	11.6	GR	2.650	94.7	94.7	29.5	2.660	.00	.00	4 7
780.44	40	2.2	.5	44.6	1.633	-1.9		78.9	124.4	37.5	13.9	GR	2.650	95.4	78.9	32.3	2.663	.00	.00	4 7
780.59	42	2.1	.4	45.3	1.577	-.3		71.2	122.2	42.4	16.0	GR	2.650	93.4	71.2	35.6	2.665	.00	.00	4 7
780.75	43	2.1	.3	46.0	1.521	1.3		68.4	130.0	47.2	17.8	GR	2.650	92.7	68.4	36.9	2.666	.00	.00	4 78
780.90	43	2.9	.3	43.8	1.654	1.4		62.0	144.8	42.7	18.4	GR	2.650	90.9	62.0	34.9	2.667	.00	.00	4 7
781.05	44	3.4	.3	41.5	1.787	1.5		63.8	172.2	38.3	18.9	GR	2.650	91.4	63.8	31.1	2.667	.00	.00	4 7
781.20	47	3.3	.5	40.2	1.682	1.5		63.6	126.5	40.5	23.3	GR	2.650	91.3	63.6	31.1	2.671	.00	.00	4 7
781.35	51	2.9	.4	43.3	1.569	3.2		68.7	145.2	44.6	28.7	GR	2.650	92.8	68.7	29.8	2.676	.00	.00	4 78
781.51	55	2.4	.3	46.4	1.456	5.0		80.4	184.9	48.7	34.1	GR	2.650	95.7	80.4	26.5	2.681	.00	.00	4 78
781.66	54	2.6	.3	51.7	1.566	4.1		76.1	162.6	47.7	33.0	GR	2.650	94.7	76.1	27.2	2.680	.00	.00	4 78
781.81	53	2.8	.4	56.9	1.676	3.3		72.3	145.6	46.7	31.9	GR	2.650	93.7	72.3	27.9	2.679	.00	.00	4 78
781.96	45	3.6	1.0	45.9	2.043	1.0		59.3	86.3	40.2	20.3	GR	2.650	86.3	59.3	32.1	2.668	.00	.00	4 7
782.12	43	4.6	1.3	45.5	2.068	.8		54.5	77.6	38.0	17.8	GR	2.650	77.6	54.5	31.2	2.666	.00	.00	4 7
782.27	41	6.4	1.6	45.1	2.093	.6		48.4	72.3	35.8	15.3	GR	2.650	72.3	48.4	30.3	2.664	.05	.02	4 7 \$
782.42	43	4.9	1.3	44.3	2.022	1.1		57.0	84.3	35.1	17.6	GR	2.650	84.3	57.0	28.9	2.666	.05	.02	4 7
782.57	45	4.4	1.0	43.5	1.951	1.6		62.4	101.7	34.5	20.0	GR	2.650	91.0	62.4	27.6	2.668	.05	.02	4 7
782.73	50	3.5	.5	40.4	1.732	1.9		62.2	129.3	41.7	28.2	GR	2.650	90.9	62.2	30.0	2.676	.05	.02	4 7
782.88	51	3.4	.5	45.0	1.730	2.2		65.1	129.3	40.3	29.1	GR	2.650	91.8	65.1	28.6	2.676	.05	.02	4 7
783.03	52	3.4	.6	49.7	1.728	2.5		68.2	129.8	39.0	30.0	GR	2.650	92.6	68.2	27.3	2.677	.05	.02	4 7
783.18	50	2.8	1.1	51.5	1.578	.4		67.8	83.2	45.9	27.1	GR	2.650	83.2	67.8	30.8	2.675	.05	.02	4 78
783.34	53	2.4	.7	48.7	1.556	.4		78.9	113.0	49.2	32.3	GR	2.650	95.4	78.9	27.6	2.679	.05	.02	4 78
783.49	57	2.2	.3	46.0	1.533	.5		89.1	182.2	52.4	37.5	GR	2.650	97.7	89.1	24.5	2.684	.05	.02	4 78
783.64	57	2.5	.5	45.1	1.678	-.9		83.3	147.2	46.1	37.6	GR	2.650	96.4	83.3	24.5	2.684	.05	.02	4 78
783.79	57	2.8	.7	44.3	1.821	-2.3		77.9	125.5	39.8	37.1	GR	2.650	95.1	77.9	24.7	2.684	.05	.02	4 78
783.95	56	2.6	1.5	37.0	2.048	-3.1	.0	86.4	88.4	41.6	36.8	GR	2.668	88.4	86.4	22.9	2.690	.05	.02	
784.10	58	2.7	1.2	38.4	2.039	-3.5	.0	83.9	99.2	42.1	39.3	GR	2.677	96.6	83.9	22.7	2.697	.05	.02	
784.25	60	2.7	.9	39.8	2.032	-3.8	.0	84.7	115.3	42.6	41.6	GR	2.689	96.7	84.7	22.4	2.706	.05	.02	
784.40	60	2.8	1.1	42.4	2.003	-3.6	.0	77.0	95.7	42.4	41.9	GR	2.702	94.9	77.0	24.3	2.716	.05	.02	
784.56	60	2.8	1.4	45.0	1.975	-3.3	.0	72.6	81.3	42.2	42.2	GR	2.721	81.3	72.6	26.2	2.730	.05	.02	
784.71	61	2.4	.7	42.9	1.893	-3.2	.0	72.8	102.7	41.5	42.6	GR	2.586	93.8	72.8	28.4	2.653	.05	.02	6 8
784.86	59	2.3	.7	45.0	1.901	-3.3	.0	73.3	98.9	42.3	40.1	GR	2.640	94.0	73.3	29.7	2.680	.05	.02	8
785.01	57	2.1	.8	47.2	1.912	-3.5	.0	74.1	95.3	43.2	37.5	GR	2.692	94.2	74.1	31.0	2.708	.05	.02	8
785.16	58	2.2	.8	46.1	1.943	-3.2	.0	75.7	97.0	45.5	38.7	GR	2.705	94.6	75.7	29.3	2.718	.05	.02	
785.32	59	2.4	.9	45.1	1.972	-2.9	.0	76.8	100.1	47.7	39.9	GR	2.718	94.9	76.8	27.3	2.727	.05	.02	
785.47	62	2.1	.9	46.9	1.962	-3.3	.0	81.8	99.4	50.7	44.7	GR	2.749	96.1	81.8	26.4	2.745	.05	.02	
785.62	62	1.9	.8	48.1	1.984	-3.3	.0	86.0	102.4	53.1	44.5	GR	2.813	97.0	86.0	26.4	2.780	.05	.02	
785.77	62	1.7	.8	49.3	2.005	-3.3	.0	90.5	105.7	55.5	44.2	GR	2.876	98.0	90.5	26.3	2.814	.05	.02	
785.93	54	2.1	1.0	44.8	2.089	-2.8	.0	86.2	97.2	53.8	32.8	GR	2.852	97.1	86.2	26.6	2.815	.05	.02	
786.08	50	2.3	1.1	42.8	2.125	-2.9		74.9	84.4	54.6	27.3	GR	2.650	84.4	74.9	30.7	2.675	.05	.02	4 78
786.23	46	2.5	1.1	40.9	2.160	-2.9		66.9	75.5	55.3	21.7	GR	2.650	75.5	66.9	34.3	2.670	.05	.02	4 78
786.38	46	2.7	1.1	38.9	2.173	-3.1		64.4	76.0	55.7	22.6	GR	2.650	76.0	64.4	33.7	2.670	.05	.02	4 78
786.54	47	2.9	1.1	36.9	2.184	-3.3		62.7	76.5	56.1	23.4	GR	2.650	76.5	62.7	33.2	2.671	.05	.02	4 78
786.69	48	3.0	1.7	33.4	2.209	-3.6	.0	92.6	95.1	49.6	24.2	GR	2.770	95.1	92.6	21.6	2.762	.05	.02	
786.84	49	3.4	1.3	33.8	2.218	-3.4	.0	88.8	110.7	48.4	26.2	GR	2.789	97.7	88.8	20.8	2.775	.05	.02	

786.99	50	3.6	.9	34.3	2.227	-3.3	.0	87.2	134.3	47.3	28.2	GR	2.809	97.3	87.2	20.0	2.788	.05	.02
787.15	47	4.4	2.5	32.3	2.288	-3.5	.0	84.6	86.0	43.0	24.1	GR	2.838	86.0	84.6	19.3	2.813	.05	.02
787.30	45	4.6	4.2	30.3	2.349	-3.8	.0	88.0	70.7	38.7	20.0	GR	2.865	88.0	88.0	18.7	2.838	.05	.02
787.45	48	3.6	2.4	27.3	2.142	-3.7	.0	86.0	82.1	45.7	25.2	GR	2.636	86.0	86.0	20.8	2.658	.05	.02
787.60	53	3.5	1.5	31.4	2.089	-3.5	.0	80.0	96.3	44.4	31.2	GR	2.638	95.6	80.0	21.8	2.664	.05	.02
787.76	57	3.2	.6	35.5	2.036	-3.3	.0	78.8	139.0	43.2	37.2	GR	2.637	95.4	78.8	22.8	2.670	.05	.02
787.91	56	3.7	1.9	36.0	2.138	-3.5	.0	83.6	91.3	40.2	36.7	GR	2.738	91.3	83.6	19.4	2.738	.05	.02
788.06	56	3.8	3.3	36.6	2.239	-3.7	.0	89.0	75.9	37.2	36.3	GR	2.887	89.0	89.0	17.7	2.831	.05	.02
788.21	64	3.6	2.0	33.3	2.119	-3.8	.0	98.5	107.0	36.5	47.8	GR	2.667	99.7	98.5	14.2	2.695	.05	.02
788.37	65	3.6	1.5	34.1	2.042	-3.7	.0	85.5	106.9	39.2	48.6	GR	2.603	96.9	85.5	17.2	2.661	.05	.02

Zone No. 1

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
788.52	65	3.4	1.0	34.9	1.964	-3.5	.0	77.2	115.9	41.8	49.4	GR	2.522	95.0	77.2	20.3	2.623	.05	.02	6
788.67	62	3.2	1.2	37.3	1.950	-3.5	.0	72.0	95.3	43.1	44.1	GR	2.561	93.6	72.0	23.9	2.636	.05	.02	6
788.82	58	3.2	1.3	39.7	1.936	-3.5	.0	66.4	80.1	44.4	38.7	GR	2.596	80.1	66.4	27.5	2.649	.05	.02	6
788.97	58	2.6	.8	42.1	1.931	-3.0	.0	71.1	98.7	47.7	39.2	GR	2.626	93.4	71.1	28.2	2.669	.05	.02	
789.13	58	2.5	.9	41.3	1.946	-2.9	.0	74.2	99.1	51.4	39.0	GR	2.630	94.2	74.2	27.5	2.671	.05	.02	
789.28	58	2.4	.9	40.5	1.961	-2.8		85.9	111.0	55.2	38.8	GR	2.650	97.0	85.9	23.7	2.685	.05	.02	4 78
789.43	57	2.4	.8	43.5	1.927	-2.5	.0	71.8	96.2	48.7	38.1	GR	2.647	93.6	71.8	29.4	2.681	.05	.02	
789.58	54	3.0	1.1	43.2	1.985	-3.0	.0	67.4	84.3	47.4	32.7	GR	2.701	84.3	67.4	29.2	2.712	.05	.02	
789.74	50	3.4	1.4	42.8	2.041	-3.5	.0	63.9	75.8	46.1	27.4	GR	2.755	75.8	63.9	29.4	2.751	.05	.02	
789.89	49	3.4	2.1	38.9	2.081	-3.5	.0	70.6	68.8	42.6	26.6	GR	2.728	70.6	70.6	26.7	2.731	.05	.02	
790.04	49	3.3	2.8	35.1	2.121	-3.5	.0	78.8	66.4	39.1	25.8	GR	2.705	78.8	78.8	24.0	2.711	.05	.02	
790.19	54	2.9	1.0	33.7	2.017	-2.8	.0	79.0	103.0	45.6	33.7	GR	2.603	95.4	79.0	24.4	2.644	.05	.02	6
790.35	55	2.8	1.1	35.0	1.972	-2.8	.0	74.6	93.5	46.5	34.3	GR	2.578	93.5	74.6	26.4	2.629	.05	.02	6
790.50	55	2.8	1.1	36.3	1.928	-2.8	.0	70.5	85.4	47.3	35.0	GR	2.549	85.4	70.5	28.3	2.633	.05	.02	6
790.65	54	2.9	1.3	37.5	1.918	-2.9	.0	66.2	78.0	45.4	33.4	GR	2.558	78.0	66.2	29.8	2.617	.05	.02	6
790.80	53	3.0	1.4	38.6	1.908	-2.9	.0	63.3	71.7	43.6	31.8	GR	2.568	71.7	63.3	31.2	2.622	.05	.02	6
790.96	49	2.7	1.0	38.3	1.903	-3.4	.0	64.2	80.8	45.9	25.9	GR	2.572	80.8	64.2	33.8	2.615	.05	.02	6
791.11	52	2.5	1.0	39.1	1.911	-3.2	.0	67.9	83.5	48.7	30.0	GR	2.582	83.5	67.9	32.0	2.629	.05	.02	6
791.26	55	2.4	1.0	40.0	1.917	-2.9	.0	71.8	86.3	51.6	34.1	GR	2.591	86.3	71.8	30.3	2.641	.05	.02	6
791.41	55	2.5	1.0	42.0	1.943	-3.3	.0	71.5	88.8	50.3	34.7	GR	2.644	88.8	71.5	29.6	2.675	.05	.02	
791.57	55	2.6	1.0	43.9	1.971	-3.7	.0	71.8	91.6	48.9	35.3	GR	2.698	91.6	71.8	28.9	2.710	.05	.02	
791.72	53	2.7	1.0	36.9	2.045	-3.8	.0	80.4	101.2	45.1	31.6	GR	2.669	95.7	80.4	25.2	2.687	.05	.02	
791.87	54	2.0	1.0	35.3	2.036	-3.5	.0	94.8	103.2	45.9	33.4	GR	2.639	98.9	94.8	24.3	2.668	.05	.02	
792.02	55	1.5	1.1	33.7	2.026	-3.3	.0	114.0	105.3	46.8	35.2	GR	2.609	100.0	100.0	23.4	2.649	.05	.02	6
792.18	53	2.7	1.2	38.0	2.040	-3.5	.0	79.6	93.4	44.1	32.0	GR	2.679	93.4	79.6	25.6	2.695	.05	.02	
792.33	53	2.6	1.3	37.6	2.064	-3.2	.0	83.3	92.3	45.2	31.9	GR	2.691	92.3	83.3	24.6	2.703	.05	.02	
792.48	53	2.6	1.4	37.1	2.086	-3.0	.0	87.2	91.5	46.3	31.7	GR	2.702	91.5	87.2	23.6	2.711	.05	.02	
792.63	56	2.6	1.3	37.4	2.043	-3.0	.0	84.4	92.3	49.0	35.7	GR	2.670	92.3	84.4	23.7	2.691	.05	.02	
792.78	59	2.6	1.2	37.8	1.999	-3.0	.0	81.8	93.5	51.7	39.7	GR	2.631	93.5	81.8	23.9	2.669	.05	.02	
792.94	64	2.3	.7	40.4	1.955	-2.5	.0	84.7	121.8	51.8	46.8	GR	2.611	96.7	84.7	23.5	2.668	.05	.02	6
793.09	64	2.4	.9	40.2	1.990	-2.2	.0	87.7	117.0	49.9	46.7	GR	2.648	97.4	87.7	22.1	2.687	.05	.02	
793.24	63	2.5	1.0	40.0	2.025	-2.0	.0	90.4	114.3	48.0	46.6	GR	2.682	98.0	90.4	20.7	2.704	.05	.02	
793.39	62	2.4	.9	40.7	2.017	-2.2	.0	89.3	113.9	50.4	44.9	GR	2.687	97.8	89.3	22.0	2.706	.05	.02	
793.55	61	2.2	.9	41.4	2.010	-2.5	.0	89.4	114.0	52.8	43.1	GR	2.691	97.8	89.4	23.2	2.708	.05	.02	
793.70	53	2.0	.8	41.8	1.984	-2.9	.0	81.6	98.5	52.1	32.1	GR	2.681	96.0	81.6	29.1	2.697	.05	.02	
793.85	51	2.3	.8	40.4	2.053	-3.0	.0	82.0	105.1	49.0	28.7	GR	2.724	96.1	82.0	27.4	2.728	.05	.02	
794.00	48	2.6	.9	39.0	2.122	-3.0	.0	82.2	110.7	45.9	25.4	GR	2.774	96.2	82.2	26.2	2.765	.05	.02	
794.16	47	3.4	1.3	37.5	2.211	-3.2	.0	78.6	96.8	41.9	23.7	GR	2.846	95.3	78.6	24.0	2.819	.05	.02	
794.31	46	4.1	1.8	36.1	2.298	-3.5	.0	78.6	90.2	37.8	22.0	GR	2.915	90.2	78.6	22.1	2.874	.05	.02	5
794.46	48	3.1	2.8	34.6	2.253	-3.8	.0	93.2	76.1	39.3	25.1	GR	2.842	93.2	93.2	20.9	2.815	.05	.02	
794.61	53	3.0	1.9	37.2	2.105	-3.3	.0	84.0	82.6	41.7	32.5	GR	2.723	84.0	84.0	22.7	2.728	.05	.02	
794.77	59	2.7	1.0	39.9	1.961	-2.9	.0	75.2	96.8	44.1	40.0	GR	2.623	94.4	75.2	26.0	2.666	.05	.02	
794.92	60	2.7	.8	42.5	1.910	-3.0	.0	69.3	98.9	46.3	41.5	GR	2.604	92.9	69.3	28.2	2.660	.05	.02	6
795.07	61	2.7	.6	45.2	1.860	-3.2	.0	68.7	111.4	48.4	43.1	GR	2.581	92.8	68.7	28.2	2.654	.05	.02	6 8
795.22	58	2.9	1.0	43.9	1.961	-2.4	.0	69.1	89.7	44.8	38.5	GR	2.687	89.7	69.1	28.0	2.705	.05	.02	
795.38	56	3.1	.9	43.3	1.919	-2.3	.0	62.4	90.2	43.3	35.5	GR	2.639	90.2	62.4	30.7	2.674	.05	.02	

795.53	53	3.2	.7	42.7	1.877	-2.3	.0	56.8	92.7	41.7	32.4	GR	2.592	89.3	56.8	33.5	2.641	.05	.02	6 8
795.68	55	2.7	.6	46.7	1.744	-2.7	.0	63.5	107.4	45.7	34.6	GR	2.474	91.3	63.5	32.4	2.625	.05	.02	6 8
795.83	59	2.7	.6	46.7	1.791	-2.3	.0	67.7	108.6	46.9	40.4	GR	2.519	92.5	67.7	29.6	2.621	.05	.02	6 8
795.99	63	2.6	.7	46.7	1.838	-2.0	.0	72.6	111.0	48.0	46.2	GR	2.568	93.8	72.6	26.7	2.655	.05	.02	6 8
796.14	62	2.5	.9	46.3	1.939	-2.3	.0	73.6	98.9	47.9	44.6	GR	2.701	94.1	73.6	27.0	2.718	.05	.02	
796.29	61	2.6	1.0	45.9	2.040	-2.7	.0	80.3	100.0	47.8	43.1	GR	2.834	95.7	80.3	24.2	2.794	.05	.02	
796.44	62	2.2	.9	43.9	2.048	-2.5	.0	90.5	113.8	50.2	44.1	GR	2.797	98.0	90.5	22.6	2.772	.05	.02	
796.59	61	2.4	.9	43.4	2.084	-2.5	.0	90.1	120.1	47.8	43.2	GR	2.835	97.9	90.1	21.8	2.793	.05	.02	
796.75	60	2.7	.8	42.9	2.120	-2.5	.0	88.0	126.5	45.3	42.2	GR	2.873	97.5	88.0	21.0	2.815	.05	.02	
796.90	55	3.4	2.1	38.1	2.187	-3.1	.0	84.3	84.4	42.0	34.2	GR	2.844	84.4	84.3	20.4	2.807	.05	.02	

Zone No. 1  
BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SKOU	PHIS	VCL	FWCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
797.05	49	4.0	3.5	33.2	2.253	-3.6	.0	85.6	71.6	38.8	26.3	GR	2.819	85.6	85.6	19.6	2.796	.05	.02	
797.20	52	2.9	2.1	31.9	2.111	-3.7	.0	90.2	83.9	40.3	31.1	GR	2.660	90.2	90.2	21.2	2.679	.05	.02	
797.36	57	2.7	1.5	36.8	1.990	-3.2	.0	78.9	82.8	45.2	37.3	GR	2.612	82.8	78.9	25.0	2.655	.05	.02	6
797.51	61	2.4	.9	41.7	1.867	-2.7	.0	74.2	93.4	50.2	43.6	GR	2.525	93.4	74.2	28.0	2.623	.05	.02	6 8
797.66	62	2.3	.8	43.7	1.861	-2.5	.0	76.8	102.2	51.8	45.1	GR	2.548	94.9	76.8	27.2	2.640	.05	.02	6 8
797.81	63	2.2	.7	45.7	1.855	-2.2	.0	79.7	113.1	53.5	46.6	GR	2.573	95.6	79.7	26.5	2.656	.05	.02	6 8
797.97	63	2.6	1.1	42.2	1.950	-2.6	.0	76.8	92.3	60.6	45.6	GR	2.638	92.3	76.8	24.8	2.682	.05	.02	
798.12	65	2.6	1.1	41.8	1.953	-2.5	.0	79.7	98.7	59.8	48.5	GR	2.629	95.6	79.7	23.3	2.680	.05	.02	
798.27	67	2.6	1.0	41.4	1.956	-2.5	.0	82.6	105.9	59.1	51.4	GR	2.618	96.3	82.6	21.8	2.678	.05	.02	
798.42	65	2.7	.9	43.0	1.967	-3.1	.0	78.8	107.7	54.1	49.2	GR	2.667	95.3	78.8	22.9	2.699	.05	.02	
798.58	64	2.8	.8	44.6	1.977	-3.7	.0	75.6	109.8	49.1	46.9	GR	2.711	94.6	75.6	24.0	2.725	.05	.02	
798.73	63	3.3	1.0	45.0	2.010	-3.9	.0	71.6	105.9	49.6	46.3	GR	2.773	93.5	71.6	23.3	2.758	.05	.02	
798.88	65	2.5	.9	45.3	1.981	-3.8	.0	81.0	105.6	45.5	48.1	GR	2.736	95.9	81.0	23.6	2.738	.05	.02	
799.03	66	2.0	.9	45.5	1.953	-3.8	.0	89.3	105.0	41.4	49.9	GR	2.699	97.8	89.3	24.0	2.719	.05	.02	
799.19	69	2.2	.9	42.9	2.022	-3.2	.0	99.0	123.4	42.6	54.2	GR	2.735	99.8	99.0	18.6	2.738	.05	.02	
799.34	68	2.4	1.2	41.5	2.112	-3.0	.0	107.2	126.2	42.3	53.4	GR	2.852	100.0	100.0	15.8	2.790	.05	.02	
799.49	68	2.7	1.4	40.1	2.201	-2.9	.0	113.1	129.8	42.1	52.5	GR	2.974	100.0	100.0	13.6	2.846	.05	.02	5
799.64	60	3.6	2.8	37.3	2.276	-3.3	.0	98.0	91.1	38.2	41.9	GR	2.975	98.0	98.0	15.1	2.871	.05	.02	5
799.80	53	4.8	4.2	34.5	2.354	-3.8	.0	87.1	74.1	34.2	31.5	GR	2.981	87.1	87.1	16.4	2.900	.05	.02	5
799.95	40	5.5	5.6	26.8	2.432	-3.8	.0	88.2	66.9	38.3	13.6	GR	2.884	88.2	88.2	17.9	2.862	.05	.02	
800.10	38	7.2	5.0	25.9	2.446	-3.8	.0	77.8	70.9	34.9	10.9	GR	2.878	77.8	77.8	18.2	2.862	.05	.02	
800.25	36	9.3	4.4	24.9	2.460	-3.8	.0	68.8	75.5	31.4	8.1	GR	2.873	75.5	68.8	18.6	2.861	.05	.02	
800.40	39	7.8	5.4	25.0	2.399	-3.8	.0	75.2	68.6	29.4	12.2	GR	2.818	75.2	75.2	17.8	2.807	.05	.02	
800.56	42	6.8	6.5	25.0	2.338	-3.8	.0	80.5	63.3	27.3	16.3	GR	2.757	80.5	80.5	17.1	2.754	.05	.02	
800.71	52	4.0	1.1	28.4	2.044	-3.7	.0	73.1	106.0	36.0	30.7	GR	2.570	93.9	73.1	22.9	2.615	.05	.02	6
800.86	54	3.8	1.2	32.4	2.032	-3.7	.0	71.5	100.6	38.6	32.7	GR	2.601	93.5	71.5	23.8	2.641	.05	.02	6
801.01	55	3.6	1.2	36.3	2.020	-3.6	.0	70.0	95.7	41.2	34.8	GR	2.637	93.1	70.0	24.7	2.668	.05	.02	
801.17	54	3.6	2.2	33.7	2.034	-3.6	.0	72.6	72.5	39.1	33.7	GR	2.617	72.6	72.6	23.7	2.653	.05	.02	
801.32	54	3.5	3.3	31.1	2.048	-3.5	.0	77.3	62.1	36.9	32.6	GR	2.600	77.3	77.3	22.8	2.639	.05	.02	6
801.47	52	3.8	1.1	27.4	2.025	-3.1	.0	73.8	108.2	36.6	30.7	GR	2.544	94.1	73.8	23.3	2.616	.05	.02	6
801.62	48	4.2	1.6	26.7	2.162	-3.4	.0	82.4	104.0	33.8	24.5	GR	2.644	96.2	82.4	20.2	2.664	.05	.02	
801.78	43	4.9	2.1	26.1	2.301	-3.8	.0	91.3	105.9	31.0	18.3	GR	2.735	98.2	91.3	17.6	2.736	.05	.02	
801.93	43	5.0	1.7	23.2	2.334	-3.8	.0	104.0	135.8	29.3	18.2	GR	2.719	100.0	100.0	15.1	2.723	.05	.02	
802.08	46	5.0	1.7	26.9	2.300	-3.8	.0	92.9	125.1	28.7	22.6	GR	2.749	98.5	92.9	16.3	2.747	.05	.02	
802.23	50	4.9	1.6	30.6	2.266	-3.7	.0	84.6	117.0	28.1	27.1	GR	2.783	96.7	84.6	17.4	2.770	.05	.02	
802.39	50	4.9	3.4	32.5	2.273	-3.7	.0	81.2	76.7	31.4	27.3	GR	2.829	81.2	81.2	18.4	2.803	.05	.02	
802.54	50	4.5	5.2	34.4	2.280	-3.7	.0	81.4	59.2	34.6	27.5	GR	2.875	81.4	81.4	19.2	2.835	.05	.02	
802.69	55	4.2	2.4	33.6	2.138	-3.8	.0	80.3	83.5	36.7	34.7	GR	2.697	83.5	80.3	19.1	2.707	.05	.02	
802.84	57	3.7	2.1	34.2	2.088	-3.8	.0	80.5	85.1	41.0	37.3	GR	2.664	85.1	80.5	20.2	2.687	.05	.02	
803.00	59	3.1	1.7	34.9	2.038	-3.8	.0	82.2	88.3	45.3	39.9	GR	2.626	88.3	82.2	21.3	2.666	.05	.02	
803.15	59	3.0	1.4	34.7	1.998	-3.2	.0	80.0	91.6	45.0	40.2	GR	2.585	91.6	80.0	22.7	2.642	.05	.02	6
803.30	59	2.8	1.1	34.5	1.957	-2.7	.0	78.4	96.9	44.6	40.4	GR	2.539	95.3	78.4	24.3	2.615	.05	.02	6
803.45	52	3.5	.9	34.3	2.062	-3.3	.0	74.9	116.2	40.6	31.1	GR	2.650	94.4	74.9	23.9	2.673	.05	.02	
803.61	52	3.7	3.2	32.4	2.212	-3.6	.0	91.9	77.9	37.4	30.3	GR	2.754	91.9	91.9	18.3	2.749	.05	.02	
803.76	51	3.8	5.5	30.5	2.362	-3.8	.0	108.2	71.0	34.1	29.5	GR	2.904	100.0	100.0	14.8	2.852	.05	.02	5
803.91	49	5.0	4.4	28.4	2.400	-3.8	.0	101.1	84.8	30.4	26.8	GR	2.905	100.0	100.0	14.1	2.857	.05	.02	5

804.06	48	6.1	3.3	26.4	2.439	-3.8	.0	97.6	105.0	26.7	24.1	GR	2.906	99.5	97.6	13.3	2.862	.05	.02
804.21	42	7.3	9.5	20.2	2.456	-3.9	.0	108.4	74.4	26.2	17.0	GR	2.798	100.0	100.0	11.7	2.787	.05	.02
804.37	43	6.8	6.5	20.7	2.392	-3.8	.0	104.0	82.5	28.2	17.3	GR	2.736	100.0	100.0	12.8	2.737	.05	.02
804.52	43	6.2	3.7	21.2	2.328	-3.8	.0	96.2	97.0	30.2	17.7	GR	2.692	97.0	96.2	14.6	2.698	.05	.02
804.67	45	5.5	3.9	25.0	2.278	-3.8	.0	87.6	80.8	31.8	20.1	GR	2.699	87.6	87.6	16.8	2.705	.05	.02
804.82	46	4.9	4.1	28.8	2.228	-3.9	.0	81.5	68.8	33.5	22.6	GR	2.707	81.5	81.5	19.1	2.713	.05	.02
804.98	46	5.2	3.4	32.7	2.206	-3.8	.0	69.1	65.5	32.7	21.4	GR	2.752	69.1	69.1	22.4	2.749	.05	.02
805.13	43	6.2	4.3	32.7	2.285	-3.8	.0	65.4	60.1	30.1	17.7	GR	2.833	65.4	65.4	22.3	2.816	.05	.02
805.28	40	7.3	5.2	32.6	2.363	-3.8	.0	62.0	56.0	27.5	14.1	GR	2.908	62.0	62.0	22.2	2.883	.05	.02
805.43	43	6.6	10.0	24.9	2.386	-3.8	.0	87.9	55.3	27.9	18.2	GR	2.808	87.9	87.9	15.5	2.795	.05	.02

Zone No. 1

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
805.59	46	6.8	6.7	25.5	2.316	-3.8	.0	84.4	66.7	29.3	22.5	GR	2.742	84.4	84.4	15.1	2.742	.05	.02	
805.74	49	7.0	3.5	26.1	2.247	-3.8	.0	78.1	87.7	30.7	26.9	GR	2.689	87.7	78.1	15.5	2.699	.05	.02	
805.89	50	6.4	4.4	27.8	2.234	-3.8	.0	78.1	74.7	30.6	27.8	GR	2.699	78.1	78.1	16.3	2.707	.05	.02	
806.04	51	5.9	5.3	29.6	2.222	-3.8	.0	78.3	65.0	30.4	28.8	GR	2.711	78.3	78.3	17.0	2.720	.05	.02	
806.20	49	5.9	4.0	29.1	2.226	-3.8	.0	76.5	72.4	31.3	25.7	GR	2.708	76.5	76.5	17.9	2.716	.05	.02	
806.35	46	7.0	5.3	29.4	2.267	-3.8	.0	69.6	62.3	28.4	22.6	GR	2.760	69.6	69.6	18.6	2.755	.05	.02	
806.50	44	8.0	6.6	29.7	2.308	-3.8	.0	64.6	55.0	25.6	19.5	GR	2.810	64.6	64.6	19.3	2.795	.05	.02	
806.65	45	8.0	6.9	27.4	2.340	-3.8	.0	72.0	60.0	25.4	20.2	GR	2.804	72.0	72.0	17.0	2.790	.05	.02	
806.81	45	8.0	7.3	25.1	2.372	-3.8	.0	81.5	66.5	25.3	21.0	GR	2.799	81.5	81.5	14.7	2.785	.05	.02	
806.96	53	6.3	3.4	26.4	2.236	-3.8	.0	86.0	93.6	28.1	32.1	GR	2.682	93.6	86.0	13.8	2.696	.05	.02	
807.11	53	5.7	3.2	29.8	2.195	-3.8	.0	78.5	82.9	29.5	32.4	GR	2.694	82.9	78.5	16.5	2.704	.05	.02	
807.26	54	5.3	3.1	33.3	2.155	-3.9	.0	72.5	75.0	30.9	32.8	GR	2.706	75.0	72.5	19.2	2.715	.05	.02	
807.42	50	6.1	3.3	32.4	2.188	-3.8	.0	67.4	71.2	30.2	27.1	GR	2.726	71.2	67.4	20.2	2.730	.05	.02	
807.57	46	7.0	3.5	31.5	2.221	-3.8	.0	62.3	67.5	29.4	21.5	GR	2.746	67.5	62.3	21.3	2.745	.05	.02	
807.72	41	8.3	5.8	27.6	2.335	-3.8	.0	65.8	59.9	24.9	15.1	GR	2.797	65.8	65.8	19.4	2.788	.05	.02	
807.87	44	7.7	6.1	27.0	2.320	-3.8	.0	72.7	62.9	24.6	19.5	GR	2.775	72.7	72.7	17.4	2.767	.05	.02	
808.02	47	7.0	6.4	26.5	2.306	-3.8	.0	81.2	66.6	24.2	23.9	GR	2.749	81.2	81.2	15.4	2.746	.05	.02	
808.18	48	7.1	3.3	30.6	2.258	-3.8	.0	68.0	77.6	27.0	24.6	GR	2.772	77.6	68.0	18.7	2.763	.05	.02	
808.33	45	6.1	4.1	29.3	2.297	-3.8	.0	76.1	71.3	28.8	21.2	GR	2.791	76.1	76.1	18.6	2.779	.05	.02	
808.48	43	5.0	5.0	28.0	2.336	-3.8	.0	86.7	66.8	30.6	17.8	GR	2.808	86.7	86.7	18.5	2.795	.05	.02	
808.63	43	4.6	3.6	26.3	2.337	-3.7	.0	95.7	83.3	32.1	18.2	GR	2.779	95.7	95.7	17.2	2.771	.05	.02	
808.79	44	4.3	2.3	24.6	2.338	-3.7	.0	106.9	111.7	33.7	18.7	GR	2.750	100.0	100.0	15.8	2.748	.05	.02	
808.94	42	5.1	4.3	27.1	2.341	-3.7	.0	87.4	73.5	37.1	16.9	GR	2.796	87.4	87.4	18.2	2.786	.05	.02	
809.09	41	5.7	4.5	27.0	2.351	-3.7	.0	82.1	70.5	35.4	14.9	GR	2.804	82.1	82.1	18.8	2.794	.05	.02	
809.24	40	6.2	4.6	27.0	2.361	-3.6	.0	77.4	67.8	33.8	12.8	GR	2.812	77.4	77.4	19.5	2.802	.05	.02	
809.40	42	5.3	4.9	25.8	2.304	-3.6	.0	85.9	68.2	31.5	16.0	GR	2.734	85.9	85.9	18.4	2.735	.05	.02	
809.55	44	4.6	5.2	24.6	2.247	-3.6	.0	90.0	65.0	29.2	19.2	GR	2.678	90.0	90.0	18.3	2.688	.05	.02	
809.70	53	3.7	2.4	28.8	2.192	-3.4	.0	97.4	95.7	39.1	31.2	GR	2.680	97.4	97.4	16.8	2.695	.05	.02	
809.85	52	3.8	1.8	29.4	2.174	-3.5	.0	91.0	103.9	39.1	30.4	GR	2.675	98.1	91.0	18.1	2.691	.05	.02	
810.01	51	3.7	1.2	30.1	2.155	-3.6	.0	87.5	119.3	39.1	29.6	GR	2.670	97.4	87.5	19.4	2.687	.05	.02	
810.16	52	3.5	3.0	30.4	2.149	-3.6	.0	89.4	75.7	38.8	30.8	GR	2.669	89.4	89.4	19.2	2.686	.05	.02	
810.31	53	3.1	4.9	30.7	2.143	-3.6	.0	95.5	59.6	38.5	32.0	GR	2.667	95.5	95.5	19.1	2.686	.05	.02	
810.46	55	2.8	.9	35.6	2.094	-2.9	.0	88.1	123.5	38.7	34.4	GR	2.688	97.5	88.1	21.6	2.702	.05	.02	
810.62	51	3.1	1.1	36.3	2.102	-3.2	.0	80.9	103.8	38.7	28.8	GR	2.705	95.8	80.9	23.9	2.713	.05	.02	
810.77	47	3.3	1.3	37.0	2.108	-3.5	.0	74.0	88.7	38.6	23.3	GR	2.724	88.7	74.0	26.4	2.728	.05	.02	
810.92	46	3.5	1.5	36.9	2.141	-3.7	.0	72.9	84.2	36.7	21.9	GR	2.757	84.2	72.9	26.1	2.753	.05	.02	
811.07	45	3.7	1.7	36.8	2.174	-3.8	.0	72.0	80.6	34.8	20.5	GR	2.790	80.6	72.0	25.8	2.779	.05	.02	
811.23	47	4.2	1.4	33.4	2.288	-3.6	.0	70.7	94.1	31.5	23.0	GR	2.650	93.3	70.7	24.2	2.671	.05	.02	4 7
811.38	47	4.2	2.7	31.0	2.284	-3.7	.0	68.2	65.0	33.0	23.5	GR	2.650	68.2	68.2	25.2	2.671	.05	.02	4 7
811.53	47	3.9	4.0	28.6	2.280	-3.8	.0	68.1	51.2	34.5	24.0	GR	2.650	68.1	68.1	26.2	2.672	.05	.02	4 7
811.68	46	3.6	5.2	29.9	2.231	-3.7	.0	92.7	59.5	37.9	22.5	GR	2.729	92.7	92.7	19.7	2.732	.05	.02	
811.83	46	4.2	3.6	30.3	2.257	-3.5	.0	86.4	72.6	36.2	22.2	GR	2.764	86.4	86.4	19.5	2.758	.05	.02	
811.99	46	4.8	2.0	30.7	2.282	-3.4	.0	82.2	98.7	34.5	21.9	GR	2.800	96.1	82.2	19.4	2.786	.05	.02	
812.14	45	4.6	2.9	29.2	2.303	-3.6	.0	87.7	86.1	33.7	21.1	GR	2.795	87.7	87.7	18.4	2.782	.05	.02	
812.29	45	4.4	3.8	27.7	2.323	-3.8	.0	95.3	79.2	32.8	20.3	GR	2.790	95.3	95.3	17.5	2.779	.05	.02	
812.44	44	4.5	1.8	26.7	2.293	-3.6	.0	93.1	115.7	32.8	19.3	GR	2.738	98.6	93.1	17.7	2.738	.05	.02	



812.60	42	5.2	2.9	29.4	2.322	-3.7	.0	78.9	81.7	32.4	16.5	GR	2.816	81.7	78.9	20.1	2.803	.05	.02
812.75	40	5.8	4.0	32.2	2.351	-3.8	.0	69.5	63.5	32.0	13.7	GR	2.889	69.5	69.5	22.4	2.867	.05	.02
812.90	39	6.0	5.5	28.7	2.360	-3.8	.0	73.8	58.1	31.1	11.5	GR	2.837	73.8	73.8	21.1	2.825	.05	.02
813.05	37	6.1	7.0	25.1	2.369	-3.8	.0	79.3	55.9	30.2	9.3	GR	2.788	79.3	79.3	19.6	2.783	.05	.02
813.21	38	5.9	1.7	23.1	2.352	-3.7	.0	87.7	123.2	30.6	11.2	GR	2.737	97.4	87.7	17.7	2.738	.05	.02
813.36	39	5.9	3.4	23.9	2.350	-3.7	.0	86.6	86.7	31.9	12.1	GR	2.748	86.7	86.6	17.9	2.747	.05	.02
813.51	40	5.1	5.1	24.6	2.348	-3.8	.0	91.6	69.7	33.2	13.0	GR	2.759	91.6	91.6	18.1	2.757	.05	.02
813.66	43	4.8	5.3	24.9	2.268	-3.7	.0	89.9	65.4	34.2	17.8	GR	2.694	89.9	89.9	18.2	2.700	.05	.02
813.82	47	4.5	5.6	25.2	2.188	-3.6	.0	84.3	58.3	35.2	22.7	GR	2.647	84.3	84.3	19.3	2.665	.05	.02
813.97	46	5.4	3.0	31.2	2.181	-3.8	.0	68.9	70.4	34.5	22.0	GR	2.703	70.4	68.9	22.0	2.708	.05	.02

Zone No. 1 BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
814.12	45	5.1	5.1	29.9	2.209	-3.8	.0	74.9	57.6	32.9	20.8	GR	2.707	74.9	74.9	20.9	2.713	.05	.02	
814.27	44	4.9	7.1	28.6	2.238	-3.8	.0	80.8	51.3	31.2	19.7	GR	2.713	80.8	80.8	19.9	2.719	.05	.02	
814.43	44	6.1	1.9	30.4	2.243	-3.3	.0	68.7	94.6	29.4	19.6	GR	2.750	92.8	68.7	21.0	2.748	.05	.02	
814.58	43	5.9	4.0	30.6	2.245	-3.6	.0	67.9	62.8	29.6	17.3	GR	2.755	67.9	67.9	22.0	2.752	.05	.02	
814.73	41	5.0	6.2	30.8	2.246	-3.8	.0	71.5	48.9	29.9	15.1	GR	2.759	71.5	71.5	23.1	2.756	.05	.02	
814.88	45	4.9	3.4	30.9	2.191	-3.6	.0	72.2	66.4	30.9	20.6	GR	2.706	72.2	72.2	22.1	2.711	.05	.02	
815.04	49	4.4	.8	31.1	2.135	-3.5	.0	74.1	136.2	31.9	26.2	GR	2.671	94.2	74.1	22.0	2.685	.05	.02	
815.19	56	4.4	4.3	36.3	2.162	-3.7	.0	77.2	62.2	36.5	36.2	GR	2.776	77.2	77.2	19.2	2.762	.05	.02	
815.34	55	4.2	2.8	35.8	2.169	-3.6	.0	78.8	76.3	36.6	34.5	GR	2.773	78.8	78.8	19.4	2.761	.05	.02	
815.49	54	3.9	1.4	35.3	2.176	-3.5	.0	82.7	107.7	36.7	32.8	GR	2.771	96.3	82.7	19.7	2.760	.05	.02	
815.64	49	4.7	2.5	34.3	2.195	-3.6	.0	73.1	78.2	36.0	26.8	GR	2.771	78.2	73.1	21.3	2.762	.05	.02	
815.80	45	5.6	3.6	33.3	2.214	-3.6	.0	65.9	62.9	35.3	20.7	GR	2.772	65.9	65.9	22.9	2.765	.05	.02	
815.95	43	6.6	5.0	29.7	2.316	-3.7	.0	70.3	61.7	28.7	17.5	GR	2.816	70.3	70.3	20.0	2.802	.05	.02	
816.10	43	6.6	4.6	28.0	2.325	-3.7	.0	74.2	68.3	29.2	17.4	GR	2.794	74.2	74.2	18.8	2.784	.05	.02	
816.25	43	6.7	4.2	26.2	2.333	-3.8	.0	78.7	76.4	29.6	17.3	GR	2.772	78.7	78.7	17.6	2.766	.05	.02	
816.41	45	5.7	4.6	27.5	2.164	-3.7	.0	67.2	57.2	30.7	20.1	GR	2.658	67.2	67.2	22.2	2.671	.05	.02	
816.56	47	4.7	5.0	28.9	1.996	-3.7	.0	58.1	42.8	31.7	22.9	GR	2.554	58.1	58.1	28.3	2.632	.05	.02	6
816.71	53	3.6	1.0	34.2	1.637	-2.9	.0	53.8	79.4	37.8	32.6	GR	2.106	79.4	53.8	33.4	2.620	.05	.02	6 8
816.86	57	3.5	1.1	37.8	1.690	-2.6	.0	57.4	77.4	40.0	37.2	GR	2.219	77.4	57.4	31.1	2.626	.05	.02	6 8
817.02	60	3.3	1.3	41.5	1.744	-2.3	.0	61.6	76.5	42.2	41.8	GR	2.348	76.5	61.6	28.8	2.630	.05	.02	6 8
817.17	58	3.9	1.5	39.4	1.952	-2.7	.0	61.6	77.5	39.6	39.1	GR	2.607	77.5	61.6	26.6	2.656	.05	.02	6
817.32	56	4.5	1.7	37.2	2.159	-3.2	.0	75.0	96.3	36.9	36.3	GR	2.793	94.4	75.0	19.7	2.772	.05	.02	
817.47	48	4.8	4.4	30.1	2.228	-3.7	.0	81.7	66.4	31.4	24.7	GR	2.727	81.7	81.7	18.9	2.731	.05	.02	
817.63	49	5.3	3.0	29.2	2.191	-3.4	.0	76.0	79.1	31.5	26.1	GR	2.687	79.1	76.0	19.1	2.697	.05	.02	
817.78	50	5.2	1.6	28.3	2.157	-3.1	.0	74.7	105.6	31.6	27.5	GR	2.654	94.3	74.7	19.6	2.674	.05	.02	
817.93	48	6.0	4.8	30.7	2.252	-3.6	.0	73.5	63.8	32.5	24.7	GR	2.767	73.5	73.5	18.8	2.760	.05	.02	
818.08	47	5.7	3.4	30.9	2.256	-3.6	.0	74.5	75.0	32.8	23.8	GR	2.776	75.0	74.5	19.3	2.767	.05	.02	
818.24	47	5.0	1.9	31.2	2.260	-3.6	.0	78.1	97.0	33.1	22.8	GR	2.785	95.2	78.1	19.8	2.774	.05	.02	
818.39	54	4.4	1.8	31.9	2.142	-3.4	.0	79.3	96.5	37.1	32.7	GR	2.680	95.5	79.3	19.2	2.695	.05	.02	
818.54	61	3.8	1.7	32.6	2.026	-3.1	.0	73.3	85.9	41.1	42.8	GR	2.650	85.9	73.3	21.5	2.689	.05	.02	4 78
818.69	68	3.0	1.1	33.6	1.979	-2.1	.0	95.3	127.1	41.7	52.9	GR	2.650	99.0	95.3	16.0	2.698	.05	.02	4 78
818.85	64	3.4	1.3	34.4	2.066	-2.9	.0	90.7	117.3	39.7	47.8	GR	2.635	98.1	90.7	16.7	2.677	.05	.02	
819.00	61	3.7	1.5	35.3	2.152	-3.6	.0	92.1	116.5	37.7	42.7	GR	2.740	98.4	92.1	16.1	2.740	.05	.02	
819.15	61	4.2	2.4	34.0	2.202	-3.6	.0	93.8	100.8	35.5	42.9	GR	2.784	98.7	93.8	14.2	2.764	.05	.02	
819.30	61	4.8	3.4	32.7	2.252	-3.6	.0	96.2	94.3	33.4	43.0	GR	2.830	96.2	96.2	12.4	2.788	.05	.02	
819.45	65	3.9	.6	31.3	2.007	-3.1	.0	78.6	160.3	35.5	49.1	GR	2.650	95.3	78.6	18.0	2.695	.05	.02	4 78
819.61	69	3.6	.8	31.4	1.953	-2.1	.0	89.5	160.6	38.4	54.9	GR	2.650	97.8	89.5	15.0	2.700	.05	.02	4 78
819.76	73	3.3	.9	31.4	1.899	-1.0	.0	102.8	164.2	41.4	60.7	GR	2.650	100.0	100.0	12.2	2.705	.05	.02	4 78
819.91	74	3.3	1.0	33.7	1.826	-1.0	.0	76.9	112.9	42.2	61.2	GR	2.312	94.9	76.9	19.2	2.620	.05	.02	6 8
820.06	74	3.3	1.1	36.0	1.753	-1.0	.0	77.2	108.5	43.0	61.6	GR	1.825	95.0	77.2	19.0	2.623	.05	.02	6 8
820.22	68	4.0	.6	40.3	1.670	-1.3	.0	83.2	178.9	39.7	53.7	GR	2.650	96.4	83.2	15.6	2.699	.05	.02	4 78
820.37	67	4.6	2.0	39.9	1.765	-2.3	.0	75.9	93.1	38.9	51.6	GR	2.650	93.1	75.9	16.7	2.697	.05	.02	4 78
820.52	65	4.2	3.5	39.5	1.859	-3.3	.0	76.2	67.7	38.1	49.3	GR	2.650	76.2	76.2	17.9	2.695	.05	.02	4 78
820.67	70	3.7	.9	40.5	1.892	-2.1	.0	89.3	147.4	39.2	55.4	GR	2.650	97.8	89.3	14.8	2.700	.05	.02	4 78
820.83	69	3.8	1.1	41.8	1.915	-2.3	.0	66.6	100.0	40.6	54.6	GR	2.555	92.2	66.6	22.3	2.656	.05	.02	6
820.98	69	3.8	1.2	43.2	1.937	-2.5	.0	66.6	94.4	42.0	53.8	GR	2.623	92.2	66.6	22.2	2.684	.05	.02	

821.13	68	3.7	1.2	40.6	1.936	-2.4	.0	68.9	98.1	38.9	53.1	GR	2.570	92.8	68.9	21.7	2.658	.05	.02	6
821.28	68	3.6	1.1	38.0	1.936	-2.3	.0	71.6	102.0	35.7	52.4	GR	2.522	93.5	71.6	21.2	2.633	.05	.02	6
821.44	64	4.8	1.6	41.1	2.016	-2.4	.0	64.3	89.7	34.3	47.8	GR	2.689	89.7	64.3	20.8	2.709	.05	.02	
821.59	64	6.4	3.2	38.4	2.176	-3.1	.0	69.7	80.4	30.0	47.1	GR	2.862	80.4	69.7	15.4	2.802	.05	.02	5
821.74	63	7.8	4.9	35.7	2.335	-3.7	.0	76.6	80.6	25.7	46.2	GR	3.054	80.6	76.6	11.6	2.901	.05	.02	5
821.89	65	6.7	5.1	34.2	2.260	-3.7	.0	83.3	80.0	26.5	48.3	GR	2.898	83.3	83.3	11.0	2.817	.05	.02	4 7
822.05	66	5.8	5.4	32.8	2.186	-3.6		78.0	67.2	27.2	50.5	GR	2.650	78.0	78.0	13.5	2.696	.05	.02	4 78
822.20	73	4.0	1.1	41.2	1.957	-2.6		91.3	150.0	38.4	59.8	GR	2.650	98.2	91.3	12.6	2.704	.05	.02	6
822.35	76	3.9	1.0	42.7	1.946	-2.5	.0	74.6	119.8	39.0	64.0	GR	2.592	94.3	74.6	17.3	2.684	.05	.02	6 8
822.50	79	3.8	1.0	44.3	1.936	-2.4	.0	78.9	127.7	39.6	68.2	GR	2.595	95.4	78.9	15.8	2.693	.05	.02	

Zone No. 1

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FCVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
822.66	76	3.8	1.0	41.6	1.976	-2.1	.0	81.5	129.2	39.4	65.0	GR	2.616	96.0	81.5	15.3	2.692	.05	.02	
822.81	74	3.8	1.1	39.0	2.017	-1.9		97.2	153.8	39.1	61.8	GR	2.650	99.4	97.2	11.7	2.706	.05	.02	4 78
822.96	67	4.6	.8	39.7	2.132	-2.8	.0	80.9	159.8	33.3	51.6	GR	2.834	95.8	80.9	15.2	2.783	.05	.02	
823.11	66	5.9	2.1	36.0	2.237	-3.3	.0	84.8	118.5	30.9	50.2	GR	2.913	96.7	84.8	11.7	2.821	.05	.02	5
823.26	65	6.3	3.5	32.3	2.346	-3.7	.0	98.8	113.9	28.5	48.8	GR	2.997	99.8	98.8	8.5	2.864	.05	.02	5
823.42	68	5.6	2.5	32.1	2.178	-3.5	.0	98.0	125.0	31.3	53.6	GR	2.698	99.6	98.0	9.0	2.717	.05	.02	
823.57	72	4.4	1.6	31.9	2.011	-3.2		85.6	119.6	34.2	58.5	GR	2.650	96.9	85.6	13.3	2.703	.05	.02	4 78
823.72	72	3.8	1.4	37.7	1.828	-1.5		92.3	129.3	40.7	58.9	GR	2.650	98.4	92.3	13.1	2.703	.05	.02	4 78
823.87	71	3.8	1.2	39.8	1.895	-2.2	.0	67.7	97.9	40.3	56.9	GR	2.464	92.5	67.7	21.4	2.625	.05	.02	6 8
824.03	69	3.7	1.0	42.0	1.962	-2.8		88.0	140.6	39.9	54.9	GR	2.650	97.5	88.0	15.0	2.700	.05	.02	4 78
824.18	68	3.6	1.0	36.0	1.955	-3.3		87.7	139.7	37.3	53.4	GR	2.650	97.4	87.7	15.8	2.698	.05	.02	4 78
824.33	68	3.3	.8	34.7	1.902	-2.6	.0	74.2	121.3	39.3	52.5	GR	2.411	94.2	74.2	21.4	2.622	.05	.02	6
824.48	67	3.0	.6	33.5	1.847	-1.9	.0	72.1	125.3	41.3	51.3	GR	2.299	93.7	72.1	23.7	2.633	.05	.02	6
824.64	70	3.0	.7	34.7	1.850	-1.5	.0	75.1	129.5	41.1	55.6	GR	2.279	94.4	75.1	22.0	2.626	.05	.02	6 8
824.79	73	3.0	.7	36.0	1.852	-1.1	.0	79.6	136.5	40.9	60.0	GR	2.253	95.5	79.6	19.8	2.619	.05	.02	6 8
824.94	69	3.0	1.0	37.8	1.899	-1.4	.0	76.4	105.5	41.3	53.8	GR	2.451	94.7	76.4	22.0	2.628	.05	.02	6
825.09	66	3.0	.9	39.3	1.935	-1.6	.0	75.6	108.6	41.6	50.6	GR	2.553	94.6	75.6	22.4	2.646	.05	.02	6
825.25	64	3.1	.9	40.9	1.971	-1.7	.0	74.9	112.1	41.9	47.4	GR	2.636	94.4	74.9	22.8	2.681	.05	.02	
825.40	64	3.4	1.0	40.3	1.995	-2.0	.0	75.0	109.2	41.5	47.7	GR	2.653	94.4	75.0	21.5	2.690	.05	.02	
825.55	64	3.6	1.2	39.7	2.019	-2.2	.0	75.6	107.6	41.1	48.1	GR	2.670	94.6	75.6	20.2	2.698	.05	.02	
825.70	65	4.2	1.9	36.6	2.081	-2.3	.0	81.9	98.1	37.0	49.0	GR	2.682	96.1	81.9	16.3	2.704	.05	.02	
825.86	69	4.1	1.7	35.3	2.095	-2.4	.0	92.1	120.0	37.3	53.8	GR	2.669	98.4	92.1	13.3	2.700	.05	.02	
826.01	72	4.0	1.4	34.0	2.109	-2.5	.0	103.8	151.6	37.6	58.5	GR	2.653	100.0	100.0	10.2	2.695	.05	.02	
826.16	74	4.1	1.4	35.4	2.094	-1.8		93.2	135.7	37.5	61.9	GR	2.650	98.6	93.2	11.6	2.706	.05	.02	4 78
826.31	77	4.2	1.4	36.9	2.079	-1.0		96.7	143.3	37.4	65.3	GR	2.650	99.3	96.7	10.1	2.709	.05	.02	4 78
826.47	74	4.6	1.8	38.6	2.017	-1.6		87.6	118.1	40.2	61.3	GR	2.650	97.4	87.6	11.9	2.706	.05	.02	4 78
826.62	75	4.7	1.7	38.8	2.040	-1.9	.0	83.6	118.2	38.2	63.6	GR	2.655	96.5	83.6	12.4	2.701	.05	.02	
826.77	77	4.8	1.5	38.9	2.063	-2.2	.0	88.3	134.2	36.3	65.7	GR	2.688	97.5	88.3	10.6	2.717	.05	.02	
826.92	75	5.3	2.3	37.5	2.060	-2.8	.0	81.4	105.2	35.8	62.5	GR	2.657	96.0	81.4	11.7	2.701	.05	.02	
827.07	72	5.3	3.1	36.1	2.055	-3.4	.0	79.3	87.1	35.3	59.4	GR	2.629	87.1	79.3	12.8	2.686	.05	.02	
827.23	72	4.0	.8	31.3	1.949	-2.7	.0	80.5	149.3	42.4	58.4	GR	2.388	95.8	80.5	15.9	2.623	.05	.02	6
827.38	70	4.1	.9	32.2	1.970	-2.9	.0	79.2	136.3	40.9	55.7	GR	2.455	95.4	79.2	16.5	2.624	.05	.02	6
827.53	68	4.2	1.1	33.0	1.991	-3.1	.0	77.3	125.8	39.4	52.9	GR	2.513	95.0	77.3	17.1	2.623	.05	.02	6
827.68	68	4.1	1.4	36.9	2.058	-3.3	.0	83.5	115.7	36.2	53.2	GR	2.658	96.5	83.5	15.5	2.694	.05	.02	
827.84	71	3.9	1.4	37.1	2.005	-3.0	.0	80.8	110.5	37.3	56.6	GR	2.590	95.8	80.8	16.3	2.667	.05	.02	6
827.99	73	3.8	1.4	37.4	1.951	-2.8	.0	78.3	105.6	38.3	60.1	GR	2.495	95.2	78.3	17.1	2.637	.05	.02	6
828.14	74	3.8	1.0	35.5	1.917	-2.5	.0	76.4	123.2	38.5	61.0	GR	2.384	94.8	76.4	17.4	2.619	.05	.02	6
828.29	74	3.9	.6	33.6	1.884	-2.1	.0	73.8	156.9	38.7	61.9	GR	2.260	94.1	73.8	17.8	2.620	.05	.02	6
828.45	73	4.1	1.7	32.1	1.933	-2.9	.0	77.1	99.1	38.7	59.4	GR	2.365	94.9	77.1	16.4	2.620	.05	.02	6
828.60	71	3.9	1.2	32.9	1.943	-2.5	.0	77.7	115.8	38.6	57.3	GR	2.415	95.1	77.7	17.1	2.633	.05	.02	6
828.75	69	3.8	.7	33.7	1.953	-2.0	.0	77.0	148.5	38.4	55.0	GR	2.460	94.9	77.0	18.0	2.626	.05	.02	6
828.90	69	4.2	1.3	35.2	1.996	-1.9	.0	76.9	114.6	43.0	55.0	GR	2.547	94.9	76.9	16.7	2.644	.05	.02	6
829.06	69	4.9	1.9	36.7	2.038	-1.7		77.1	102.3	47.5	55.0	GR	2.650	94.9	77.1	15.0	2.700	.05	.02	4 78
829.21	72	4.7	1.4	38.2	2.096	-2.2		82.7	126.0	40.6	58.6	GR	2.650	96.3	82.7	13.2	2.703	.05	.02	4 78
829.36	72	4.6	1.1	37.6	2.036	-1.9		84.8	143.9	40.8	59.0	GR	2.650	96.7	84.8	13.0	2.703	.05	.02	4 78
829.51	73	4.4	.8	37.0	1.975	-1.5		87.3	170.7	41.0	59.4	GR	2.650	97.3	87.3	12.8	2.704	.05	.02	4 78

829.67	74	4.1	.8	36.1	1.949	-1.6		91.8	180.9	40.6	61.1	GR	2.650	98.3	91.8	12.0	2.705	.05	.02	4	78
829.82	75	3.9	.7	35.2	1.923	-1.6		96.7	192.0	40.3	62.9	GR	2.650	99.3	96.7	11.2	2.707	.05	.02	4	78
829.97	73	4.4	1.6	36.3	2.007	-3.1		87.5	121.8	38.8	59.8	GR	2.650	97.4	87.5	12.6	2.704	.05	.02	4	78
830.12	73	4.0	1.4	37.5	1.979	-3.0		92.1	130.8	41.6	59.8	GR	2.650	98.4	92.1	12.7	2.704	.05	.02	4	78
830.28	73	3.7	1.2	38.8	1.951	-2.9	.0	77.4	112.3	44.4	59.7	GR	2.526	95.0	77.4	17.7	2.650	.05	.02		6
830.43	71	3.3	.9	43.8	1.948	-2.9	.0	75.0	112.9	42.7	57.2	GR	2.644	94.4	75.0	20.5	2.696	.05	.02		
830.58	70	3.2	1.1	43.1	1.965	-2.8	.0	77.3	108.6	43.0	55.8	GR	2.657	95.0	77.3	20.2	2.699	.05	.02		
830.73	69	3.1	1.2	42.4	1.983	-2.8	.0	79.8	105.2	43.2	54.4	GR	2.668	95.6	79.8	19.8	2.703	.05	.02		
830.88	71	3.2	1.0	42.2	1.993	-2.4	.0	82.3	121.4	41.9	57.1	GR	2.675	96.2	82.3	18.2	2.707	.05	.02		
831.04	73	3.3	.8	42.1	2.003	-2.1	.0	85.3	143.2	40.6	59.9	GR	2.683	96.9	85.3	16.6	2.712	.05	.02		

Zone No. 1

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FCVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
831.19	76	3.5	1.1	38.2	2.003	-1.9	.0	92.5	139.1	40.1	64.4	GR	2.581	98.4	92.5	13.4	2.675	.05	.02	6
831.34	76	3.6	1.3	37.7	1.978	-1.4	.0	87.7	120.7	40.6	64.7	GR	2.525	97.4	87.7	14.1	2.657	.05	.02	6
831.49	76	4.0	1.6	37.2	1.953	-.9	.0	81.2	106.7	41.2	65.0	GR	2.463	95.9	81.2	14.9	2.637	.05	.02	6
831.65	79	3.5	1.1	36.8	1.957	-.5	.0	91.0	134.9	42.6	68.3	GR	2.435	98.1	91.0	13.2	2.636	.05	.02	6
831.80	81	3.2	.7	36.5	1.961	-.1		121.4	234.3	44.1	71.7	GR	2.650	100.0	100.0	7.5	2.715	.05	.02	4 78
831.95	82	3.4	1.2	36.4	1.966	-1.5		118.8	182.0	46.3	72.3	GR	2.650	100.0	100.0	7.2	2.715	.05	.02	4 78
832.10	79	3.4	1.1	38.9	2.009	-2.1	.0	98.2	146.8	45.2	68.3	GR	2.595	99.6	98.2	11.7	2.685	.05	.02	6
832.26	76	3.4	1.1	41.5	2.052	-2.7	.0	96.3	145.4	44.0	64.3	GR	2.748	99.3	96.3	12.7	2.742	.05	.02	
832.41	76	4.0	1.4	41.6	2.098	-2.7		98.9	141.5	42.5	65.0	GR	2.650	99.8	98.9	10.3	2.709	.05	.02	4 78
832.56	77	4.5	1.8	41.7	2.143	-2.6		93.8	127.2	41.0	65.6	GR	2.650	98.7	93.8	10.0	2.709	.05	.02	4 78
832.71	78	4.2	1.3	40.9	2.101	-2.4		101.3	159.3	37.2	67.8	GR	2.650	100.0	100.0	9.0	2.711	.05	.02	4 78
832.87	77	4.1	1.5	41.2	2.081	-2.2		100.0	140.2	38.4	66.3	GR	2.650	100.0	100.0	9.7	2.710	.05	.02	4 78
833.02	76	4.0	1.8	41.6	2.061	-2.1		98.5	125.3	39.7	64.8	GR	2.650	99.7	98.5	10.3	2.709	.05	.02	4 78
833.17	77	3.9	1.6	40.8	1.985	-1.7		99.9	136.2	41.0	65.1	GR	2.650	100.0	99.9	10.2	2.709	.05	.02	4 78
833.32	77	3.9	1.3	40.0	1.908	-1.2		101.1	149.9	42.3	65.3	GR	2.650	100.0	100.0	10.1	2.709	.05	.02	4 78
833.48	76	3.7	.6	39.2	1.850	-1.1	.0	75.6	152.6	41.2	64.7	GR	2.370	94.6	75.6	17.5	2.629	.05	.02	6 8
833.63	74	3.7	.8	39.5	1.878	-1.4	.0	72.7	128.8	40.0	61.9	GR	2.373	93.8	72.7	18.9	2.630	.05	.02	6 8
833.78	72	3.8	1.0	39.7	1.905	-1.7		93.3	154.3	38.8	59.2	GR	2.650	98.6	93.3	12.9	2.704	.05	.02	4 78
833.93	75	3.6	.6	37.5	1.946	-.7		100.0	216.3	39.7	62.5	GR	2.650	100.0	100.0	11.4	2.707	.05	.02	4 78
834.09	75	3.9	.8	37.7	1.968	-.6	.0	80.7	150.3	39.1	62.3	GR	2.521	95.8	80.7	15.5	2.651	.05	.02	6
834.24	74	4.2	1.0	37.9	1.990	-.4	.0	80.0	137.7	38.4	62.1	GR	2.564	95.6	80.0	14.8	2.666	.05	.02	6
834.39	76	4.0	.8	37.5	1.939	-.6	.0	77.5	143.6	38.7	63.8	GR	2.450	95.0	77.5	16.0	2.631	.05	.02	6
834.54	77	3.9	.6	37.1	1.888	-.7	.0	75.0	154.9	39.1	65.5	GR	2.297	94.4	75.0	17.1	2.635	.05	.02	6 8
834.69	82	3.8	.5	36.9	1.832	-.1		114.2	288.6	40.5	73.1	GR	2.650	100.0	100.0	6.9	2.716	.05	.02	4 78
834.85	82	3.8	.5	37.8	1.903	.2		113.8	291.3	40.0	72.6	GR	2.650	100.0	100.0	7.1	2.716	.05	.02	4 78
835.00	81	3.7	.4	38.8	1.974	.4		113.4	294.0	39.6	72.1	GR	2.650	100.0	100.0	7.3	2.715	.05	.02	4 78
835.15	83	3.7	.5	40.7	1.968	.6		117.2	279.0	41.1	74.6	GR	2.650	100.0	100.0	6.4	2.718	.05	.02	4 78
835.30	85	3.8	.6	42.7	1.962	.8		120.9	268.7	42.6	77.1	GR	2.650	100.0	100.0	5.4	2.720	.05	.02	4 78
835.46	82	4.0	.4	42.0	1.938	-.1		110.2	319.1	39.0	72.2	GR	2.650	100.0	100.0	7.2	2.715	.05	.02	4 78
835.61	80	4.2	.8	40.1	1.985	-.7		102.8	202.7	38.5	69.4	GR	2.650	100.0	100.0	8.4	2.713	.05	.02	4 78
835.76	78	4.4	1.3	38.2	2.031	-1.4		96.2	153.3	38.1	66.5	GR	2.650	99.2	96.2	9.6	2.710	.05	.02	4 78
835.91	78	4.7	1.4	39.2	2.073	-1.6		94.0	151.1	38.9	66.8	GR	2.650	98.8	94.0	9.5	2.711	.05	.02	4 78
836.07	78	4.9	1.4	40.2	2.115	-1.9		92.0	148.9	39.7	67.1	GR	2.650	98.4	92.0	9.4	2.711	.05	.02	4 78
836.22	74	6.3	4.1	38.5	2.234	-2.7		74.4	77.9	35.7	61.0	GR	2.650	77.9	74.4	12.1	2.705	.05	.02	4 78
836.37	74	6.3	3.8	35.6	2.207	-2.6		74.1	80.5	35.8	60.9	GR	2.650	80.5	74.1	12.1	2.705	.05	.02	4 78
836.52	73	6.4	3.5	32.7	2.179	-2.5		73.4	83.4	36.0	60.8	GR	2.650	83.4	73.4	12.2	2.705	.05	.02	4 78
836.68	73	4.8	.9	31.9	2.021	-2.3	.0	84.3	160.5	33.6	60.3	GR	2.501	96.6	84.3	12.4	2.631	.05	.02	6
836.83	76	4.8	1.0	33.7	2.001	-2.4	.0	83.3	152.3	35.0	64.4	GR	2.481	96.4	83.3	12.0	2.635	.05	.02	6
836.98	79	4.8	1.1	35.4	1.982	-2.5	.0	82.6	145.1	36.4	68.4	GR	2.453	96.2	82.6	11.7	2.638	.05	.02	6
837.13	79	5.1	1.9	36.5	2.034	-2.8	.0	88.1	125.7	36.0	69.1	GR	2.576	97.5	88.1	9.6	2.678	.05	.02	6
837.29	80	5.0	2.6	37.6	2.086	-3.1	.0	97.9	119.2	35.6	69.8	GR	2.684	99.6	97.9	7.6	2.718	.05	.02	
837.44	77	4.6	1.6	37.3	2.047	-2.4	.0	89.2	129.0	37.9	65.3	GR	2.627	97.7	89.2	11.0	2.691	.05	.02	
837.59	77	4.5	1.3	37.8	2.045	-2.1	.0	89.9	141.1	37.0	65.9	GR	2.635	97.9	89.9	10.9	2.695	.05	.02	
837.74	78	4.4	1.1	38.3	2.043	-1.7	.0	90.2	157.4	36.1	66.5	GR	2.643	98.0	90.2	10.9	2.699	.05	.02	
837.90	76	4.6	1.3	37.9	2.097	-1.8		91.3	147.7	35.9	64.3	GR	2.650	98.2	91.3	10.6	2.708	.05	.02	4 78
838.05	74	4.8	1.5	37.5	2.152	-1.8		86.5	130.6	35.7	62.0	GR	2.650	97.1	86.5	11.6	2.706	.05	.02	4 78

838.20	76	4.2	1.4	36.6	2.182	-1.3		96.5	145.4	38.1	64.7	GR	2.650	99.3	96.5	10.4	2.709	.05	.02	4	78
838.35	78	3.8	1.0	38.7	2.035	-1.1		104.5	171.7	41.5	66.5	GR	2.650	100.0	100.0	9.6	2.710	.05	.02	4	78
838.50	79	3.4	.7	40.9	1.889	-.8	.0	83.0	149.5	44.9	68.4	GR	2.358	96.4	83.0	15.7	2.631	.05	.02		6 8
838.66	78	3.2	.6	42.7	1.788	-1.2	.0	83.3	163.6	47.4	66.6	GR	1.839	96.4	83.3	16.6	2.617	.05	.02		6 8
838.81	76	3.0	.4	44.5	1.686	-1.7	.0	83.8	185.7	50.0	64.7	GR	1.207	96.5	83.8	17.5	2.631	.05	.02		6 8
838.96	80	3.0	.6	47.9	1.731	-1.7	.0	123.8	243.8	51.9	70.6	GR	2.650	100.0	100.0	7.9	2.627	.05	.02		8
839.11	80	3.2	.8	49.6	1.823	-1.7	.0	120.2	217.4	53.3	70.3	GR	2.650	100.0	100.0	8.0	2.676	.05	.02		8
839.27	80	3.3	.9	51.4	1.914	-1.8	.0	116.4	197.5	54.7	70.0	GR	2.650	100.0	100.0	8.1	2.772	.05	.02		8
839.42	77	3.2	.8	47.3	1.874	-2.1	.0	82.9	136.8	48.1	66.2	GR	2.546	96.3	82.9	16.7	2.685	.05	.02		6 8
839.57	75	3.1	.7	43.1	1.833	-2.3	.0	80.4	136.1	41.5	62.5	GR	2.321	95.7	80.4	18.6	2.635	.05	.02		6 8

Zone No. 1 BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
839.72	78	3.0	.8	44.8	1.784	-2.4	.0	87.4	144.1	44.2	67.3	GR	1.774	97.3	87.4	16.2	2.615	.05	.02	6 8
839.88	79	2.9	.9	44.6	1.846	-2.2	.0	90.0	136.7	45.6	68.7	GR	2.197	97.9	90.0	15.5	2.639	.05	.02	6 8
840.03	80	2.9	1.0	44.4	1.909	-2.0	.0	125.3	186.4	46.9	70.1	GR	2.650	100.0	100.0	8.1	2.678	.05	.02	8
840.18	82	2.9	.7	38.8	1.887	-1.6	.0	128.8	236.7	44.9	72.4	GR	2.650	100.0	100.0	7.2	2.630	.05	.02	8
840.33	82	3.1	.8	38.9	1.844	-2.0	.0	125.7	218.6	44.3	72.9	GR	2.650	100.0	100.0	7.0	2.621	.05	.02	8
840.49	82	3.3	.9	38.9	1.801	-2.4	.0	122.5	204.3	43.8	73.3	GR	2.650	100.0	100.0	6.9	2.629	.05	.02	8
840.64	83	3.4	1.2	39.4	1.818	-2.3	.0	121.1	181.4	42.6	73.6	GR	2.650	100.0	100.0	6.7	2.627	.05	.02	8
840.79	83	3.6	1.5	39.9	1.834	-2.3	.0	117.9	165.1	41.5	74.0	GR	2.650	100.0	100.0	6.6	2.624	.05	.02	8
840.94	79	4.1	2.1	39.7	1.943	-2.2	.0	78.7	91.8	44.1	67.9	GR	2.479	91.8	78.7	14.8	2.654	.05	.02	6
841.10	76	3.9	1.5	40.8	1.929	-2.2	.0	75.2	101.0	42.9	65.0	GR	2.500	94.5	75.2	17.0	2.656	.05	.02	6
841.25	74	3.5	.9	41.9	1.916	-2.1	.0	75.2	123.9	41.6	62.1	GR	2.519	94.4	75.2	18.8	2.658	.05	.02	6 8
841.40	76	3.9	1.7	42.1	1.871	-1.6	.0	72.9	90.6	39.5	63.9	GR	2.399	90.6	72.9	17.9	2.631	.05	.02	6 8
841.55	77	3.8	2.6	42.3	1.826	-1.0	.0	76.0	75.9	37.3	65.7	GR	2.161	76.0	76.0	17.0	2.622	.05	.02	6 8
841.71	81	3.9	3.8	44.6	1.797	-.1		110.8	99.5	35.2	72.1	GR	2.650	100.0	100.0	7.3	2.715	.05	.02	4 7 8
841.86	80	4.2	3.6	44.7	1.862	-.9	.0	70.9	63.7	27.9	64.7	S	2.452	70.9	70.9	17.5	2.651	.05	.02	6 8
842.01	79	4.5	3.3	44.8	1.927	-1.6	4.2	57.4	53.4	20.5	50.0	S	2.649	57.4	57.4	24.7	2.693	.05	.02	
842.16	77	5.1	3.1	42.5	2.062	-2.3	.0	66.0	68.9	20.7	50.2	S	2.787	68.9	66.0	18.9	2.763	.05	.02	
842.31	74	5.8	2.8	40.1	2.196	-2.9	.0	74.2	87.7	20.8	50.5	S	2.955	87.7	74.2	14.5	2.842	.05	.02	5
842.47	73	5.1	.5	39.4	2.242	-2.8	.0	85.5	225.6	21.4	51.7	S	3.024	96.9	85.5	12.8	2.870	.05	.02	5
842.62	72	5.5	.5	41.0	2.249	-2.8	.0	78.0	206.8	20.7	50.3	S	3.073	95.1	78.0	14.1	2.898	.05	.02	5
842.77	72	6.0	.6	42.7	2.257	-2.8	.0	71.7	190.9	19.9	48.8	S	3.119	93.5	71.7	15.3	2.926	.05	.02	5
842.92	61	4.7	1.6	37.9	2.136	-2.7	2.8	70.4	96.1	13.5	35.9	S	2.775	93.2	70.4	20.8	2.761	.05	.02	
843.08	53	5.0	34.1	39.1	2.083	-2.2	8.5	60.5	17.9	12.5	31.2	GR	2.734	60.5	60.5	24.8	2.736	.05	.02	
843.23	44	4.7	68.6	40.4	2.031	-1.8	17.6	51.8	10.3	11.5	18.8	GR	2.706	51.8	51.8	32.3	2.711	.05	.02	
843.38	39	7.4	68.6	36.6	2.179	-2.5	20.8	48.0	11.8	2.9	12.3	GR	2.787	48.0	48.0	29.1	2.781	.09	.05	\$
843.53	35	10.8	68.6	32.9	2.324	-3.3	27.4	42.6	12.5	.0	.0	S	2.853	42.6	42.6	29.0	2.853	.13	.07	\$
843.69	34	18.9	55.0	15.7	2.628	-3.6	3.9	81.7	36.1	.4	5.4	GR	2.885	81.7	81.7	11.3	2.878	.13	.07	
843.84	37	24.6	27.3	15.6	2.638	-3.6	.0	78.5	57.2	12.5	9.1	GR	2.901	78.5	78.5	9.7	2.886	.13	.07	5
843.99	40	19.7	1.0	15.6	2.648	-3.6	.0	96.3	336.9	24.7	12.9	GR	2.918	99.2	96.3	8.1	2.894	.13	.07	5
844.14	43	20.0	2.1	16.9	2.653	-3.5	.0	95.9	239.6	23.4	17.6	GR	2.959	99.2	95.9	7.1	2.919	.13	.07	5
844.30	46	19.9	3.2	18.2	2.658	-3.5	.0	96.3	198.6	22.2	22.3	GR	3.004	99.2	96.3	6.2	2.944	.13	.07	5
844.45	60	9.3	2.1	17.2	2.503	-3.3	.0	100.0	100.0	22.9	41.4	GR	2.853	100.0	100.0	.0	2.786	.13	.07	
844.60	70	6.5	1.7	21.5	2.277	-3.0	.0	169.9	330.0	26.2	52.6	N	2.587	100.0	100.0	.3	2.677	.13	.07	6
844.75	79	3.8	1.3	25.8	2.048	-2.7		98.1	143.2	29.5	61.7	N	2.650	99.6	98.1	11.3	2.706	.13	.07	4 7
844.91	83	3.7	1.3	34.5	1.968	-1.7		132.9	191.4	15.8	40.6	S	2.650	100.0	100.0	9.4	2.687	.13	.07	4 7
845.06	87	3.6	1.2	43.3	1.887	-.7		577.4	863.7	2.2	13.0	S	2.650	100.0	100.0	1.9	2.662	.13	.07	4 7
845.21	84	3.6	1.2	42.6	1.966	.0		110.1	161.9	24.6	58.1	S	2.650	100.0	100.0	10.3	2.703	.13	.07	4 7
845.36	87	3.4	.9	45.3	1.946	-.1		111.4	181.1	26.1	61.1	S	2.650	100.0	100.0	10.1	2.705	.13	.07	4 7
845.52	90	3.2	.7	48.1	1.926	-.2		113.7	211.5	27.6	64.2	S	2.650	100.0	100.0	9.9	2.708	.13	.07	4 7
845.67	93	3.2	.8	45.3	1.935	-.3	.0	120.8	214.8	30.8	70.6	S	2.650	100.0	100.0	7.9	2.702	.13	.07	8
845.82	96	3.2	.9	42.5	1.944	-.5	.0			34.0	77.1	S	2.650	100.0	100.0	10.2	2.680	.13	.07	3
845.97	100	3.6	1.0	41.7	2.063	-.1				45.6	95.1	N	2.650	100.0	100.0	2.0	2.736	.13	.07	1 4
846.12	97	3.8	1.1	43.2	2.063	-.1		141.0	258.5	47.0	93.8	GR	2.650	100.0	100.0	.8	2.735	.13	.07	4 7 8
846.28	94	4.0	1.2	44.7	2.062	-.1		134.6	240.0	48.4	90.0	GR	2.650	100.0	100.0	1.6	2.732	.13	.07	4 7 8
846.43	93	5.2	1.7	50.2	2.070	-.5	.0	116.6	200.1	48.2	88.9	GR	2.650	100.0	100.0	1.8	2.879	.13	.07	8
846.58	96	4.2	1.1	47.1	2.083	-.4	.0	133.8	252.4	46.5	93.0	GR	2.650	100.0	100.0	.9	2.843	.13	.07	8



846.73	99	3.8	.6	43.9	2.096	-.4	.0			44.8	97.1	GR	2.650	100.0	100.0	1.2	2.809	.13	.07	1
846.89	99	3.9	.7	44.6	2.057	-.6	.0			45.7	96.6	GR	2.650	100.0	100.0	1.4	2.788	.13	.07	1
847.04	99	4.0	.7	45.2	2.018	-.7	.0			46.6	96.1	GR	2.650	100.0	100.0	1.7	2.767	.13	.07	1
847.19	94	4.4	1.1	51.4	1.995	-.8	.0			36.4	82.0	S	2.650	100.0	100.0	8.4	2.838	.13	.07	3
847.34	93	5.7	1.9	50.2	2.046	-1.0	.0			34.4	77.8	S	2.650	100.0	100.0	9.8	2.860	.13	.07	3
847.50	93	5.7	2.7	48.9	2.097	-1.2	.0	93.5	121.4	32.3	73.7	S	2.650	98.7	93.5	6.7	2.880	.13	.07	3
847.65	95	5.9	2.6	49.5	2.054	-1.3	.0			33.6	76.2	S	2.650	100.0	100.0	10.4	2.856	.13	.07	3
847.80	97	6.0	2.5	50.0	2.012	-1.3	.0			34.8	78.8	S	2.650	100.0	100.0	9.6	2.830	.13	.07	3
847.95	102	5.4	2.8	42.9	2.039	-.8	.0			48.7	97.7	N	2.650	100.0	100.0	1.0	2.751	.13	.07	1
848.11	103	5.4	2.2	40.9	2.097	-.8	.0			46.4	93.4	N	2.650	100.0	100.0	2.5	2.770	.13	.07	2

Zone No. 1  
 BROADBILL-1  
 AMITY OIL NL

Complex Lithology Results  
 28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
848.26	103	5.4	1.6	38.8	2.156	-.8	.0			44.2	89.2	N	2.650	100.0	100.0	3.9	2.791	.13	.07	2
848.41	103	5.4	1.4	41.9	2.099	-.7	.0			44.2	95.7	N	2.650	100.0	100.0	1.7	2.785	.13	.07	1
848.56	102	4.4	1.2	45.0	2.042	-.7	.0			44.2	97.7	S	2.650	100.0	100.0	1.0	2.783	.13	.07	1
848.72	104	4.7	1.2	48.2	1.956	-.3	.0			44.8	98.8	S	2.650	100.0	100.0	.6	2.759	.13	.07	1
848.87	103	4.7	1.2	48.2	1.996	-.2				44.7	98.6	S	2.650	100.0	100.0	.6	2.739	.13	.07	1 4
849.02	101	4.8	1.2	48.3	2.035	-.2				44.6	98.4	S	2.650	100.0	100.0	.7	2.739	.13	.07	1 4
849.17	102	4.7	1.1	47.2	2.080	-.2				41.5	92.1	S	2.650	100.0	100.0	3.3	2.733	.13	.07	34
849.33	104	4.6	1.1	46.1	2.126	-.2				38.4	85.9	S	2.650	100.0	100.0	5.7	2.728	.13	.07	34
849.48	94	5.6	1.3	45.9	2.099	-.2				38.0	85.2	S	2.650	100.0	100.0	6.0	2.727	.13	.07	34
849.63	91	6.9	1.8	47.0	2.086	-.1				36.9	82.9	S	2.650	100.0	100.0	7.1	2.725	.13	.07	34
849.78	89	9.4	2.2	48.1	2.074	.0				35.7	80.6	S	2.650	100.0	100.0	8.3	2.723	.13	.07	34
849.93	92	10.1	2.5	48.7	2.219	.0		67.6	118.6	30.7	70.5	S	2.650	92.5	67.6	7.9	2.714	.13	.07	4 78

BROADBILL-1

AMITY OIL NL

Complex Lithology Results 28-01-98

Zone No. 1

Hydrocarbon Volume Report

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Formation Name	
FROM M	779.983
TO M	849.935
INTERVAL M	69.952
PHIE Cut off	.050
SW Cut Off	.500
Vclay Cut Off	.300
Net Pay M	.000
Average PHIE %	.000
Average SW %	.000
Average Vclay %	.000
Integrated PHI M	.000
Sum PHI*(1-SW) M	.000

Zone No. 2

BROADBILL-1  
AMITY OIL NLComplex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
850.09	94	10.3	2.5	46.5	2.177	3.7		225.0	279.4	32.8	79.9	GR	2.650	100.0	100.0	3.7	2.794	.00	.00	4 78
850.24	96	10.5	2.5	44.2	2.136	3.6		224.2	299.7	34.8	81.8	GR	2.650	100.0	100.0	3.2	2.798	.00	.00	4 78
850.39	97	8.4	1.9	47.3	1.965	3.7		251.4	355.4	37.6	83.2	GR	2.650	100.0	100.0	2.8	2.800	.00	.00	4 78
850.54	98	7.8	1.4	50.3	1.794	3.8		262.7	437.8	40.4	84.6	GR	2.650	100.0	100.0	2.5	2.803	.00	.00	4 78
850.70	98	11.3	3.0	57.6	1.608	4.2		217.4	289.4	43.0	83.9	GR	2.650	100.0	100.0	2.6	2.802	.00	.00	4 78
850.85	98	12.6	3.3	61.5	1.549	3.9		206.1	274.8	41.9	83.6	GR	2.650	100.0	100.0	2.7	2.801	.00	.00	4 78
851.00	97	13.8	3.6	65.3	1.491	3.7		196.4	261.6	40.8	83.3	GR	2.650	100.0	100.0	2.8	2.801	.00	.00	4 78
851.15	95	11.1	2.1	69.0	1.458	3.8		217.6	315.8	43.3	81.0	GR	2.650	100.0	100.0	3.4	2.796	.00	.00	4 78
851.31	93	9.9	.7	72.6	1.425	3.8		228.3	511.2	45.9	78.7	GR	2.650	100.0	100.0	4.0	2.792	.00	.00	4 78
851.46	91	9.7	.3	80.8	1.494	4.7		228.7	711.4	46.8	77.2	GR	2.650	100.0	100.0	4.5	2.789	.00	.00	4 78
851.61	89	10.0	.4	79.4	1.505	5.1		223.4	617.9	44.6	74.8	GR	2.650	100.0	100.0	5.2	2.785	.00	.00	4 78
851.76	87	10.2	.4	78.0	1.515	5.4		217.9	539.7	42.4	72.3	GR	2.650	100.0	100.0	6.0	2.781	.00	.00	4 78
851.92	82	10.2	.4	81.8	1.460	5.5		212.4	456.7	48.2	66.9	GR	2.650	100.0	100.0	7.8	2.771	.00	.00	4 78
852.07	77	10.1	.4	85.7	1.404	5.5		206.3	390.3	54.0	61.5	GR	2.650	100.0	100.0	9.8	2.761	.00	.00	4 78
852.22	72	9.9	.4	95.1	1.299	6.5		201.7	359.8	66.2	56.5	GR	2.650	100.0	100.0	11.8	2.752	.00	.00	4 78
852.37	70	9.9	.4	99.4	1.271	6.4		199.1	344.7	64.4	54.9	GR	2.650	100.0	100.0	12.4	2.749	.00	.00	4 78
852.53	69	9.9	.4		1.243	6.3		196.6	330.5	62.7	53.3	GR	2.650	100.0	100.0	13.1	2.746	.00	.00	4 78
852.68	68	10.0	.3	90.4	1.233	6.6		194.8	343.7	62.1	52.5	GR	2.650	100.0	100.0	13.4	2.745	.00	.00	4 78
852.83	66	10.3	.3	86.5	1.244	6.9		189.0	323.8	62.2	50.6	GR	2.650	100.0	100.0	14.2	2.741	.00	.00	4 78
852.98	65	10.7	.3	82.7	1.256	7.2		183.2	305.3	62.4	48.7	GR	2.650	100.0	100.0	15.1	2.738	.00	.00	4 78
853.14	66	10.6	.3	83.6	1.258	7.8		185.2	320.4	63.0	49.7	GR	2.650	100.0	100.0	14.6	2.740	.00	.00	4 78
853.29	66	10.5	.3	84.5	1.260	8.3		187.2	336.6	63.6	50.6	GR	2.650	100.0	100.0	14.2	2.741	.00	.00	4 78
853.44	70	10.7	.4	88.1	1.244	9.1		190.5	323.5	67.2	54.5	GR	2.650	100.0	100.0	12.6	2.748	.00	.00	4 78
853.59	68	10.5	.3	83.9	1.237	9.7		189.5	345.9	69.5	52.4	GR	2.650	100.0	100.0	13.5	2.745	.00	.00	4 78
853.74	66	10.3	.2	79.6	1.229	10.2		188.9	383.4	71.8	50.2	GR	2.650	100.0	100.0	14.4	2.741	.00	.00	4 78
853.90	65	10.2	.2	87.6	1.227	11.8		187.9	390.0	73.7	49.2	GR	2.650	100.0	100.0	14.8	2.739	.00	.00	4 78
854.05	64	10.2	.2	95.6	1.226	13.4		186.5	395.8	75.7	48.0	GR	2.650	100.0	100.0	15.4	2.737	.00	.00	4 78
854.20	61	10.3	.2	63.5	1.217	14.1		181.2	397.2	75.5	44.8	GR	2.650	100.0	100.0	16.8	2.731	.00	.00	4 78
854.35	60	10.3	.2	67.7	1.213	14.1		179.4	393.8	77.1	43.9	GR	2.650	100.0	100.0	17.2	2.729	.00	.00	4 78
854.51	59	10.4	.2	72.0	1.209	14.1		177.4	382.5	78.6	43.1	GR	2.650	100.0	100.0	17.6	2.728	.00	.00	4 78
854.66	56	10.8	.2		1.207	14.1		169.9	357.2	79.1	40.0	GR	2.650	100.0	100.0	19.1	2.722	.00	.00	4 78
854.81	53	11.2	.2		1.204	14.1		162.7	334.3	79.6	36.9	GR	2.650	100.0	100.0	20.6	2.717	.00	.00	4 78
854.96	50	11.4	.2		1.198	14.1		156.3	308.3	81.3	32.7	GR	2.650	100.0	100.0	22.6	2.709	.00	.00	4 78
855.12	49	11.6	.2		1.202	13.9		154.4	306.8	79.9	32.5	GR	2.650	100.0	100.0	22.7	2.709	.00	.00	4 78
855.27	49	11.9	.2		1.206	13.8		152.4	305.4	78.6	32.3	GR	2.650	100.0	100.0	22.9	2.708	.00	.00	4 78
855.42	49	12.0	.2		1.211	13.9		151.7	305.9	79.6	32.3	GR	2.650	100.0	100.0	22.8	2.708	.00	.00	4 78
855.57	49	12.1	.2	93.0	1.217	14.1		151.0	306.4	80.6	32.3	GR	2.650	100.0	100.0	22.8	2.708	.00	.00	4 78
855.73	48	12.3	.2	65.8	1.220	14.1		148.0	296.7	78.9	30.8	GR	2.650	100.0	100.0	23.6	2.706	.00	.00	4 78
855.88	45	12.3	.2	70.5	1.217	14.1		143.8	279.7	78.8	27.8	GR	2.650	100.0	100.0	25.2	2.700	.00	.00	4 78
856.03	42	12.4	.2	75.3	1.214	14.1		139.7	264.1	78.7	24.7	GR	2.650	100.0	100.0	26.8	2.695	.00	.00	4 78
856.18	39	12.9	.2	72.7	1.199	14.1		133.6	251.7	78.7	22.0	GR	2.650	100.0	100.0	28.3	2.690	.00	.00	4 78
856.34	39	12.9	.2	80.0	1.195	14.1		133.4	250.5	79.4	21.7	GR	2.650	100.0	100.0	28.4	2.689	.00	.00	4 78
856.49	39	12.9	.2	87.2	1.191	14.1		133.2	249.4	80.0	21.4	GR	2.650	100.0	100.0	28.6	2.689	.00	.00	4 78
856.64	37	12.9	.2	98.2	1.187	14.1		130.7	241.6	80.2	19.7	GR	2.650	100.0	100.0	29.5	2.686	.00	.00	4 78
856.79	36	13.0	.2		1.184	14.1		128.2	234.3	80.4	17.9	GR	2.650	100.0	100.0	30.5	2.682	.00	.00	4 78
856.95	36	13.4	.2	89.3	1.187	14.1		127.1	237.2	80.4	18.6	GR	2.650	100.0	100.0	30.1	2.684	.00	.00	4 78

857.10	38	13.4	.2	81.1	1.188	14.1	129.2	244.1	80.4	20.2	GR	2.650	100.0	100.0	29.2	2.687	.00	.00	4	78
857.25	39	13.3	.2	72.9	1.190	14.1	131.4	251.3	80.4	21.9	GR	2.650	100.0	100.0	28.3	2.690	.00	.00	4	78
857.40	39	13.3	.2	69.6	1.187	14.1	131.6	251.7	80.3	21.9	GR	2.650	100.0	100.0	28.3	2.690	.00	.00	4	78
857.55	40	13.3	.2	66.2	1.184	14.1	131.8	252.1	80.3	22.0	GR	2.650	100.0	100.0	28.2	2.690	.00	.00	4	78
857.71	41	13.4	.2	86.5	1.180	14.1	132.7	257.3	80.3	23.1	GR	2.650	100.0	100.0	27.6	2.692	.00	.00	4	78
857.86	40	13.5	.2		1.181	14.1	131.1	254.0	80.7	22.4	GR	2.650	100.0	100.0	28.0	2.691	.00	.00	4	78
858.01	39	13.7	.2		1.182	14.1	129.5	250.7	81.1	21.7	GR	2.650	100.0	100.0	28.4	2.689	.00	.00	4	78
858.16	38	14.0	.2		1.183	14.1	126.5	244.6	80.7	20.4	GR	2.650	100.0	100.0	29.1	2.687	.00	.00	4	78
858.32	37	14.3	.2	99.5	1.185	14.1	123.7	238.8	80.3	19.0	GR	2.650	100.0	100.0	29.9	2.684	.00	.00	4	78
858.47	36	14.7	.2	70.8	1.189	14.1	120.5	234.4	80.7	18.0	GR	2.650	100.0	100.0	30.5	2.682	.00	.00	4	78

Zone No. 2  
BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
858.62	35	14.8	.2	69.1	1.187	14.1		119.7	232.7	80.6	17.5	GR	2.650	100.0	100.0	30.7	2.682	.00	.00	4 78
858.77	35	14.9	.2	67.4	1.186	14.1		118.9	231.1	80.6	17.1	GR	2.650	100.0	100.0	30.9	2.681	.00	.00	4 78
858.93	36	15.0	.2	85.4	1.176	14.1		119.8	236.0	80.6	18.3	GR	2.650	100.0	100.0	30.3	2.683	.00	.00	4 78
859.08	37	14.8	.2	79.6	1.179	14.1		121.8	240.5	80.9	19.5	GR	2.650	100.0	100.0	29.6	2.685	.00	.00	4 78
859.23	38	14.7	.2	73.8	1.182	14.1		123.8	245.1	81.3	20.6	GR	2.650	100.0	100.0	29.0	2.687	.00	.00	4 78
859.38	39	14.5	.2	88.5	1.185	14.1		125.3	247.8	81.0	21.3	GR	2.650	100.0	100.0	28.6	2.688	.00	.00	4 78
859.54	39	14.3	.2		1.189	14.1		126.7	250.5	80.7	21.9	GR	2.650	100.0	100.0	28.3	2.690	.00	.00	4 78
859.69	40	14.3	.2		1.187	14.1		127.8	254.2	81.0	22.7	GR	2.650	100.0	100.0	27.8	2.691	.00	.00	4 78
859.84	39	14.2	.2	96.6	1.185	14.1		127.1	249.4	80.9	21.6	GR	2.650	100.0	100.0	28.4	2.689	.00	.00	4 78
859.99	38	14.0	.2	69.6	1.183	14.1		126.5	244.7	80.9	20.5	GR	2.650	100.0	100.0	29.1	2.687	.00	.00	4 78
860.15	38	13.9	.2	68.8	1.184	14.1		126.9	243.6	79.3	20.2	GR	2.650	100.0	100.0	29.2	2.686	.00	.00	4 78
860.30	37	13.7	.2	68.1	1.186	14.1		127.2	242.4	77.6	19.9	GR	2.650	100.0	100.0	29.4	2.686	.00	.00	4 78
860.45	38	12.8	.2	83.5	1.194	14.1		132.2	244.2	76.9	20.4	GR	2.650	100.0	100.0	29.1	2.687	.00	.00	4 78
860.60	37	12.5	.2	81.5	1.196	14.1		132.5	239.9	77.2	19.3	GR	2.650	100.0	100.0	29.7	2.685	.00	.00	4 78
860.76	36	12.2	.2	79.5	1.197	14.1		132.9	235.8	77.6	18.3	GR	2.650	100.0	100.0	30.3	2.683	.00	.00	4 78
860.91	36	12.1	.2	83.4	1.196	14.1		133.1	235.1	78.2	18.1	GR	2.650	100.0	100.0	30.4	2.683	.00	.00	4 78
861.06	36	12.1	.2	87.2	1.195	14.1		133.3	234.4	78.8	18.0	GR	2.650	100.0	100.0	30.5	2.682	.00	.00	4 78
861.21	36	12.0	.2	74.7	1.194	14.1		134.3	236.8	80.3	18.7	GR	2.650	100.0	100.0	30.1	2.684	.00	.00	4 78
861.36	37	12.3	.2	80.9	1.196	14.1		133.2	237.3	80.3	18.8	GR	2.650	100.0	100.0	30.0	2.684	.00	.00	4 78
861.52	37	12.5	.2	87.0	1.198	14.1		132.0	237.7	80.3	19.0	GR	2.650	100.0	100.0	29.9	2.684	.00	.00	4 78
861.67	36	12.4	.2	88.5	1.197	14.1		131.7	234.2	80.6	18.2	GR	2.650	100.0	100.0	30.4	2.683	.00	.00	4 78
861.82	35	12.3	.2	89.9	1.196	14.1		131.4	230.7	80.9	17.3	GR	2.650	100.0	100.0	30.8	2.681	.00	.00	4 78
861.97	39	12.0	.2	64.3	1.189	14.1		137.9	247.4	79.6	21.5	GR	2.650	100.0	100.0	28.5	2.689	.00	.00	4 78
862.13	39	12.1	.2	64.3	1.185	14.1		137.5	246.8	80.4	21.4	GR	2.650	100.0	100.0	28.6	2.689	.00	.00	4 78
862.28	39	12.1	.2	64.2	1.181	14.1		137.1	246.2	81.2	21.4	GR	2.650	100.0	100.0	28.6	2.689	.00	.00	4 78
862.43	32	13.1	.2	88.6	1.194	11.4		123.2	215.8	80.3	13.9	GR	2.650	100.0	100.0	32.7	2.675	.00	.00	4 78
862.58	32	15.8	.3	80.9	1.211	8.4		111.7	157.9	79.6	13.7	GR	2.650	100.0	100.0	32.9	2.675	.00	.00	4 78
862.74	31	19.6	.4	73.4	1.227	5.4		99.6	128.5	79.0	12.9	GR	2.650	99.9	99.6	33.4	2.673	.00	.00	4 78
862.89		Coal																		
863.04		Coal																		
863.19		Coal																		
863.35		Coal																		
863.50		Coal																		
863.65		Coal																		
863.80		Coal																		
863.96		Coal																		
864.11	27	19.2	.7	94.4	1.243	-4	.0	90.2	86.8	66.7	3.7	DN	1.485	90.2	90.2	39.5	2.629	.00	.00	6 8
864.26	25	16.2	.7	93.5	1.248	-4	.0	97.2	88.5	66.6	1.9	DN	1.539	97.2	97.2	40.2	2.622	.00	.00	6 8
864.41	25	15.8	.6	98.9	1.242	-7	.0	98.4	89.8	67.7	1.5	DN	1.532	98.4	98.4	40.4	2.627	.00	.00	6 8
864.57	25	15.3	.6		1.236	-1.0	.0	99.6	91.2	68.7	1.2	DN	1.525	99.6	99.6	40.5	2.632	.00	.00	6 8
864.72	21	14.8	.6		1.234	-1.5	.0	102.3	96.6	67.4	2.9	GR	1.481	100.0	100.0	39.8	2.627	.00	.00	6 8
864.87	21	13.6	.5		1.225	-1.5	.0	106.4	101.2	67.5	2.6	GR	1.466	100.0	100.0	40.0	2.626	.00	.00	6 8
865.02	21	12.5	.5		1.217	-1.5	.0	111.0	106.5	67.6	2.3	GR	1.452	100.0	100.0	40.1	2.624	.00	.00	6 8
865.17	21	11.9	.5	84.3	1.215	-1.4	.0	114.1	105.4	67.7	2.6	GR	1.439	100.0	100.0	40.0	2.619	.00	.00	6 8
865.33	20	12.1	.5	85.9	1.221	-1.4	.0	112.5	99.9	67.8	1.8	GR	1.472	100.0	100.0	40.3	2.634	.00	.00	6 8
865.48	20	12.3	.6	87.4	1.227	-1.4	.0	111.0	95.0	67.9	1.1	GR	1.505	100.0	100.0	40.6	2.629	.00	.00	6 8

865.63	20	13.2	.8	98.2	1.220	-1.5	.0	107.5	77.8	68.2	1.2	GR	1.484	100.0	100.0	40.5	2.632	.00	.00	6	8
865.78	20	14.3	1.1		1.213	-1.7	.0	103.1	67.3	68.6	1.3	GR	1.463	100.0	100.0	40.4	2.634	.00	.00	6	8
865.94	20	12.5	.6	99.1	1.214	-2.0	.0	110.1	91.7	68.3	1.1	GR	1.472	100.0	100.0	40.6	2.617	.00	.00	6	8
866.09	19	12.1	.5	94.3	1.221	-2.2	.0	111.5	95.9	68.0	.0	GR	1.516	100.0	100.0	41.0	2.616	.00	.00	6	8
866.24	18	11.6	.5	89.4	1.229	-2.3	.0	113.8	102.0	67.8	.0	GR	1.534	100.0	100.0	41.0	2.634	.00	.00	6	8
866.39	18	11.4	.4	87.6	1.229	-2.3	.0	114.9	113.1	67.7	.0	GR	1.534	100.0	100.0	41.0	2.634	.00	.00	6	8
866.55	19	11.2	.3	85.7	1.229	-2.3	.0	115.9	128.7	67.5	.0	GR	1.534	100.0	100.0	41.0	2.634	.00	.00	6	8
866.70	22	11.4	.4	82.2	1.234	-2.3	.0	116.8	116.2	67.7	3.2	GR	1.474	100.0	100.0	39.7	2.627	.00	.00	6	8
866.85	23	11.2	.4	80.7	1.234	-2.0	.0	116.0	105.1	67.7	.0	DN	1.548	100.0	100.0	41.0	2.628	.00	.00	6	8
867.00	24	11.0	.5	79.2	1.235	-1.8	.0	116.8	98.8	67.8	.0	DN	1.549	100.0	100.0	41.0	2.629	.00	.00	6	8

Zone No. 2

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
867.16	24	10.9	.4	79.4	1.227	-1.7	.0	117.3	108.6	67.8	.0	DN	1.531	100.0	100.0	41.0	2.631	.00	.00	6 8
867.31	24	10.9	.3	79.5	1.220	-1.5	.0	117.6	121.8	67.9	.0	DN	1.512	100.0	100.0	41.0	2.632	.00	.00	6 8
867.46	25	10.9	.3	82.2	1.204	-1.7	.0	117.2	121.2	66.9	.0	DN	1.472	100.0	100.0	41.0	2.632	.00	.00	6 8
867.61	23	11.8	.4	81.6	1.197	-2.2	.0	112.6	106.2	66.4	.0	DN	1.453	100.0	100.0	41.0	2.633	.00	.00	6 8
867.77	22	12.7	.5	81.0	1.189	-2.6	.0	108.6	95.5	65.8	.0	DN	1.434	100.0	100.0	41.0	2.634	.00	.00	6 8
867.92	20	12.4	.4	83.9	1.192	-2.6	.0	110.2	109.6	65.8	.0	DN	1.443	100.0	100.0	41.0	2.623	.00	.00	6 8
868.07	19	12.0	.3	86.7	1.196	-2.6	.0	112.1	132.0	65.8	.0	GR	1.452	100.0	100.0	41.0	2.632	.00	.00	6 8
868.22	18	10.7	.3	68.5	1.222	-2.7	.0	118.7	132.0	65.1	.0	DN	1.517	100.0	100.0	41.0	2.617	.00	.00	6 8
868.38	20	11.0	.3	64.8	1.227	-2.8	.0	116.6	131.1	64.4	.0	DN	1.528	100.0	100.0	41.0	2.628	.00	.00	6 8
868.53	22	11.4	.3	61.2	1.231	-2.9	.0	114.7	130.3	63.7	.0	DN	1.539	100.0	100.0	41.0	2.619	.00	.00	6 8
868.68	23	15.4	.3	72.3	1.224	-3.0	16.0	98.8	121.9	25.0	.0	DN	1.522	99.8	98.8	41.0	2.622	.00	.00	6 8
868.83	21	15.3	.3	73.7	1.219	-3.1	12.8	99.2	130.2	28.2	.0	DN	1.509	99.8	99.2	41.0	2.629	.00	.00	6 8
868.98	20	15.1	.3	75.2	1.214	-3.3	9.6	99.6	140.2	31.4	.0	DN	1.497	99.9	99.6	41.0	2.617	.00	.00	6 8
869.14	21	15.3	.2	76.1	1.221	-2.7	9.6	99.2	141.3	31.4	.0	DN	1.516	99.8	99.2	41.0	2.616	.00	.00	6 8
869.29	21	15.3	.2	77.0	1.229	-2.0		132.5	194.0	31.5	2.8	GR	2.650	100.0	100.0	30.6	2.655	.00	.00	4 7
869.44	18	15.7	.4	61.0	1.283	-.9		130.7	155.9	31.3	.0	GR	2.650	100.0	100.0	31.3	2.650	.00	.00	4 7
869.59	16	16.6	.8	57.4	1.390	-.7	9.4	95.0	78.3	31.6	.0	DN	1.937	95.0	95.0	41.0	2.617	.00	.00	6 8
869.75	15	17.3	1.3	53.9	1.497	-.6	9.1	93.1	62.6	31.9	.0	DN	2.204	93.1	93.1	41.0	2.624	.00	.00	6 8
869.90	16	16.0	1.3	49.4	1.733	-.5	10.1	97.0	62.3	30.9	.0	DN	2.606	97.0	97.0	41.0	2.626	.00	.00	6 8
870.05	17	14.7	1.3	45.0	1.968	-.4	8.4	101.2	62.0	29.9	.0	GR	2.724	100.0	100.0	41.0	2.724	.00	.00	8
870.20	20	14.4	1.3	31.5	2.175	-.1	2.4	135.6	82.7	26.2	1.4	GR	2.707	100.0	100.0	31.2	2.708	.00	.00	
870.36	21	14.4	1.3	29.7	2.187	.0	.7	141.2	85.6	27.0	2.1	GR	2.698	100.0	100.0	29.8	2.700	.00	.00	
870.51	21	14.4	1.4	28.0	2.199	.1	.0	147.3	88.7	27.7	2.9	GR	2.689	100.0	100.0	28.5	2.692	.00	.00	
870.66	24	13.4	1.2	27.8	2.201	.2	.0	155.9	96.0	27.3	5.3	GR	2.686	100.0	100.0	27.5	2.691	.00	.00	
870.81	26	12.3	1.1	27.6	2.203	.2	.0	165.3	104.3	26.9	7.7	GR	2.683	100.0	100.0	26.4	2.690	.00	.00	
870.97	39	10.9	1.0	27.8	2.197	.2	.0	184.4	132.0	28.9	21.3	GR	2.664	100.0	100.0	21.6	2.689	.00	.00	
871.12	42	9.6	1.0	33.4	2.153	.1	.0	173.8	115.9	29.9	24.3	GR	2.690	100.0	100.0	24.2	2.714	.00	.00	
871.27	45	8.3	1.1	39.0	2.108	.0	.0	167.2	102.6	30.9	27.3	GR	2.724	100.0	100.0	26.8	2.754	.00	.00	
871.42	46	8.5	1.1	40.7	2.050	.4	.0	153.4	93.0	33.4	29.2	GR	2.696	100.0	100.0	28.8	2.730	.00	.00	
871.58	48	8.6	1.1	42.4	1.996	.9	.0	152.2	92.6	35.9	31.0	GR	2.670	100.0	100.0	28.3	2.710	.00	.00	8
871.73	54	8.4	.6	39.1	2.045	.4	.0	159.9	144.2	37.1	37.1	GR	2.656	100.0	100.0	25.6	2.706	.00	.00	
871.88	60	9.2	.8	41.1	2.075	.5	.0	159.0	133.0	36.1	44.0	GR	2.701	100.0	100.0	22.5	2.756	.00	.00	
872.03	67	10.2	1.1	43.2	2.103	.7	.0	156.0	128.4	35.2	50.8	GR	2.779	100.0	100.0	19.9	2.805	.00	.00	
872.19	73	15.0	2.4	45.8	2.003	.6	.0	132.3	96.8	34.7	57.1	GR	2.675	100.0	100.0	17.6	2.763	.00	.00	8
872.34	67	13.4	1.7	44.0	2.000	.3	.0	134.8	103.2	37.5	50.8	GR	2.651	100.0	100.0	20.2	2.735	.00	.00	8
872.49	61	12.5	1.0	42.2	1.999	.1		164.2	163.3	40.3	44.7	GR	2.650	100.0	100.0	16.9	2.731	.00	.00	4 78
872.64	55	12.4	1.5	37.5	2.047	.2		157.7	115.8	40.0	39.0	GR	2.650	100.0	100.0	19.5	2.720	.00	.00	4 78
872.79	50	12.1	2.0	32.8	2.096	.2		152.5	88.2	39.7	33.3	GR	2.650	100.0	100.0	22.3	2.710	.00	.00	4 78
872.95	56	11.5	.8	35.5	2.091	-.1		164.0	160.1	40.5	39.2	GR	2.650	100.0	100.0	19.4	2.721	.00	.00	4 78
873.10	72	11.8	1.1	39.2	1.990	-.3	.0	123.6	80.8	41.6	19.2	DN	2.647	100.0	100.0	33.1	2.676	.00	.00	8
873.25	88	12.2	1.5	42.9	1.888	-.6	.0	113.3	60.1	42.7	4.0	DN	2.642	100.0	100.0	39.4	2.649	.00	.00	8
873.40	105	12.1	1.5	43.1	1.892	-1.1	.0	115.5	60.8	42.7	7.1	DN	2.642	100.0	100.0	38.1	2.654	.00	.00	8
873.56	120	12.2	1.6	43.3	1.896	-1.5	.0	116.6	61.5	42.6	10.1	DN	2.642	100.0	100.0	36.9	2.659	.00	.00	8
873.71	110	12.2	2.7	37.6	2.088	-.9	.0	147.3	84.4	43.1	46.9	DN	2.652	100.0	100.0	19.8	2.719	.00	.00	
873.86	95	11.8	1.9	34.6	2.122	-.7	.0	158.3	101.7	42.2	40.8	DN	2.655	100.0	100.0	19.7	2.708	.00	.00	
874.01	79	11.4	1.1	31.7	2.155	-.5	.0	170.8	133.5	41.3	34.8	DN	2.657	100.0	100.0	19.6	2.700	.00	.00	



874.17	78	11.3	1.0	33.0	2.154	-.4	.0	174.0	156.1	39.9	42.6	DN	2.657	100.0	100.0	17.2	2.710	.00	.00			
874.32	76	11.2	.9	34.3	2.152	-.3	.0	177.8	185.8	38.5	50.5	DN	2.657	100.0	100.0	14.8	2.727	.00	.00			
874.47	86	11.3	1.0	33.8	2.094	-.3	.0	147.7	109.6	38.7	25.2	DN	2.653	100.0	100.0	26.3	2.687	.00	.00			
874.62	90	10.9	1.0	34.0	1.862	-.2	1.8	117.7	71.1	39.2	.0	DN	2.549	100.0	100.0	41.0	2.629	.00	.00			6 8
874.78	94	10.4	1.0	34.2	1.629	-.2	1.4	120.4	71.1	39.6	.0	DN	2.353	100.0	100.0	41.0	2.633	.00	.00			6 8
874.93	105	10.5	1.0	39.3	1.442	-.1	2.7	119.4	71.6	38.3	.0	DN	2.067	100.0	100.0	41.0	2.627	.00	.00			6 8
875.08	103	12.4	.9	44.0	1.457	-.1	1.0	110.2	72.3	40.0	.0	DN	2.103	100.0	100.0	41.0	2.623	.00	.00			6 8
875.23	102	14.2	.9	48.7	1.471	-.1	.0	102.9	73.0	41.7	.0	DN	2.139	100.0	100.0	41.0	2.619	.00	.00			6 8
875.39	91	14.6	1.6	43.0	1.526	-.1	.0	101.3	55.4	45.1	.0	DN	2.276	100.0	100.0	41.0	2.616	.00	.00			6 8
875.54	79	15.2	2.3	37.3	1.580	-.1	.0	99.4	46.3	48.4	.0	DN	2.412	99.4	99.4	41.0	2.632	.00	.00			6 8

Zone No. 2

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
875.69	53	14.1	2.4	33.1	1.864	-.3	.0	103.3	45.6	41.5	.0	DN	2.542	100.0	100.0	41.0	2.622	.00	.00	6 8
875.84	44	12.7	1.6	34.9	1.967	-.3	.0	108.7	55.0	41.4	.0	DN	2.625	100.0	100.0	41.0	2.625	.00	.00	8
876.00	35	11.3	.9	36.6	2.071	-.4	.0	135.9	97.0	41.3	17.2	GR	2.679	100.0	100.0	31.1	2.698	.00	.00	
876.15	37	10.9	.8	36.4	2.090	-.4	.0	142.5	105.7	40.5	19.1	GR	2.687	100.0	100.0	29.6	2.706	.00	.00	
876.30	39	10.6	.8	36.2	2.109	-.4	.0	149.6	115.7	39.7	21.0	GR	2.695	100.0	100.0	28.1	2.717	.00	.00	
876.45	37	10.6	.8	34.1	2.122	-.3	.0	154.6	117.1	37.3	19.3	GR	2.684	100.0	100.0	27.5	2.704	.00	.00	
876.60	37	10.7	.8	35.4	2.135	-.3	.0	154.8	115.8	36.4	19.3	GR	2.705	100.0	100.0	27.3	2.727	.00	.00	
876.76	37	10.8	.8	36.6	2.149	-.3	.0	153.1	113.1	35.5	19.4	GR	2.737	100.0	100.0	27.5	2.755	.00	.00	
876.91	40	10.7	.9	38.1	2.133	-.3	.0	149.3	109.6	36.6	22.4	GR	2.743	100.0	100.0	27.6	2.763	.00	.00	
877.06	43	10.7	.9	39.7	2.117	-.3	.0	145.8	106.4	37.8	25.4	GR	2.750	100.0	100.0	27.6	2.770	.00	.00	
877.21	48	11.2	.9	40.8	2.081	-.4	.0	138.5	111.8	42.7	30.5	GR	2.724	100.0	100.0	27.3	2.756	.00	.00	
877.37	51	11.3	.9	39.4	2.100	-.4	.0	144.8	117.7	42.7	34.0	GR	2.712	100.0	100.0	24.7	2.753	.00	.00	
877.52	54	11.5	1.0	38.0	2.118	-.5	.0	151.6	125.0	42.6	37.5	GR	2.703	100.0	100.0	22.2	2.749	.00	.00	
877.67	60	11.4	1.0	36.7	2.118	-.5	.0	158.5	141.3	42.3	43.9	GR	2.674	100.0	100.0	19.4	2.731	.00	.00	
877.82	66	11.3	1.0	35.4	2.117	-.5	.0	161.4	144.6	41.9	43.7	DN	2.654	100.0	100.0	19.0	2.712	.00	.00	
877.98	85	11.2	1.0	35.8	2.112	-.4	.0	160.7	142.0	38.0	44.4	DN	2.654	100.0	100.0	19.1	2.714	.00	.00	
878.13	93	11.4	1.1	35.8	2.105	-.4	.0	156.5	127.3	38.0	42.2	DN	2.654	100.0	100.0	20.2	2.710	.00	.00	
878.28	102	11.5	1.3	35.9	2.099	-.4	.0	152.5	115.1	38.1	40.1	DN	2.653	100.0	100.0	21.3	2.707	.00	.00	
878.43	94	11.7	1.3	35.1	2.084	-.4	.0	143.5	97.0	39.3	29.2	DN	2.653	100.0	100.0	25.7	2.692	.00	.00	
878.59	87	11.6	1.4	35.6	2.085	-.3	.0	145.4	96.7	39.6	32.6	DN	2.653	100.0	100.0	24.5	2.697	.00	.00	
878.74	80	11.5	1.5	36.1	2.085	-.3	.0	147.4	96.9	39.9	36.1	DN	2.652	100.0	100.0	23.4	2.701	.00	.00	
878.89	80	11.7	1.7	37.1	2.095	-.3	.0	152.4	104.7	40.7	45.9	DN	2.653	100.0	100.0	19.7	2.717	.00	.00	
879.04	80	11.9	2.0	38.0	2.104	-.3	.0	158.6	116.9	41.4	55.7	DN	2.653	100.0	100.0	16.0	2.738	.00	.00	
879.20	85	10.9	1.3	37.0	2.144	-.3	.0	186.0	195.9	41.4	64.4	DN	2.656	100.0	100.0	10.8	2.757	.00	.00	
879.35	92	10.6	1.6	39.0	2.150	-.3	.0	219.2	319.8	42.4	77.3	GR	2.650	100.0	100.0	4.4	2.788	.00	.00	8
879.50	98	10.2	1.9	41.0	2.156	-.3	.0	228.4	369.2	43.4	83.9	GR	2.650	100.0	100.0	2.7	2.820	.00	.00	8
879.65	101	10.6	1.7	49.6	2.124	-.3	.0	226.5	437.4	48.6	87.5	GR	2.650	100.0	100.0	1.8	2.910	.00	.00	8
879.81	105	11.0	1.5	58.1	2.093	-.3	.0	224.0	516.2	53.8	91.2	GR	2.650	100.0	100.0	1.1	3.017	.00	.00	8
879.96	98	13.1	2.4	57.4	2.030	-.2	.0	202.4	324.2	54.3	84.1	GR	2.650	100.0	100.0	2.6	2.958	.00	.00	8
880.11	97	13.3	1.7	54.1	2.036	-.2	.0	200.0	377.4	51.4	83.0	GR	2.650	100.0	100.0	2.9	2.911	.00	.00	8
880.26	96	13.3	.9	50.8	2.042	-.2	.0	199.2	487.9	48.4	81.9	GR	2.650	100.0	100.0	3.1	2.866	.00	.00	8
880.41	96	14.4	2.6	46.9	2.080	-.1	.0	191.7	297.3	47.3	82.4	GR	2.650	100.0	100.0	3.0	2.838	.00	.00	8
880.57	97	16.6	4.3	43.1	2.117	-.1	.0	179.1	234.2	46.2	82.8	GR	2.650	100.0	100.0	2.9	2.815	.00	.00	8
880.72	98	15.3	3.1	41.7	2.185	-.1	.0	187.0	290.9	44.1	84.3	GR	2.650	100.0	100.0	2.5	2.853	.00	.00	8
880.87	99	15.2	3.1	43.1	2.173	-.1	.0	188.3	302.3	43.8	85.7	GR	2.650	100.0	100.0	2.2	2.862	.00	.00	8
881.02	101	15.1	3.2	44.5	2.161	-.1	.0	189.5	314.0	43.4	87.1	GR	2.650	100.0	100.0	1.9	2.870	.00	.00	8
881.18	100	18.9	4.2	47.5	2.121	.1	.0	169.4	266.1	43.6	86.3	GR	2.650	100.0	100.0	2.1	2.878	.00	.00	8
881.33	100	15.7	2.8	45.6	2.134	-.1	.0	185.7	330.0	41.6	86.7	GR	2.650	100.0	100.0	2.0	2.861	.00	.00	8
881.48	101	13.8	1.5	43.7	2.146	-.3	.0	198.5	464.2	39.6	87.2	GR	2.650	100.0	100.0	1.9	2.847	.00	.00	8
881.63	99	11.6	1.2	41.2	2.167	-.4	.0	215.3	481.6	39.6	85.1	GR	2.650	100.0	100.0	2.3	2.831	.00	.00	8
881.79	97	9.5	.9	38.7	2.187	-.5	.0	237.2	511.7	39.5	83.1	GR	2.650	100.0	100.0	2.8	2.816	.00	.00	8
881.94	97	9.7	1.4	39.1	2.196	-.3	.0	234.1	407.7	39.6	82.7	GR	2.650	100.0	100.0	2.9	2.827	.00	.00	8
882.09	98	9.7	1.4	39.0	2.197	-.3	.0	235.3	427.2	39.6	84.0	GR	2.650	100.0	100.0	2.6	2.827	.00	.00	
882.24	99	9.7	1.4	38.9	2.198	-.3	.0	238.2	461.8	39.6	85.2	GR	2.650	100.0	100.0	2.0	2.826	.00	.00	
882.40	97	10.7	1.4	39.8	2.198	-.3	.0	222.9	422.4	40.1	83.5	GR	2.650	100.0	100.0	2.7	2.839	.00	.00	8
882.55	96	11.7	1.3	40.7	2.199	-.3	.0	212.3	406.7	40.6	81.9	GR	2.650	100.0	100.0	3.2	2.852	.00	.00	8

882.70	91	13.5	1.3	38.9	2.176	-.3	.0	193.7	342.5	41.4	76.3	GR	2.650	100.0	100.0	4.7	2.808	.00	.00	8
882.85	92	13.7	1.4	39.1	2.127	-.1	.0	187.4	280.1	45.1	71.3	DN	2.650	100.0	100.0	6.3	2.771	.00	.00	8
883.01	94	13.9	1.5	39.4	2.078	.1	.0	138.3	120.0	48.8	54.3	DN	2.650	100.0	100.0	18.0	2.735	.00	.00	8
883.16	96	14.7	2.0	42.0	2.061	.0	.0	140.5	123.0	50.4	64.6	DN	2.646	100.0	100.0	14.5	2.756	.00	.00	8
883.31	99	15.3	2.6	44.7	2.043	-.1	.0	180.5	233.1	51.9	74.9	DN	2.650	100.0	100.0	5.2	2.779	.00	.00	8
883.46	98	15.4	1.7	51.7	2.052	-.1	.0	186.9	391.3	52.1	84.4	GR	2.650	100.0	100.0	2.5	2.888	.00	.00	8
883.62	97	16.1	1.6	50.9	2.016	-.1	.0	182.2	388.2	50.2	83.4	GR	2.650	100.0	100.0	2.8	2.848	.00	.00	8
883.77	96	16.7	1.5	50.1	1.981	-.1	.0	178.0	385.7	48.2	82.3	GR	2.650	100.0	100.0	3.0	2.807	.00	.00	8
883.92	98	18.5	4.1	51.4	1.981	.1	.0	170.4	254.2	46.7	84.4	GR	2.650	100.0	100.0	2.5	2.828	.00	.00	8
884.07	Coal																			



891.24	Coal																			
891.39	Coal																			
891.54	110	19.1	6.3	53.8	1.921	.1	.0	168.3	215.8	52.5	86.1	DN	2.650	100.0	100.0	2.1	2.814	.00	.00	8
891.69	106	14.2	2.3	58.6	1.857	.5	.0	196.7	422.6	53.0	91.9	DN	2.650	100.0	100.0	.9	2.835	.00	.00	8
891.84	102	14.0	2.0	56.0	1.875	.3	.0	194.4	342.3	51.8	82.4	DN	2.650	100.0	100.0	3.0	2.809	.00	.00	8
892.00	98	13.8	1.6	53.4	1.895	.1	.0	188.6	282.7	50.5	73.5	DN	2.650	100.0	100.0	5.6	2.786	.00	.00	8
892.15	99	14.2	1.9	53.3	1.888	.4	.0	183.2	232.5	51.0	70.4	DN	2.650	100.0	100.0	6.6	2.778	.00	.00	8
892.30	100	14.6	2.3	53.3	1.882	.6	.0	124.1	78.0	51.6	43.1	DN	2.689	100.0	100.0	23.3	2.773	.00	.00	8
892.45	105	16.5	4.9	50.2	1.844	.0	.0	111.6	46.4	51.8	33.8	DN	2.626	100.0	100.0	27.1	2.696	.00	.00	8
892.61	107	14.4	3.0	50.2	1.898	.0	.0	129.6	76.6	51.5	49.9	DN	2.643	100.0	100.0	20.6	2.741	.00	.00	8

Zone No. 2 BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
892.76	110	13.4	1.0	50.3	1.953	.0	.0	193.7	380.6	51.3	75.9	DN	2.650	100.0	100.0	4.8	2.787	.00	.00	8
892.91	109	15.2	3.5	50.5	1.960	.1	.0	185.2	235.1	51.8	79.9	DN	2.650	100.0	100.0	3.7	2.796	.00	.00	8
893.06	Coal																			
893.22	113	15.2	3.1	47.0	1.905	.6	.0	117.9	61.3	53.2	36.8	DN	2.634	100.0	100.0	25.9	2.702	.00	.00	8
893.37	115	15.1	2.2	46.3	1.888	.8	.0	112.7	63.0	53.3	26.3	DN	2.637	100.0	100.0	30.2	2.685	.00	.00	8
893.52	116	14.8	1.3	45.7	1.872	1.0	.0	108.5	71.3	53.5	15.8	DN	2.638	100.0	100.0	34.5	2.667	.00	.00	8
893.67	115	15.1	1.8	50.2	1.839	.8	.0	115.1	75.3	53.7	31.6	DN	2.627	100.0	100.0	28.0	2.693	.00	.00	8
893.83	113	15.4	2.2	54.7	1.806	.6	.0	112.1	64.0	53.9	27.6	DN	2.681	100.0	100.0	29.7	2.725	.00	.00	8
893.98	118	14.6	2.2	61.4	1.767	.8	.0	185.7	260.5	53.9	75.6	DN	2.650	100.0	100.0	4.9	2.880	.00	.00	8
894.13	121	13.8	1.6	58.1	1.788	.9	.0	115.9	69.9	55.3	22.8	DN	2.676	100.0	100.0	31.7	2.765	.00	.00	8
894.28	125	13.0	1.1	54.9	1.808	1.0	.0			56.6	100.0	GR	2.650	100.0	100.0	.0	2.831	.00	.00	1 4
894.44	122	13.1	2.2	50.6	1.798	.9	.0	117.1	57.9	57.3	19.2	DN	2.629	100.0	100.0	33.1	2.670	.00	.00	8
894.59	120	13.1	2.0	53.0	1.782	.8	.0	122.0	67.1	56.4	27.9	DN	2.619	100.0	100.0	29.6	2.685	.00	.00	8
894.74	118	13.0	1.8	55.4	1.765	.8	.0	121.6	69.2	55.5	26.7	DN	2.646	100.0	100.0	30.1	2.701	.00	.00	8
894.89	120	13.6	1.6	57.2	1.774	.8	.0	116.3	70.2	54.4	21.6	DN	2.649	100.0	100.0	32.2	2.737	.00	.00	8
895.05	122	14.1	1.3	59.0	1.783	.8	.0	113.9	76.5	53.3	21.5	DN	2.678	100.0	100.0	32.2	2.775	.00	.00	8
895.20	119	15.2	1.4	58.6	1.817	.7	.0	183.0	340.2	53.5	76.8	DN	2.650	100.0	100.0	4.6	2.800	.00	.00	8
895.35	114	16.9	2.3	61.7	1.753	.3	.0	169.8	229.7	53.1	72.6	DN	2.650	100.0	100.0	5.9	2.846	.00	.00	8
895.50	110	19.1	3.2	64.9	1.692	.0	.0	90.5	40.7	52.6	4.1	DN	2.644	90.5	90.5	39.3	2.692	.00	.00	8
895.65	113	19.3	3.8	60.8	1.541	.0	.0	88.3	36.2	51.1	.0	DN	2.313	88.3	88.3	41.0	2.633	.00	.00	6 8
895.81	116	19.3	4.3	56.7	1.389	.0	.0	88.2	33.8	49.5	.0	DN	1.934	88.2	88.2	41.0	2.634	.00	.00	6 8
895.96	123	13.6	1.7	49.7	1.338	.1	.0	105.2	53.5	47.1	.0	DN	1.807	100.0	100.0	41.0	2.627	.00	.00	6 8
896.11	109	13.4	1.5	47.9	1.463	.0	.0	105.9	56.8	47.4	.0	DN	2.119	100.0	100.0	41.0	2.619	.00	.00	6 8
896.26	96	13.2	1.3	46.1	1.588	-.1	.0	106.8	60.7	47.7	.0	DN	2.432	100.0	100.0	41.0	2.632	.00	.00	6 8
896.42	74	14.9	2.2	49.3	1.738	-.2	.0	100.5	47.3	51.5	.0	DN	2.609	100.0	100.0	41.0	2.629	.00	.00	6 8
896.57	52	16.5	3.1	52.5	1.888	-.2	.0	112.0	59.5	55.4	34.8	GR	2.726	100.0	100.0	26.7	2.767	.00	.00	8
896.72	33	21.9	2.6	75.5	2.048	-.3	.0	89.0	51.2	57.3	15.0	GR	3.544	89.0	89.0	34.9	3.582	.00	.00	5 8
896.87	37	23.5	4.5	79.6	2.079	-.3	.0	87.5	40.6	53.8	19.3	GR	3.626	87.5	87.5	33.1	3.659	.00	.00	5 8
897.03	41	27.3	6.4	83.8	2.110	-.2	.0	82.8	35.6	50.2	23.5	GR	3.718	82.8	82.8	31.3	3.737	.00	.00	5 8
897.18	65	17.9	1.4	48.1	2.104	-.2	.0	115.6	108.6	45.4	49.3	GR	2.922	100.0	100.0	20.8	2.874	.00	.00	5 8
897.33	101	17.4	1.1	38.3	2.075	-.2	.0	120.3	124.3	43.1	46.3	DN	2.651	100.0	100.0	20.7	2.718	.00	.00	
897.48	137	16.9	.8	28.5	2.046	-.2	.0	108.9	90.5	40.7	.0	DN	2.617	100.0	100.0	35.9	2.617	.00	.00	
897.64	176	16.9	1.1	28.3	1.998	-.2	.0	103.2	71.7	42.3	.0	DN	2.587	100.0	100.0	37.7	2.627	.00	.00	6
897.79	215	16.8	1.5	28.0	1.950	-.2	.0	98.1	59.6	43.8	.0	DN	2.556	98.1	98.1	39.6	2.616	.00	.00	6
897.94	192	20.0	2.2	42.5	1.747	.1	.0	86.8	47.4	51.9	.0	DN	2.542	86.8	86.8	41.0	2.622	.00	.00	6 8
898.09	Coal																			
898.25	Coal																			
898.40	Coal																			
898.55	Coal																			
898.70	Coal																			
898.86	100	19.6	4.8	59.8	1.730	.0	.0	92.8	36.3	61.6	11.9	DN	2.652	92.8	92.8	36.1	2.739	.00	.00	8
899.01	99	18.5	5.2	56.0	1.697	.2	.0	94.3	33.9	62.0	9.6	DN	2.632	94.3	94.3	37.1	2.655	.00	.00	8
899.16	99	14.8	3.2	59.2	1.734	.2	.0	107.7	45.4	58.2	13.8	DN	2.635	100.0	100.0	35.3	2.731	.00	.00	8
899.31	100	13.5	1.2	62.4	1.770	.2	.0	198.4	444.9	54.5	83.1	DN	2.650	100.0	100.0	2.8	2.887	.00	.00	8
899.46	102	12.9	1.1	53.5	1.993	.1	.0	205.5	559.4	41.9	88.0	GR	2.650	100.0	100.0	1.7	2.868	.00	.00	8
899.62	86	14.4	1.1	40.0	2.087	.0	.0	142.1	161.1	38.0	61.6	DN	2.650	100.0	100.0	15.1	2.750	.00	.00	

899.77	70	15.8	1.2	26.6	2.181	-.2	.0	146.3	105.8	34.0	12.2	DN	2.657	100.0	100.0	25.2	2.672	.00	.00
899.92	56	19.2	1.4	25.2	2.217	-.2	.0	146.0	114.0	35.3	17.0	DN	2.657	100.0	100.0	21.5	2.678	.00	.00
900.07	43	22.7	1.6	23.8	2.252	-.3	.0	149.4	127.5	36.7	21.8	DN	2.657	100.0	100.0	17.8	2.684	.00	.00
900.23	37	35.1	1.3	25.9	2.213	-.3	.0	107.9	120.8	38.4	19.8	GR	2.657	100.0	100.0	20.9	2.681	.00	.00
900.38	37	39.3	1.2	27.1	2.196	-.3	.0	97.2	117.9	38.9	19.1	GR	2.660	99.4	97.2	22.2	2.683	.00	.00
900.53	36	43.3	1.1	28.3	2.179	-.3	.0	88.4	116.0	39.4	18.3	GR	2.663	97.6	88.4	23.6	2.684	.00	.00
900.68	36	40.6	1.0	28.9	2.167	-.3	.0	88.7	119.9	39.4	17.9	GR	2.663	97.6	88.7	24.5	2.683	.00	.00
900.84	38	41.5	.9	28.0	2.160	-.3	.0	86.3	116.0	39.4	13.3	DN	2.657	97.1	86.3	26.2	2.673	.00	.00
900.99	41	42.3	.9	27.1	2.153	-.3	.0	82.3	107.5	39.4	4.8	DN	2.656	96.2	82.3	29.3	2.662	.00	.00
901.14	38	42.2	.9	28.8	2.157	-.3	.0	85.7	120.8	39.2	17.0	DN	2.656	97.0	85.7	25.2	2.677	.00	.00

Zone No. 2  
 BROADBILL-1  
 AMITY OIL NL

Complex Lithology Results  
 28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FCVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS	
901.29	35	42.0	.9	30.5	2.161	-.3	.0	84.6	116.0	38.9	16.8	GR	2.675	96.7	84.6	25.6	2.693	.00	.00		
901.45	32	42.0	1.0	31.4	2.173	-.3	.0	84.0	107.2	39.6	13.6	GR	2.694	96.6	84.0	26.6	2.706	.00	.00		
901.60	34	43.0	1.1	29.7	2.166	-.3	.0	84.7	110.7	39.6	16.3	GR	2.671	96.7	84.7	25.4	2.689	.00	.00		
901.75	37	44.1	1.1	28.0	2.158	-.3	.0	83.2	105.1	39.5	12.6	DN	2.656	96.4	83.2	26.5	2.672	.00	.00		
901.90	38	43.2	1.1	28.0	2.155	-.3	.0	83.1	101.0	39.3	11.2	DN	2.656	96.4	83.1	27.2	2.670	.00	.00		
902.06	39	42.4	1.2	28.0	2.151	-.3	.0	83.0	97.1	39.1	9.9	DN	2.656	96.3	83.0	27.8	2.668	.00	.00		
902.21	45	37.5	.9	28.6	2.141	-.3	.0	86.4	106.8	36.1	10.0	DN	2.656	97.1	86.4	28.4	2.668	.00	.00		
902.36	62	36.4	.9	29.0	2.133	-.3	.0	86.0	104.8	36.8	9.0	DN	2.655	97.0	86.0	29.2	2.667	.00	.00		
902.51	80	35.2	.9	29.3	2.124	-.3	.0	85.7	103.0	37.5	8.0	DN	2.655	97.0	85.7	30.0	2.665	.00	.00		
902.67	96	39.4	.9	30.7	2.144	-.3	.0	87.6	127.8	38.1	24.1	DN	2.656	97.4	87.6	23.7	2.686	.00	.00		
902.82	111	43.5	.9	32.0	2.164	-.3	.0	90.2	167.7	38.6	40.2	DN	2.657	98.0	90.2	17.3	2.707	.00	.00		
902.97	82	60.1	1.3	31.7	2.224	-.3	.0	95.5	285.1	38.1	61.1	DN	2.656	99.1	95.5	7.0	2.750	.00	.00		
903.12	63	62.0	1.2	30.1	2.232	-.2	.0	89.4	206.5	37.4	46.7	GR	2.674	97.8	89.4	11.5	2.735	.00	.00		
903.27	43	63.9	1.1	28.6	2.240	-.2	.0	82.6	146.5	36.8	26.3	GR	2.692	96.3	82.6	18.3	2.720	.00	.00		
903.43	36	47.2	1.0	28.9	2.218	-.2	.0	89.2	127.3	38.2	18.3	GR	2.691	97.7	89.2	22.3	2.708	.00	.00		
903.58	36	43.9	1.1	28.7	2.214	-.2	.0	92.3	127.0	38.5	18.8	GR	2.687	98.4	92.3	22.2	2.704	.00	.00		
903.73	37	40.6	1.1	28.5	2.210	-.2	.0	95.9	126.7	38.7	19.3	GR	2.682	99.2	95.9	22.1	2.701	.00	.00		
903.88	37	42.5	1.1	28.2	2.210	-.2	.0	94.3	128.8	40.2	19.9	GR	2.678	98.8	94.3	21.8	2.698	.00	.00		
904.04	38	44.5	1.1	27.9	2.210	-.2	.0	92.9	130.9	41.6	20.5	GR	2.674	98.5	92.9	21.5	2.696	.00	.00		
904.19	67	30.2	1.1	27.5	2.181	-.2	.0	107.1	116.4	44.5	18.1	DN	2.657	100.0	100.0	23.4	2.679	.00	.00		
904.34	90	28.3	1.1	27.5	2.163	-.2	.0	104.7	105.4	45.2	11.4	DN	2.657	100.0	100.0	26.6	2.670	.00	.00		
904.49	113	26.4	1.0	27.5	2.146	-.2	.0	102.7	96.7	45.9	4.8	DN	2.656	100.0	100.0	29.8	2.662	.00	.00		
904.65	119	27.0	2.3	32.6	2.124	-.2	.0	102.2	80.2	47.0	28.5	DN	2.655	100.0	100.0	23.5	2.691	.00	.00		
904.80	125	27.4	3.5	37.6	2.102	-.2	.0	102.9	82.8	48.1	52.3	DN	2.653	100.0	100.0	17.2	2.731	.00	.00		
904.95	99	28.8	3.3	53.9	2.101	-.2	.0	137.1	296.8	47.4	85.7	GR	2.650	100.0	100.0	2.2	2.957	.00	.00	8	
905.10	79	27.7	2.9	47.9	2.144	-.2	.0	101.7	101.2	43.8	64.0	GR	3.033	100.0	100.0	14.8	2.899	.00	.00	5 8	
905.26	59	27.0	2.6	41.8	2.186	-.3	.0	101.2	83.7	40.2	42.3	GR	2.874	100.0	100.0	20.3	2.856	.00	.00		
905.41	48	26.1	2.5	36.5	2.212	-.3	.0	109.6	83.1	39.3	31.4	GR	2.795	100.0	100.0	21.3	2.807	.00	.00		
905.56	38	25.2	2.5	31.3	2.237	-.3	.0	121.0	83.7	38.4	20.5	GR	2.735	100.0	100.0	21.9	2.755	.00	.00		
905.71	52	23.4	1.6	27.4	2.205	-.3	.0	131.5	116.0	38.2	26.6	DN	2.657	100.0	100.0	19.2	2.690	.00	.00		
905.87	65	26.5	1.5	26.6	2.165	-.3	.0	107.1	83.9	38.7	6.1	DN	2.657	100.0	100.0	28.2	2.664	.00	.00		
906.02	78	29.5	1.4	25.8	2.125	-.3	.0	93.9	77.0	39.2	.0	DN	2.637	93.9	93.9	31.8	2.637	.00	.00		
906.17	78	34.0	1.2	29.1	2.109	-.3	.0	82.7	81.1	40.2	.5	DN	2.654	82.7	82.7	33.3	2.655	.00	.00		
906.32	78	38.1	.9	32.4	2.092	-.3	.0	78.7	102.8	41.2	15.3	DN	2.654	95.3	78.7	29.6	2.674	.00	.00		
906.48	75	39.1	.9	36.6	2.094	-.3	.0	82.6	140.7	43.2	42.8	DN	2.653	96.2	82.6	20.7	2.711	.00	.00		
906.63	83	37.4	.9	35.0	2.106	-.3	.0	85.3	136.7	42.5	37.3	DN	2.654	96.9	85.3	21.8	2.703	.00	.00		
906.78	90	35.8	.9	33.4	2.118	-.3	.0	88.3	133.0	41.8	31.7	DN	2.655	97.5	88.3	22.8	2.696	.00	.00		
906.93	113	34.5	1.3	33.6	2.144	-.3	.0	97.5	134.2	40.3	42.9	DN	2.656	99.5	97.5	17.7	2.711	.00	.00		
907.08	109	27.1	1.3	34.4	2.163	-.3	.0	119.3	176.9	39.3	55.4	DN	2.657	100.0	100.0	12.5	2.738	.00	.00		
907.24	106	19.4	1.4	35.3	2.182	-.2	.0	155.0	258.8	38.4	67.8	DN	2.657	100.0	100.0	7.4	2.765	.00	.00		
907.39	93	19.7	1.7	36.7	2.188	-.2	.0	163.9	342.2	38.7	78.7	DN	2.650	100.0	100.0	3.7	2.788	.00	.00		
907.54	81	20.0	2.0	38.0	2.193	-.2	.0	145.8	186.1	39.1	66.3	GR	2.769	100.0	100.0	8.9	2.811	.00	.00		
907.69	90	24.1	3.8	44.0	2.054	-.2	.0	143.5	188.3	44.6	74.5	DN	2.650	100.0	100.0	5.3	2.778	.00	.00	8	
907.85	96	27.5	4.6	47.1	1.994	-.1	.0	132.3	155.7	49.0	71.2	DN	2.650	100.0	100.0	6.3	2.774	.00	.00	8	
908.00	Coal																				
908.15	97	33.6	6.7	47.9	1.960	-.1	.0	91.9	66.0	51.5	63.2	DN	2.622	91.9	91.9	15.1	2.758	.00	.00	8	



908.30	92	38.4	8.1	45.5	1.986	-.1	.0	83.3	54.2	49.6	58.4	DN	2.635	83.3	83.3	17.1	2.746	.00	.00
908.46	83	27.5	1.8	42.0	2.069	-.2	.0	104.9	141.4	44.1	67.8	DN	2.646	100.0	100.0	13.2	2.763	.00	.00
908.61	82	30.8	1.3	41.3	2.096	-.3	.0	100.2	166.4	41.0	67.6	GR	2.675	100.0	100.0	12.9	2.775	.00	.00
908.76	82	33.7	.9	40.5	2.124	-.3	.0	99.9	218.4	37.9	66.7	GR	2.702	100.0	99.9	11.9	2.787	.00	.00
908.91	85	34.2	.9	38.3	2.127	-.3	.0	102.0	236.1	37.6	66.4	DN	2.655	100.0	100.0	11.2	2.761	.00	.00
909.07	88	34.8	.8	36.2	2.130	-.3	.0	97.3	193.7	37.3	53.9	DN	2.655	99.4	97.3	15.0	2.734	.00	.00
909.22	87	35.8	.8	36.1	2.137	-.3	.0	97.9	203.6	38.7	55.9	DN	2.656	99.6	97.9	13.9	2.738	.00	.00
909.37	81	36.6	.9	35.9	2.140	-.3	.0	97.4	202.4	38.8	55.9	DN	2.656	99.5	97.4	13.8	2.738	.00	.00
909.52	75	37.4	.9	35.8	2.142	-.3	.0	97.0	201.3	39.0	55.8	DN	2.656	99.4	97.0	13.7	2.738	.00	.00
909.68	71	32.8	.9	38.6	2.147	-.3	.0	100.2	183.7	39.0	55.4	GR	2.717	100.0	100.0	14.6	2.781	.00	.00

Zone No. 2      BROADBILL-1  
 AMITY OIL NL      Complex Lithology Results  
 28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
909.83	74	32.5	.9	39.3	2.148	-.3	.0	101.5	203.6	39.1	58.8	GR	2.731	100.0	100.0	13.6	2.791	.00	.00	
909.98	77	32.1	.8	40.0	2.148	-.3	.0	103.0	227.4	39.2	62.2	GR	2.747	100.0	100.0	12.7	2.800	.00	.00	
910.13	81	33.4	.8	38.9	2.156	-.3	.0	106.5	251.7	38.7	65.7	GR	2.714	100.0	100.0	10.5	2.792	.00	.00	
910.29	84	34.6	.9	37.8	2.164	-.2	.0	109.9	282.2	38.1	69.2	GR	2.689	100.0	100.0	8.5	2.784	.00	.00	
910.44	87	35.8	1.2	34.4	2.171	-.2	.0	106.9	209.5	37.6	58.4	DN	2.657	100.0	100.0	11.1	2.744	.00	.00	
910.59	84	32.0	1.1	34.1	2.167	-.2	.0	110.2	198.1	37.6	54.4	DN	2.657	100.0	100.0	12.6	2.735	.00	.00	
910.74	81	28.2	1.0	33.7	2.162	-.2	.0	114.7	189.9	37.6	50.5	DN	2.657	100.0	100.0	14.2	2.727	.00	.00	
910.89	78	29.5	2.3	34.4	2.170	-.2	.0	117.3	148.2	38.2	57.9	DN	2.657	100.0	100.0	11.3	2.743	.00	.00	
911.05	75	30.7	3.6	35.1	2.179	-.2	.0	117.2	125.6	38.8	60.2	GR	2.673	100.0	100.0	10.3	2.759	.00	.00	
911.20	82	35.4	5.4	36.6	2.076	-.1	.0	82.5	50.1	42.7	35.9	DN	2.652	82.5	82.5	24.0	2.701	.00	.00	
911.35	82	30.4	5.0	37.5	1.977	.0	.0	71.9	32.7	45.6	4.3	DN	2.648	71.9	71.9	39.2	2.655	.00	.00	8
911.50	82	26.6	4.6	38.5	1.879	.2	.0	75.2	32.5	48.4	.0	DN	2.601	75.2	75.2	41.0	2.621	.00	.00	6 8
911.66	65	23.3	3.4	41.2	1.867	.4	.0	80.2	37.9	51.6	.0	DN	2.619	80.2	80.2	41.0	2.619	.00	.00	8
911.81	47	20.5	2.2	43.9	1.858	.6	.0	85.6	47.1	54.8	.0	DN	2.640	85.6	85.6	41.0	2.640	.00	.00	8
911.96	24	23.1	5.2	40.4	2.013	.0	.0	82.8	32.5	51.7	5.1	GR	2.696	82.8	82.8	38.9	2.701	.00	.00	8
912.11	21	22.7	3.3	41.2	2.080	-.1	.0	86.4	41.8	47.2	2.7	GR	2.759	86.4	86.4	38.2	2.761	.00	.00	
912.27	19	23.4	1.4	42.0	2.147	-.3	.0	87.7	64.9	42.7	.2	GR	2.826	87.7	87.7	37.6	2.826	.00	.00	
912.42	19	26.6	1.2	39.2	2.150	-.3	.0	86.0	74.3	40.7	.7	GR	2.791	86.0	86.0	36.1	2.791	.00	.00	
912.57	20	29.6	.9	36.4	2.153	-.3	.0	85.4	87.1	38.7	1.1	GR	2.755	87.1	85.4	34.4	2.756	.00	.00	
912.72	18	36.4	1.0	31.7	2.154	-.3	.0	82.3	91.5	39.5	.0	GR	2.699	91.5	82.3	32.6	2.699	.00	.00	
912.88	18	39.0	.9	30.6	2.151	-.3	.0	80.2	94.3	40.7	.0	GR	2.689	94.3	80.2	32.3	2.689	.00	.00	
913.03	18	41.7	.9	29.4	2.149	-.3	.0	78.3	97.2	41.9	.0	GR	2.679	95.2	78.3	32.0	2.679	.00	.00	
913.18	23	44.4	1.0	28.2	2.143	-.3	.0	78.1	99.4	39.5	4.6	GR	2.660	95.2	78.1	30.2	2.666	.00	.00	
913.33	24	46.8	.9	28.5	2.148	-.3	.0	76.8	103.4	39.8	5.7	GR	2.664	94.9	76.8	29.6	2.670	.00	.00	
913.49	25	49.1	.9	28.7	2.153	-.3	.0	75.7	107.7	40.1	6.8	GR	2.667	94.6	75.7	29.1	2.675	.00	.00	
913.64	24	50.0	.9	29.0	2.153	-.3	.0	74.2	103.7	39.9	5.5	GR	2.671	94.2	74.2	29.7	2.677	.00	.00	
913.79	23	51.0	.9	29.3	2.152	-.3	.0	72.7	100.0	39.7	4.2	GR	2.675	93.8	72.7	30.3	2.679	.00	.00	
913.94	23	48.7	.8	29.9	2.143	-.3	.0	73.0	102.7	39.8	4.2	GR	2.675	93.9	73.0	30.9	2.680	.00	.00	
914.10	22	49.7	.8	30.5	2.135	-.3	.0	71.0	102.8	39.8	3.9	GR	2.675	93.4	71.0	31.5	2.680	.00	.00	
914.25	22	50.6	.8	31.0	2.126	-.3	.0	69.1	103.0	39.9	3.7	GR	2.675	92.9	69.1	32.1	2.679	.00	.00	
914.40	23	53.3	.8	31.5	2.127	-.3	.0	67.1	101.1	39.2	4.3	GR	2.680	92.3	67.1	32.0	2.684	.00	.00	
914.55	23	56.0	.8	32.1	2.127	-.3	.0	65.3	99.4	38.4	5.0	GR	2.684	91.8	65.3	31.9	2.689	.00	.00	
914.70	22	60.1	.8	32.2	2.141	-.3	.0	63.7	103.9	37.9	3.5	GR	2.694	91.4	63.7	32.0	2.697	.00	.00	
914.86	22	59.4	.8	30.3	2.143	-.3	.0	65.4	104.8	37.9	3.0	GR	2.680	91.9	65.4	31.5	2.683	.00	.00	
915.01	21	58.8	.8	28.4	2.145	-.3	.0	67.2	105.8	37.9	2.5	GR	2.666	92.4	67.2	30.9	2.668	.00	.00	
915.16	24	60.0	.8	28.4	2.145	-.3	.0	67.4	109.6	38.1	5.3	GR	2.662	92.4	67.4	29.9	2.668	.00	.00	
915.31	26	61.2	.8	28.3	2.144	-.3	.0	67.6	113.6	38.4	8.1	GR	2.657	92.5	67.6	28.8	2.667	.00	.00	
915.47	25	56.5	.8	28.8	2.148	-.3	.0	69.9	111.8	38.6	6.7	GR	2.666	93.1	69.9	29.4	2.673	.00	.00	
915.62	24	57.4	.9	29.1	2.149	-.3	.0	69.0	104.2	38.4	5.8	GR	2.669	92.8	69.0	29.7	2.676	.00	.00	
915.77	23	58.2	1.0	29.3	2.150	-.3	.0	68.1	97.7	38.2	5.0	GR	2.673	92.6	68.1	30.1	2.678	.00	.00	
915.92	27	56.4	1.0	29.2	2.139	-.3	.0	69.5	100.4	38.4	8.9	GR	2.661	93.0	69.5	29.0	2.672	.00	.00	
916.08	28	54.2	.9	29.0	2.133	-.3	.0	70.6	104.7	38.7	9.5	DN	2.655	93.3	70.6	29.0	2.667	.00	.00	
916.23	29	52.0	.8	28.8	2.127	-.3	.0	70.5	104.4	38.9	5.9	DN	2.655	93.3	70.5	30.5	2.663	.00	.00	
916.38	30	51.6	.9	29.0	2.121	-.3	.0	69.8	99.3	39.5	5.0	DN	2.655	93.1	69.8	31.2	2.661	.00	.00	
916.53	30	51.2	.9	29.2	2.115	-.3	.0	69.0	94.7	40.1	4.0	DN	2.655	92.9	69.0	31.9	2.660	.00	.00	
916.69	30	50.1	.9	29.3	2.099	-.3	.0	67.0	89.8	41.0	.0	DN	2.652	89.8	67.0	34.0	2.652	.00	.00	

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
916.84	31	50.0	.9	30.3	2.099	-.3	.0	67.8	94.6	41.2	4.5	DN	2.654	92.5	67.8	32.7	2.660	.00	.00	[REDACTED]	[REDACTED]
916.99	32	49.9	.9	31.3	2.098	-.3	.0	68.8	101.5	41.4	10.5	DN	2.654	92.8	68.8	30.8	2.668	.00	.00	[REDACTED]	[REDACTED]
917.14	31	50.7	.8	31.6	2.097	-.3	.0	68.4	104.0	41.5	12.0	DN	2.654	92.7	68.4	30.4	2.670	.00	.00	[REDACTED]	[REDACTED]
917.30	30	51.5	.8	31.9	2.096	-.3	.0	67.4	104.1	41.5	11.5	GR	2.657	92.4	67.4	30.7	2.672	.00	.00	[REDACTED]	[REDACTED]
917.45	26	51.3	.8	30.5	2.101	-.3	.0	67.6	101.9	41.4	6.4	DN	2.654	92.5	67.6	31.9	2.662	.00	.00	[REDACTED]	[REDACTED]
917.60	27	51.7	.8	29.7	2.112	-.3	.0	68.5	103.5	41.2	5.6	DN	2.655	92.7	68.5	31.6	2.662	.00	.00	[REDACTED]	[REDACTED]
917.75	27	52.2	.8	28.9	2.122	-.3	.0	69.5	105.2	41.0	4.7	DN	2.655	93.0	69.5	31.2	2.661	.00	.00	[REDACTED]	[REDACTED]
917.91	25	51.6	.8	28.4	2.120	-.3	.0	68.6	102.9	40.4	.4	DN	2.655	92.7	68.6	32.7	2.655	.00	.00	[REDACTED]	[REDACTED]
918.06	24	51.0	.7	27.8	2.118	-.3	.0	69.1	105.3	39.9	.0	DN	2.650	92.9	69.1	32.7	2.650	.00	.00	[REDACTED]	[REDACTED]
918.21	24	48.2	.7	29.0	2.102	-.3	.0	68.8	101.9	40.5	.0	DN	2.651	92.8	68.8	33.8	2.651	.00	.00	[REDACTED]	[REDACTED]

Zone No. 2 BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FCVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
918.36	26	49.1	.8	30.5	2.101	-.3	.0	69.1	104.6	40.5	6.4	DN	2.654	92.9	69.1	31.9	2.662	.00	.00	
918.51	27	49.9	.8	31.9	2.100	-.3	.0	68.2	103.3	40.5	9.2	GR	2.662	92.6	68.2	31.4	2.674	.00	.00	
918.67	29	51.1	.8	31.7	2.095	-.3	.0	67.5	104.7	40.6	10.7	GR	2.655	92.4	67.5	31.0	2.669	.00	.00	
918.82	30	52.2	.8	31.5	2.089	-.3	.0	65.8	101.6	40.6	8.3	DN	2.654	92.0	65.8	32.0	2.665	.00	.00	
918.97	31	53.8	.8	32.0	2.082	-.3	.0	64.0	99.0	40.7	8.9	DN	2.653	91.5	64.0	32.2	2.665	.00	.00	
919.12	31	54.3	.8	32.2	2.083	-.3	.0	64.2	101.9	41.3	10.9	DN	2.653	91.5	64.2	31.5	2.668	.00	.00	
919.28	31	54.7	.8	32.5	2.084	-.3	.0	64.4	104.9	42.0	12.9	DN	2.653	91.6	64.4	30.8	2.670	.00	.00	
919.43	33	55.1	.8	33.8	2.099	-.3	.0	65.0	108.1	43.2	15.4	GR	2.672	91.8	65.0	29.8	2.689	.00	.00	
919.58	33	55.1	.8	35.2	2.099	-.3	.0	64.1	106.9	41.8	15.1	GR	2.686	91.5	64.1	30.3	2.701	.00	.00	
919.73	33	55.1	.8	36.5	2.100	-.3	.0	63.2	105.7	40.3	14.7	GR	2.700	91.2	63.2	30.8	2.714	.00	.00	
919.89	33	54.2	.8	36.0	2.099	-.2	.0	64.0	106.4	40.2	14.7	GR	2.695	91.5	64.0	30.7	2.708	.00	.00	
920.04	32	53.2	.8	35.6	2.099	-.2	.0	64.8	107.0	40.1	14.6	GR	2.690	91.7	64.8	30.6	2.704	.00	.00	
920.19	35	52.1	.9	34.7	2.104	-.3	.0	67.2	106.2	41.3	17.0	GR	2.681	92.4	67.2	29.2	2.699	.00	.00	
920.34	36	52.0	.9	34.3	2.106	-.3	.0	67.8	105.0	41.6	17.8	GR	2.677	92.5	67.8	28.8	2.697	.00	.00	
920.50	36	51.9	1.0	33.9	2.107	-.3	.0	68.5	104.0	41.9	18.7	GR	2.673	92.7	68.5	28.3	2.694	.00	.00	
920.65	37	51.3	.9	33.9	2.107	-.3	.0	69.0	110.1	41.8	18.9	GR	2.673	92.8	69.0	28.2	2.694	.00	.00	
920.80	37	50.6	.8	33.8	2.107	-.3	.0	69.5	117.1	41.7	19.1	GR	2.672	93.0	69.5	28.1	2.693	.00	.00	
920.95	37	49.6	.8	33.7	2.113	-.3	.0	70.8	116.5	41.4	19.1	GR	2.675	93.3	70.8	27.8	2.696	.00	.00	
921.11	38	49.0	.8	34.3	2.111	-.3	.0	71.1	117.7	41.4	20.6	GR	2.677	93.4	71.1	27.5	2.699	.00	.00	
921.26	40	48.4	.8	34.9	2.109	-.3	.0	71.3	119.0	41.4	22.1	GR	2.680	93.5	71.3	27.2	2.703	.00	.00	
921.41	41	47.5	.8	35.6	2.108	-.3	.0	71.7	119.1	41.4	23.4	GR	2.685	93.6	71.7	27.0	2.709	.00	.00	
921.56	42	46.7	.8	36.3	2.107	-.3	.0	72.0	119.2	41.5	24.8	GR	2.690	93.6	72.0	26.8	2.717	.00	.00	
921.72	47	43.3	.8	36.2	2.131	-.3	.0	78.9	136.2	42.0	30.4	GR	2.699	95.4	78.9	23.7	2.735	.00	.00	
921.87	71	40.5	1.0	35.7	2.128	-.3	.0	88.8	165.5	42.0	50.2	DN	2.655	97.6	88.8	16.3	2.726	.00	.00	
922.02	94	37.4	1.2	35.3	2.125	-.4	.0	90.7	139.3	42.0	46.1	DN	2.655	98.1	90.7	17.8	2.717	.00	.00	
922.17	126	36.5	1.2	37.3	2.112	-.4	.0	91.3	148.8	42.5	53.8	DN	2.654	98.2	91.3	16.1	2.734	.00	.00	
922.32	159	35.7	1.2	39.3	2.099	-.4	.0	92.3	160.1	42.9	61.6	DN	2.652	98.4	92.3	14.4	2.750	.00	.00	
922.48	180	34.2	1.2	39.1	2.079	-.4	.0	88.0	134.3	43.0	52.7	DN	2.651	97.5	88.0	18.4	2.732	.00	.00	
922.63	170	33.2	1.3	39.7	2.079	-.3	.0	90.3	135.4	44.5	56.7	DN	2.650	98.0	90.3	17.2	2.740	.00	.00	
922.78	161	32.1	1.4	40.4	2.078	-.3	.0	93.0	137.6	46.0	60.8	DN	2.649	98.6	93.0	15.9	2.748	.00	.00	
922.93	129	28.9	1.6	45.2	2.058	-.3	.0	136.1	396.8	46.0	83.8	DN	2.650	100.0	100.0	2.7	2.798	.00	.00	8
923.09	123	28.5	1.7	45.7	2.046	-.3	.0	136.4	371.1	46.6	82.2	DN	2.650	100.0	100.0	3.1	2.795	.00	.00	8
923.24	117	28.1	1.7	46.2	2.034	-.3	.0	136.5	347.0	47.2	80.6	DN	2.650	100.0	100.0	3.5	2.792	.00	.00	8
923.39	110	28.9	1.8	49.1	2.013	-.3	.0	138.0	475.5	47.1	91.5	DN	2.650	100.0	100.0	1.0	2.819	.00	.00	8
923.54		Coal																		
923.70	57	29.3	2.2	49.8	1.654	-.2	.0	71.6	47.0	51.4	.0	DN	2.541	71.6	71.6	41.0	2.621	.00	.00	6 8
923.85	46	40.0	2.0	49.6	1.516	-.1	.0	61.3	49.5	53.5	.0	DN	2.252	61.3	61.3	41.0	2.632	.00	.00	6 8
924.00	34	50.3	1.8	49.4	1.378	.0	.0	54.6	52.4	55.7	.0	DN	1.907	54.6	54.6	41.0	2.627	.00	.00	6 8
924.15		Coal																		
924.31		Coal																		
924.46	34	42.3	1.2	36.2	2.057	-.2	.0	69.1	81.1	42.5	16.5	GR	2.667	81.1	69.1	31.8	2.687	.00	.00	
924.61	38	39.5	1.2	31.3	2.123	-.2	.0	83.1	100.1	40.8	20.5	DN	2.655	96.4	83.1	26.1	2.681	.00	.00	
924.76	42	36.7	1.2	26.5	2.190	-.2	.0	98.6	112.2	39.2	15.0	DN	2.657	99.7	98.6	23.8	2.675	.00	.00	
924.92	43	36.5	1.2	26.3	2.194	-.2	.0	99.7	111.4	37.1	15.1	DN	2.657	99.9	99.7	23.6	2.675	.00	.00	
925.07	44	36.3	1.3	26.1	2.197	-.2	.0	100.8	110.7	35.0	15.1	DN	2.657	100.0	100.0	23.3	2.675	.00	.00	
925.22	47	37.6	2.3	27.0	2.200	-.2	.0	101.4	91.0	27.8	22.1	DN	2.657	100.0	100.0	20.9	2.684	.00	.00	

925.37	55	37.5	2.3	27.8	2.199	-.2	.0	102.3	97.2	27.6	27.0	DN	2.657	100.0	100.0	19.4	2.690	.00	.00
925.53	63	37.4	2.3	28.7	2.197	-.3	.0	103.2	104.2	27.4	32.0	DN	2.657	100.0	100.0	18.0	2.696	.00	.00
925.68	103	40.9	2.2	27.5	2.192	-.2	.0	95.4	91.8	34.5	22.3	DN	2.657	95.4	95.4	21.4	2.684	.00	.00
925.83	128	41.2	2.1	28.4	2.181	-.2	.0	93.0	91.4	37.3	23.9	DN	2.657	93.0	93.0	21.5	2.686	.00	.00
925.98	153	41.4	2.1	29.3	2.170	-.3	.0	90.7	91.0	40.1	25.6	DN	2.657	91.0	90.7	21.6	2.688	.00	.00
926.13	150	38.7	2.0	31.7	2.158	-.2	.0	93.4	102.2	39.5	35.9	DN	2.657	98.6	93.4	19.1	2.701	.00	.00
926.29	147	36.0	2.0	34.0	2.146	-.2	.0	96.8	116.1	38.9	46.3	DN	2.656	99.3	96.8	16.5	2.718	.00	.00
926.44	139	33.3	2.0	39.2	2.169	-.2	.0	127.9	405.1	38.2	87.6	DN	2.650	100.0	100.0	1.8	2.806	.00	.00
926.59	158	33.1	1.8	37.2	2.185	-.2	.0	127.2	350.7	38.6	81.0	DN	2.650	100.0	100.0	3.1	2.793	.00	.00
926.74	178	33.0	1.7	35.2	2.201	-.2	.0	128.2	322.0	38.9	74.4	DN	2.650	100.0	100.0	4.3	2.779	.00	.00



933.91 Coal  
934.06 Coal  
934.21 Coal  
934.36 Coal  
934.52 Coal  
934.67 Coal  
934.82 Coal  
934.97 Coal  
935.13 Coal  
935.28 Coal





942.44 Coal  
942.59 Coal  
942.75 Coal  
942.90 Coal  
943.05 Coal  
943.20 Coal  
943.36 Coal  
943.51 Coal  
943.66 Coal  
943.81 Coal

Zone No. 2 BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
943.97	Coal																			
944.12	Coal																			
944.27	Coal																			
944.42	Coal																			
944.58	Coal																			
944.73	Coal																			
944.88	Coal																			
945.03	33	30.7	3.2	48.2	1.462	-.8	.0	70.0	39.0	61.6	.0	DN	2.117	70.0	70.0	41.0	2.617	.00	.00	6 8
945.18	59	21.1	.4	44.8	1.574	-1.2		124.2	241.8	55.2	42.4	GR	2.650	100.0	100.0	17.9	2.727	.00	.00	4 78
945.34	70	19.4	.5	49.1	1.635	-2.4		142.1	289.5	53.7	54.7	GR	2.650	100.0	100.0	12.5	2.749	.00	.00	4 78
945.49	80	17.5	.6	53.4	1.696	-3.7		159.8	349.7	52.2	64.9	GR	2.650	100.0	100.0	8.5	2.767	.00	.00	4 78
945.64	92	17.9	.6	55.0	1.632	-2.4		169.0	547.6	52.5	77.5	GR	2.650	100.0	100.0	4.4	2.790	.00	.00	4 78
945.79	104	18.1	.5	56.6	1.568	-1.1		174.3	883.2	52.8	90.6	GR	2.650	100.0	100.0	1.2	2.814	.00	.00	4 78
945.95	94	18.1	.5	62.4	1.505	-.2	.0	91.2	97.1	55.8	.0	DN	2.224	97.1	91.2	41.0	2.624	.00	.00	6 8
946.10	90	19.1	.7	63.4	1.556	.0	.0	90.2	83.9	55.5	3.1	DN	2.305	90.2	90.2	39.7	2.632	.00	.00	6 8
946.25	Coal																			
946.40	Coal																			
946.56	Coal																			
946.71	Coal																			
946.86	Coal																			
947.01	Coal																			
947.17	Coal																			
947.32	121	37.1	.9	54.8	2.030	-.4	.0			44.9	100.0	GR	2.650	100.0	100.0	.0	2.918	.00	.00	1
947.47	116	55.0	1.3	51.7	2.088	-.2	.0			41.5	100.0	S	2.650	100.0	100.0	.0	2.915	.00	.00	1
947.62	120	63.5	1.2	54.0	2.070	-.2	.0			42.9	100.0	S	2.650	100.0	100.0	.0	2.937	.00	.00	1
947.78	123	71.9	1.1	56.4	2.053	-.1	.0			44.2	100.0	S	2.650	100.0	100.0	.0	2.960	.00	.00	1
947.93	Coal																			
948.08	141	68.9	.7	47.3	1.969	-.1	.0	64.0	196.2	47.6	62.8	DN	2.626	91.5	64.0	15.2	2.756	.00	.00	8
948.23	145	68.3	.7	43.9	1.969	.0	.0	56.8	135.7	47.5	41.5	DN	2.641	89.3	56.8	24.0	2.709	.00	.00	8
948.39	148	494.5	.6	44.2	2.021	.2	.0	19.4	120.7	44.5	23.2	RT	2.733	72.0	19.4	31.5	2.756	.05	.04	8 \$
948.54	151	926.5	.4	44.5	2.074	.4		13.0	114.5	41.5	1.8	RT	2.650	66.5	13.0	39.9	2.653	.11	.09	4 78 \$
948.69	136	997.4	.4	44.5	2.169	.3		15.1	131.4	33.9	.1	RT	2.650	68.5	15.1	33.9	2.650	.16	.14	4 7 \$
948.84	123	1033.5	.4	42.1	2.074	.2		14.0	127.5	35.7	.0	RT	2.650	67.5	14.0	35.7	2.650	.21	.18	4 7 \$
948.99	110	1069.6	.4	39.7	1.979	.2		13.0	124.3	37.6	.0	RT	2.650	66.5	13.0	37.6	2.650	.27	.23	4 7 \$
949.15	104	1167.0	.4	39.5	1.851	.1	.0	11.3	104.6	42.1	.0	DN	2.592	64.7	11.3	41.0	2.632	.33	.29	6 8 \$
949.30	98	1263.8	.5	39.4	1.723	.0	.0	10.9	97.7	46.6	.0	DN	2.491	64.2	10.9	41.0	2.631	.40	.34	6 8 \$
949.45	64	1239.8	.5	46.2	1.805	.1	.0	11.0	104.2	44.5	.0	DN	2.626	64.3	11.0	41.0	2.626	.46	.40	8 \$
949.60	55	1231.6	.4	47.9	1.895	.0	.0	11.0	106.4	43.9	.0	RT	2.705	64.4	11.0	41.0	2.705	.52	.45	8 \$
949.76	46	1223.5	.4	49.7	1.984	.0	.0	11.1	108.8	43.3	.0	RT	2.804	64.4	11.1	41.0	2.804	.58	.51	8 \$
949.91	47	964.6	.5	46.4	2.050	-.2	.0	12.5	95.9	43.3	.8	RT	2.808	66.0	12.5	40.7	2.808	.65	.56	8 \$
950.06	47	703.4	.7	43.1	2.117	-.4	.0	16.1	99.1	43.2	9.6	RT	2.813	69.4	16.1	35.3	2.815	.70	.61	\$
950.21	50	60.0	.6	37.3	2.190	-.4	.0	70.4	171.3	42.4	32.8	GR	2.783	93.2	70.4	21.6	2.799	.70	.61	
950.37	50	59.5	.6	36.4	2.161	-.5	.0	70.3	171.2	39.6	33.6	GR	2.727	93.2	70.3	21.6	2.763	.70	.61	
950.52	51	59.0	.6	35.6	2.132	-.6	.0	69.2	167.6	36.7	34.4	GR	2.687	92.9	69.2	21.9	2.727	.70	.61	
950.67	50	61.4	.5	37.0	2.114	-.5	.0	65.0	165.1	36.4	33.5	GR	2.692	91.7	65.0	23.5	2.732	.70	.61	
950.82	49	63.8	.5	38.4	2.096	-.4	.0	61.1	164.1	36.1	32.6	GR	2.698	90.6	61.1	25.0	2.737	.70	.61	

950.98	46	63.2	.4	36.8	2.085	-.4	.0	60.7	165.7	36.0	28.7	GR	2.675	90.5	60.7	26.4	2.707	.70	.61
951.13	42	63.1	.5	35.9	2.095	-.5	.0	61.2	151.4	36.0	25.1	GR	2.677	90.7	61.2	27.0	2.705	.70	.61
951.28	39	63.0	.5	35.1	2.104	-.6	.0	61.8	139.6	36.0	21.5	GR	2.679	90.8	61.8	27.7	2.702	.70	.61
951.43	35	59.9	.8	32.1	2.115	-.4	.0	65.4	117.3	35.3	17.6	GR	2.662	91.9	65.4	27.7	2.683	.70	.61
951.59	34	57.7	.9	31.0	2.116	-.4	.0	67.0	110.6	35.7	15.4	DN	2.655	92.3	67.0	28.2	2.674	.70	.61
951.74	32	55.5	.9	29.8	2.117	-.4	.0	67.4	99.2	36.1	8.6	DN	2.655	92.4	67.4	30.3	2.666	.70	.61
951.89	32	56.1	.9	30.2	2.125	-.4	.0	69.0	108.5	35.7	14.0	GR	2.655	92.9	69.0	28.1	2.673	.70	.61
952.04	32	56.7	.9	30.7	2.133	-.4	.0	69.0	110.8	35.2	13.6	GR	2.664	92.8	69.0	28.0	2.680	.70	.61
952.20	32	57.7	.8	29.0	2.163	-.5	.0	72.8	126.3	30.0	14.2	GR	2.666	93.9	72.8	26.1	2.682	.70	.61
952.35	34	58.8	.8	27.8	2.168	-.4	.0	74.1	128.6	29.7	15.0	DN	2.657	94.2	74.1	25.1	2.675	.70	.61



959.51	Coal																			
959.66	Coal																			
959.82	Coal																			
959.97	Coal																			
960.12	143	27.3	5.5	47.6	1.995	-.4	.0	134.9	157.5	44.9	74.6	DN	2.650	100.0	100.0	5.2	2.782	1.16	.97	8
960.27	144	25.8	5.4	44.5	2.144	-1.0	.0			39.4	98.1	S	2.650	100.0	100.0	.7	2.855	1.16	.97	1
960.42	136	23.1	3.8	38.3	2.215	-.7				38.9	89.6	N	2.650	100.0	100.0	3.6	2.812	1.16	.97	2 4
960.58	133	24.8	2.3	37.2	2.200	-.5	.0	156.5	466.9	38.2	86.8	DN	2.650	100.0	100.0	.6	2.805	1.16	.97	
960.73	131	26.6	.9	36.1	2.184	-.4	.0	136.7	377.4	37.6	73.8	DN	2.650	100.0	100.0	5.4	2.777	1.16	.97	
960.88	132	27.2	.9	37.0	2.195	-.4	.0	146.1	642.4	36.7	84.0	DN	2.650	100.0	100.0	1.6	2.799	1.16	.97	

Zone No. 2

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
961.03	134	27.7	.8	37.9	2.207	-.4	.0			35.9	88.7	N	2.650	100.0	100.0	3.9	2.821	1.16	.97	2
961.19	133	26.3	3.1	38.4	2.245	-.2	.0			37.4	89.8	N	2.650	100.0	100.0	3.4	2.860	1.16	.97	2
961.34	132	26.2	3.6	40.6	2.240	-.1	.0			38.1	94.5	N	2.650	100.0	100.0	1.9	2.885	1.16	.97	2
961.49	130	26.4	4.1	42.8	2.236	.0	.0			38.7	96.7	S	2.650	100.0	100.0	1.2	2.910	1.16	.97	1
961.64	133	24.2	2.5	43.5	2.194	.2	.0			37.6	94.1	S	2.650	100.0	100.0	2.2	2.884	1.16	.97	3
961.80	137	21.9	.9	44.2	2.152	.4	.0			36.5	91.5	S	2.650	100.0	100.0	3.3	2.858	1.16	.97	3
961.95	137	21.0	1.0	44.2	2.123	-.2				33.6	85.1	S	2.650	100.0	100.0	5.9	2.804	1.16	.97	34
962.10	132	20.4	.9	44.3	2.075	-.2				33.7	85.2	S	2.650	100.0	100.0	6.0	2.804	1.16	.97	34
962.25	127	19.7	.9	44.3	2.026	-.2				33.7	85.4	S	2.650	100.0	100.0	6.0	2.804	1.16	.97	34
962.41	131	19.5	.9	44.7	2.039	.2				35.2	88.8	S	2.650	100.0	100.0	4.6	2.810	1.16	.97	34
962.56	135	19.4	.9	45.2	2.055	.7				36.7	92.2	S	2.650	100.0	100.0	3.2	2.817	1.16	.97	34
962.71	131	19.2	1.1	43.8	2.157	.4				35.8	90.0	S	2.650	100.0	100.0	3.8	2.813	1.16	.97	34
962.86	133	19.1	1.1	45.2	2.165	.2				35.3	89.0	S	2.650	100.0	100.0	4.2	2.811	1.16	.97	34
963.02	135	18.9	1.2	46.7	2.173	.0				34.9	88.1	S	2.650	100.0	100.0	4.7	2.809	1.16	.97	34

BROADBILL-1

AMITY OIL NL

Complex Lithology Results 28-01-98

Zone No. 2

Hydrocarbon Volume Report  
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Formation Name	
FROM M	850.087
TO M	963.016
INTERVAL M	112.928
PHIE Cut off	.050
SW Cut Off	.500
Vclay Cut Off	.300
Net Pay M	.000
Average PHIE %	.000
Average SW %	.000
Average Vclay %	.000
Integrated PHI M	.000
Sum PHI*(1-SW) M	.000

Zone No. 3

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHO B	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
779.98	38	1.3	1.5	50.0	1.931	-3.1	2.9	75.0	53.0	37.9	10.7	GR	2.768	75.0	75.0	43.4	2.765	.00	.00	
780.14	38	1.6	1.7	47.7	1.918	-3.1	4.7	70.1	50.6	35.6	11.1	GR	2.718	70.1	70.1	42.6	2.721	.00	.00	
780.29	39	1.8	1.9	45.5	1.905	-3.1		94.7	69.7	33.4	11.6	GR	2.650	94.7	94.7	29.5	2.660	.00	.00	4 7
780.44	40	2.2	.5	44.6	1.633	-1.9		78.9	124.4	37.5	13.9	GR	2.650	95.4	78.9	32.3	2.663	.00	.00	4 7
780.59	42	2.1	.4	45.3	1.577	-.3		71.2	122.2	42.4	16.0	GR	2.650	93.4	71.2	35.6	2.665	.00	.00	4 7
780.75	43	2.1	.3	46.0	1.521	1.3		68.4	130.0	47.2	17.8	GR	2.650	92.7	68.4	36.9	2.666	.00	.00	4 78
780.90	43	2.9	.3	43.8	1.654	1.4		62.0	144.8	42.7	18.4	GR	2.650	90.9	62.0	34.9	2.667	.00	.00	4 7
781.05	44	3.4	.3	41.5	1.787	1.5		63.8	172.2	38.3	18.9	GR	2.650	91.4	63.8	31.1	2.667	.00	.00	4 7
781.20	47	3.3	.5	40.2	1.682	1.5		63.6	126.5	40.5	23.3	GR	2.650	91.3	63.6	31.1	2.671	.00	.00	4 7
781.35	51	2.9	.4	43.3	1.569	3.2		68.7	145.2	44.6	28.7	GR	2.650	92.8	68.7	29.8	2.676	.00	.00	4 78
781.51	55	2.4	.3	46.4	1.456	5.0		80.4	184.9	48.7	34.1	GR	2.650	95.7	80.4	26.5	2.681	.00	.00	4 78
781.66	54	2.6	.3	51.7	1.566	4.1		76.1	162.6	47.7	33.0	GR	2.650	94.7	76.1	27.2	2.680	.00	.00	4 78
781.81	53	2.8	.4	56.9	1.676	3.3		72.3	145.6	46.7	31.9	GR	2.650	93.7	72.3	27.9	2.679	.00	.00	4 78
781.96	45	3.6	1.0	45.9	2.043	1.0		59.3	86.3	40.2	20.3	GR	2.650	86.3	59.3	32.1	2.668	.00	.00	4 7
782.12	43	4.6	1.3	45.5	2.068	.8		54.5	77.6	38.0	17.8	GR	2.650	77.6	54.5	31.2	2.666	.00	.00	4 7
782.27	41	6.4	1.6	45.1	2.093	.6		48.4	72.3	35.8	15.3	GR	2.650	72.3	48.4	30.3	2.664	.05	.02	4 7 \$
782.42	43	4.9	1.3	44.3	2.022	1.1		57.0	84.3	35.1	17.6	GR	2.650	84.3	57.0	28.9	2.666	.05	.02	4 7
782.57	45	4.4	1.0	43.5	1.951	1.6		62.4	101.7	34.5	20.0	GR	2.650	91.0	62.4	27.6	2.668	.05	.02	4 7
782.73	50	3.5	.5	40.4	1.732	1.9		62.2	129.3	41.7	28.2	GR	2.650	90.9	62.2	30.0	2.676	.05	.02	4 7
782.88	51	3.4	.5	45.0	1.730	2.2		65.1	129.3	40.3	29.1	GR	2.650	91.8	65.1	28.6	2.676	.05	.02	4 7
783.03	52	3.4	.6	49.7	1.728	2.5		68.2	129.8	39.0	30.0	GR	2.650	92.6	68.2	27.3	2.677	.05	.02	4 7
783.18	50	2.8	1.1	51.5	1.578	.4		67.8	83.2	45.9	27.1	GR	2.650	83.2	67.8	30.8	2.675	.05	.02	4 78
783.34	53	2.4	.7	48.7	1.556	.4		78.9	113.0	49.2	32.3	GR	2.650	95.4	78.9	27.6	2.679	.05	.02	4 78
783.49	57	2.2	.3	46.0	1.533	.5		89.1	182.2	52.4	37.5	GR	2.650	97.7	89.1	24.5	2.684	.05	.02	4 78
783.64	57	2.5	.5	45.1	1.678	-.9		83.3	147.2	46.1	37.6	GR	2.650	96.4	83.3	24.5	2.684	.05	.02	4 78
783.79	57	2.8	.7	44.3	1.821	-2.3		77.9	125.5	39.8	37.1	GR	2.650	95.1	77.9	24.7	2.684	.05	.02	4 78
783.95	56	2.6	1.5	37.0	2.048	-3.1	.0	86.4	88.4	41.6	36.8	GR	2.668	88.4	86.4	22.9	2.690	.05	.02	
784.10	58	2.7	1.2	38.4	2.039	-3.5	.0	83.9	99.2	42.1	39.3	GR	2.677	96.6	83.9	22.7	2.697	.05	.02	
784.25	60	2.7	.9	39.8	2.032	-3.8	.0	84.7	115.3	42.6	41.6	GR	2.689	96.7	84.7	22.4	2.706	.05	.02	
784.40	60	2.8	1.1	42.4	2.003	-3.6	.0	77.0	95.7	42.4	41.9	GR	2.702	94.9	77.0	24.3	2.716	.05	.02	
784.56	60	2.8	1.4	45.0	1.975	-3.3	.0	72.6	81.3	42.2	42.2	GR	2.721	81.3	72.6	26.2	2.730	.05	.02	
784.71	61	2.4	.7	42.9	1.893	-3.2	.0	72.8	102.7	41.5	42.6	GR	2.586	93.8	72.8	28.4	2.653	.05	.02	6 8
784.86	59	2.3	.7	45.0	1.901	-3.3	.0	73.3	98.9	42.3	40.1	GR	2.640	94.0	73.3	29.7	2.680	.05	.02	8
785.01	57	2.1	.8	47.2	1.912	-3.5	.0	74.1	95.3	43.2	37.5	GR	2.692	94.2	74.1	31.0	2.708	.05	.02	8
785.16	58	2.2	.8	46.1	1.943	-3.2	.0	75.7	97.0	45.5	38.7	GR	2.705	94.6	75.7	29.3	2.718	.05	.02	
785.32	59	2.4	.9	45.1	1.972	-2.9	.0	76.8	100.1	47.7	39.9	GR	2.718	94.9	76.8	27.3	2.727	.05	.02	
785.47	62	2.1	.9	46.9	1.962	-3.3	.0	81.8	99.4	50.7	44.7	GR	2.749	96.1	81.8	26.4	2.745	.05	.02	
785.62	62	1.9	.8	48.1	1.984	-3.3	.0	86.0	102.4	53.1	44.5	GR	2.813	97.0	86.0	26.4	2.780	.05	.02	
785.77	62	1.7	.8	49.3	2.005	-3.3	.0	90.5	105.7	55.5	44.2	GR	2.876	98.0	90.5	26.3	2.814	.05	.02	
785.93	54	2.1	1.0	44.8	2.089	-2.8	.0	86.2	97.2	53.8	32.8	GR	2.852	97.1	86.2	26.6	2.815	.05	.02	
786.08	50	2.3	1.1	42.8	2.125	-2.9		74.9	84.4	54.6	27.3	GR	2.650	84.4	74.9	30.7	2.675	.05	.02	4 78
786.23	46	2.5	1.1	40.9	2.160	-2.9		66.9	75.5	55.3	21.7	GR	2.650	75.5	66.9	34.3	2.670	.05	.02	4 78
786.38	46	2.7	1.1	38.9	2.173	-3.1		64.4	76.0	55.7	22.6	GR	2.650	76.0	64.4	33.7	2.670	.05	.02	4 78
786.54	47	2.9	1.1	36.9	2.184	-3.3		62.7	76.5	56.1	23.4	GR	2.650	76.5	62.7	33.2	2.671	.05	.02	4 78
786.69	48	3.0	1.7	33.4	2.209	-3.6	.0	92.6	95.1	49.6	24.2	GR	2.770	95.1	92.6	21.6	2.762	.05	.02	
786.84	49	3.4	1.3	33.8	2.218	-3.4	.0	88.8	110.7	48.4	26.2	GR	2.789	97.7	88.8	20.8	2.775	.05	.02	



786.99	50	3.6	.9	34.3	2.227	-3.3	.0	87.2	134.3	47.3	28.2	GR	2.809	97.3	87.2	20.0	2.788	.05	.02
787.15	47	4.4	2.5	32.3	2.288	-3.5	.0	84.6	86.0	43.0	24.1	GR	2.838	86.0	84.6	19.3	2.813	.05	.02
787.30	45	4.6	4.2	30.3	2.349	-3.8	.0	88.0	70.7	38.7	20.0	GR	2.865	88.0	88.0	18.7	2.838	.05	.02
787.45	48	3.6	2.4	27.3	2.142	-3.7	.0	86.0	82.1	45.7	25.2	GR	2.636	86.0	86.0	20.8	2.658	.05	.02
787.60	53	3.5	1.5	31.4	2.089	-3.5	.0	80.0	96.3	44.4	31.2	GR	2.638	95.6	80.0	21.8	2.664	.05	.02
787.76	57	3.2	.6	35.5	2.036	-3.3	.0	78.8	139.0	43.2	37.2	GR	2.637	95.4	78.8	22.8	2.670	.05	.02
787.91	56	3.7	1.9	36.0	2.138	-3.5	.0	83.6	91.3	40.2	36.7	GR	2.738	91.3	83.6	19.4	2.738	.05	.02
788.06	56	3.8	3.3	36.6	2.239	-3.7	.0	89.0	75.9	37.2	36.3	GR	2.887	89.0	89.0	17.7	2.831	.05	.02
788.21	64	3.6	2.0	33.3	2.119	-3.8	.0	98.5	107.0	36.5	47.8	GR	2.667	99.7	98.5	14.2	2.695	.05	.02
788.37	65	3.6	1.5	34.1	2.042	-3.7	.0	85.5	106.9	39.2	48.6	GR	2.603	96.9	85.5	17.2	2.661	.05	.02

Zone No. 3  
 BROADBILL-1  
 AMITY OIL NL

Complex Lithology Results  
 28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
788.52	65	3.4	1.0	34.9	1.964	-3.5	.0	77.2	115.9	41.8	49.4	GR	2.522	95.0	77.2	20.3	2.623	.05	.02	6
788.67	62	3.2	1.2	37.3	1.950	-3.5	.0	72.0	95.3	43.1	44.1	GR	2.561	93.6	72.0	23.9	2.636	.05	.02	6
788.82	58	3.2	1.3	39.7	1.936	-3.5	.0	66.4	80.1	44.4	38.7	GR	2.596	80.1	66.4	27.5	2.649	.05	.02	6
788.97	58	2.6	.8	42.1	1.931	-3.0	.0	71.1	98.7	47.7	39.2	GR	2.626	93.4	71.1	28.2	2.669	.05	.02	
789.13	58	2.5	.9	41.3	1.946	-2.9	.0	74.2	99.1	51.4	39.0	GR	2.630	94.2	74.2	27.5	2.671	.05	.02	
789.28	58	2.4	.9	40.5	1.961	-2.8	.0	85.9	111.0	55.2	38.8	GR	2.650	97.0	85.9	23.7	2.685	.05	.02	4 78
789.43	57	2.4	.8	43.5	1.927	-2.5	.0	71.8	96.2	48.7	38.1	GR	2.647	93.6	71.8	29.4	2.681	.05	.02	
789.58	54	3.0	1.1	43.2	1.985	-3.0	.0	67.4	84.3	47.4	32.7	GR	2.701	84.3	67.4	29.2	2.712	.05	.02	
789.74	50	3.4	1.4	42.8	2.041	-3.5	.0	63.9	75.8	46.1	27.4	GR	2.755	75.8	63.9	29.4	2.751	.05	.02	
789.89	49	3.4	2.1	38.9	2.081	-3.5	.0	70.6	68.8	42.6	26.6	GR	2.728	70.6	70.6	26.7	2.731	.05	.02	
790.04	49	3.3	2.8	35.1	2.121	-3.5	.0	78.8	66.4	39.1	25.8	GR	2.705	78.8	78.8	24.0	2.711	.05	.02	
790.19	54	2.9	1.0	33.7	2.017	-2.8	.0	79.0	103.0	45.6	33.7	GR	2.603	95.4	79.0	24.4	2.644	.05	.02	6
790.35	55	2.8	1.1	35.0	1.972	-2.8	.0	74.6	93.5	46.5	34.3	GR	2.578	93.5	74.6	26.4	2.629	.05	.02	6
790.50	55	2.8	1.1	36.3	1.928	-2.8	.0	70.5	85.4	47.3	35.0	GR	2.549	85.4	70.5	28.3	2.633	.05	.02	6
790.65	54	2.9	1.3	37.5	1.918	-2.9	.0	66.2	78.0	45.4	33.4	GR	2.558	78.0	66.2	29.8	2.617	.05	.02	6
790.80	53	3.0	1.4	38.6	1.908	-2.9	.0	63.3	71.7	43.6	31.8	GR	2.568	71.7	63.3	31.2	2.622	.05	.02	6
790.96	49	2.7	1.0	38.3	1.903	-3.4	.0	64.2	80.8	45.9	25.9	GR	2.572	80.8	64.2	33.8	2.615	.05	.02	6
791.11	52	2.5	1.0	39.1	1.911	-3.2	.0	67.9	83.5	48.7	30.0	GR	2.582	83.5	67.9	32.0	2.629	.05	.02	6
791.26	55	2.4	1.0	40.0	1.917	-2.9	.0	71.8	86.3	51.6	34.1	GR	2.591	86.3	71.8	30.3	2.641	.05	.02	6
791.41	55	2.5	1.0	42.0	1.943	-3.3	.0	71.5	88.8	50.3	34.7	GR	2.644	88.8	71.5	29.6	2.675	.05	.02	
791.57	55	2.6	1.0	43.9	1.971	-3.7	.0	71.8	91.6	48.9	35.3	GR	2.698	91.6	71.8	28.9	2.710	.05	.02	
791.72	53	2.7	1.0	36.9	2.045	-3.8	.0	80.4	101.2	45.1	31.6	GR	2.669	95.7	80.4	25.2	2.687	.05	.02	
791.87	54	2.0	1.0	35.3	2.036	-3.5	.0	94.8	103.2	45.9	33.4	GR	2.639	98.9	94.8	24.3	2.668	.05	.02	
792.02	55	1.5	1.1	33.7	2.026	-3.3	.0	114.0	105.3	46.8	35.2	GR	2.609	100.0	100.0	23.4	2.649	.05	.02	6
792.18	53	2.7	1.2	38.0	2.040	-3.5	.0	79.6	93.4	44.1	32.0	GR	2.679	93.4	79.6	25.6	2.695	.05	.02	
792.33	53	2.6	1.3	37.6	2.064	-3.2	.0	83.3	92.3	45.2	31.9	GR	2.691	92.3	83.3	24.6	2.703	.05	.02	
792.48	53	2.6	1.4	37.1	2.086	-3.0	.0	87.2	91.5	46.3	31.7	GR	2.702	91.5	87.2	23.6	2.711	.05	.02	
792.63	56	2.6	1.3	37.4	2.043	-3.0	.0	84.4	92.3	49.0	35.7	GR	2.670	92.3	84.4	23.7	2.691	.05	.02	
792.78	59	2.6	1.2	37.8	1.999	-3.0	.0	81.8	93.5	51.7	39.7	GR	2.631	93.5	81.8	23.9	2.669	.05	.02	
792.94	64	2.3	.7	40.4	1.955	-2.5	.0	84.7	121.8	51.8	46.8	GR	2.611	96.7	84.7	23.5	2.668	.05	.02	6
793.09	64	2.4	.9	40.2	1.990	-2.2	.0	87.7	117.0	49.9	46.7	GR	2.648	97.4	87.7	22.1	2.687	.05	.02	
793.24	63	2.5	1.0	40.0	2.025	-2.0	.0	90.4	114.3	48.0	46.6	GR	2.682	98.0	90.4	20.7	2.704	.05	.02	
793.39	62	2.4	.9	40.7	2.017	-2.2	.0	89.3	113.9	50.4	44.9	GR	2.687	97.8	89.3	22.0	2.706	.05	.02	
793.55	61	2.2	.9	41.4	2.010	-2.5	.0	89.4	114.0	52.8	43.1	GR	2.691	97.8	89.4	23.2	2.708	.05	.02	
793.70	53	2.0	.8	41.8	1.984	-2.9	.0	81.6	98.5	52.1	32.1	GR	2.681	96.0	81.6	29.1	2.697	.05	.02	
793.85	51	2.3	.8	40.4	2.053	-3.0	.0	82.0	105.1	49.0	28.7	GR	2.724	96.1	82.0	27.4	2.728	.05	.02	
794.00	48	2.6	.9	39.0	2.122	-3.0	.0	82.2	110.7	45.9	25.4	GR	2.774	96.2	82.2	26.2	2.765	.05	.02	
794.16	47	3.4	1.3	37.5	2.211	-3.2	.0	78.6	96.8	41.9	23.7	GR	2.846	95.3	78.6	24.0	2.819	.05	.02	
794.31	46	4.1	1.8	36.1	2.298	-3.5	.0	78.6	90.2	37.8	22.0	GR	2.915	90.2	78.6	22.1	2.874	.05	.02	5
794.46	48	3.1	2.8	34.6	2.253	-3.8	.0	93.2	76.1	39.3	25.1	GR	2.842	93.2	93.2	20.9	2.815	.05	.02	
794.61	53	3.0	1.9	37.2	2.105	-3.3	.0	84.0	82.6	41.7	32.5	GR	2.723	84.0	84.0	22.7	2.728	.05	.02	
794.77	59	2.7	1.0	39.9	1.961	-2.9	.0	75.2	96.8	44.1	40.0	GR	2.623	94.4	75.2	26.0	2.666	.05	.02	
794.92	60	2.7	.8	42.5	1.910	-3.0	.0	69.3	98.9	46.3	41.5	GR	2.604	92.9	69.3	28.2	2.660	.05	.02	6
795.07	61	2.7	.6	45.2	1.860	-3.2	.0	68.7	111.4	48.4	43.1	GR	2.581	92.8	68.7	28.2	2.654	.05	.02	6 8
795.22	58	2.9	1.0	43.9	1.961	-2.4	.0	69.1	89.7	44.8	38.5	GR	2.687	89.7	69.1	28.0	2.705	.05	.02	
795.38	56	3.1	.9	43.3	1.919	-2.3	.0	62.4	90.2	43.3	35.5	GR	2.639	90.2	62.4	30.7	2.674	.05	.02	

795.53	53	3.2	.7	42.7	1.877	-2.3	.0	56.8	92.7	41.7	32.4	GR	2.592	89.3	56.8	33.5	2.641	.05	.02	6 8
795.68	55	2.7	.6	46.7	1.744	-2.7	.0	63.5	107.4	45.7	34.6	GR	2.474	91.3	63.5	32.4	2.625	.05	.02	6 8
795.83	59	2.7	.6	46.7	1.791	-2.3	.0	67.7	108.6	46.9	40.4	GR	2.519	92.5	67.7	29.6	2.621	.05	.02	6 8
795.99	63	2.6	.7	46.7	1.838	-2.0	.0	72.6	111.0	48.0	46.2	GR	2.568	93.8	72.6	26.7	2.655	.05	.02	6 8
796.14	62	2.5	.9	46.3	1.939	-2.3	.0	73.6	98.9	47.9	44.6	GR	2.701	94.1	73.6	27.0	2.718	.05	.02	
796.29	61	2.6	1.0	45.9	2.040	-2.7	.0	80.3	100.0	47.8	43.1	GR	2.834	95.7	80.3	24.2	2.794	.05	.02	
796.44	62	2.2	.9	43.9	2.048	-2.5	.0	90.5	113.8	50.2	44.1	GR	2.797	98.0	90.5	22.6	2.772	.05	.02	
796.59	61	2.4	.9	43.4	2.084	-2.5	.0	90.1	120.1	47.8	43.2	GR	2.835	97.9	90.1	21.8	2.793	.05	.02	
796.75	60	2.7	.8	42.9	2.120	-2.5	.0	88.0	126.5	45.3	42.2	GR	2.873	97.5	88.0	21.0	2.815	.05	.02	
796.90	55	3.4	2.1	38.1	2.187	-3.1	.0	84.3	84.4	42.0	34.2	GR	2.844	84.4	84.3	20.4	2.807	.05	.02	

Zone No. 3

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
797.05	49	4.0	3.5	33.2	2.253	-3.6	.0	85.6	71.6	38.8	26.3	GR	2.819	85.6	85.6	19.6	2.796	.05	.02	
797.20	52	2.9	2.1	31.9	2.111	-3.7	.0	90.2	83.9	40.3	31.1	GR	2.660	90.2	90.2	21.2	2.679	.05	.02	
797.36	57	2.7	1.5	36.8	1.990	-3.2	.0	78.9	82.8	45.2	37.3	GR	2.612	82.8	78.9	25.0	2.655	.05	.02	6
797.51	61	2.4	.9	41.7	1.867	-2.7	.0	74.2	93.4	50.2	43.6	GR	2.525	93.4	74.2	28.0	2.623	.05	.02	6 8
797.66	62	2.3	.8	43.7	1.861	-2.5	.0	76.8	102.2	51.8	45.1	GR	2.548	94.9	76.8	27.2	2.640	.05	.02	6 8
797.81	63	2.2	.7	45.7	1.855	-2.2	.0	79.7	113.1	53.5	46.6	GR	2.573	95.6	79.7	26.5	2.656	.05	.02	6 8
797.97	63	2.6	1.1	42.2	1.950	-2.6	.0	76.8	92.3	60.6	45.6	GR	2.638	92.3	76.8	24.8	2.682	.05	.02	
798.12	65	2.6	1.1	41.8	1.953	-2.5	.0	79.7	98.7	59.8	48.5	GR	2.629	95.6	79.7	23.3	2.680	.05	.02	
798.27	67	2.6	1.0	41.4	1.956	-2.5	.0	82.6	105.9	59.1	51.4	GR	2.618	96.3	82.6	21.8	2.678	.05	.02	
798.42	65	2.7	.9	43.0	1.967	-3.1	.0	78.8	107.7	54.1	49.2	GR	2.667	95.3	78.8	22.9	2.699	.05	.02	
798.58	64	2.8	.8	44.6	1.977	-3.7	.0	75.6	109.8	49.1	46.9	GR	2.711	94.6	75.6	24.0	2.725	.05	.02	
798.73	63	3.3	1.0	45.0	2.010	-3.9	.0	71.6	105.9	49.6	46.3	GR	2.773	93.5	71.6	23.3	2.758	.05	.02	
798.88	65	2.5	.9	45.3	1.981	-3.8	.0	81.0	105.6	45.5	48.1	GR	2.736	95.9	81.0	23.6	2.738	.05	.02	
799.03	66	2.0	.9	45.5	1.953	-3.8	.0	89.3	105.0	41.4	49.9	GR	2.699	97.8	89.3	24.0	2.719	.05	.02	
799.19	69	2.2	.9	42.9	2.022	-3.2	.0	99.0	123.4	42.6	54.2	GR	2.735	99.8	99.0	18.6	2.738	.05	.02	
799.34	68	2.4	1.2	41.5	2.112	-3.0	.0	107.2	126.2	42.3	53.4	GR	2.852	100.0	100.0	15.8	2.790	.05	.02	
799.49	68	2.7	1.4	40.1	2.201	-2.9	.0	113.1	129.8	42.1	52.5	GR	2.974	100.0	100.0	13.6	2.846	.05	.02	5
799.64	60	3.6	2.8	37.3	2.276	-3.3	.0	98.0	91.1	38.2	41.9	GR	2.975	98.0	98.0	15.1	2.871	.05	.02	5
799.80	53	4.8	4.2	34.5	2.354	-3.8	.0	87.1	74.1	34.2	31.5	GR	2.981	87.1	87.1	16.4	2.900	.05	.02	5
799.95	40	5.5	5.6	26.8	2.432	-3.8	.0	88.2	66.9	38.3	13.6	GR	2.884	88.2	88.2	17.9	2.862	.05	.02	
800.10	38	7.2	5.0	25.9	2.446	-3.8	.0	77.8	70.9	34.9	10.9	GR	2.878	77.8	77.8	18.2	2.862	.05	.02	
800.25	36	9.3	4.4	24.9	2.460	-3.8	.0	68.8	75.5	31.4	8.1	GR	2.873	75.5	68.8	18.6	2.861	.05	.02	
800.40	39	7.8	5.4	25.0	2.399	-3.8	.0	75.2	68.6	29.4	12.2	GR	2.818	75.2	75.2	17.8	2.807	.05	.02	
800.56	42	6.8	6.5	25.0	2.338	-3.8	.0	80.5	63.3	27.3	16.3	GR	2.757	80.5	80.5	17.1	2.754	.05	.02	
800.71	52	4.0	1.1	28.4	2.044	-3.7	.0	73.1	106.0	36.0	30.7	GR	2.570	93.9	73.1	22.9	2.615	.05	.02	6
800.86	54	3.8	1.2	32.4	2.032	-3.7	.0	71.5	100.6	38.6	32.7	GR	2.601	93.5	71.5	23.8	2.641	.05	.02	6
801.01	55	3.6	1.2	36.3	2.020	-3.6	.0	70.0	95.7	41.2	34.8	GR	2.637	93.1	70.0	24.7	2.668	.05	.02	
801.17	54	3.6	2.2	33.7	2.034	-3.6	.0	72.6	72.5	39.1	33.7	GR	2.617	72.6	72.6	23.7	2.653	.05	.02	
801.32	54	3.5	3.3	31.1	2.048	-3.5	.0	77.3	62.1	36.9	32.6	GR	2.600	77.3	77.3	22.8	2.639	.05	.02	6
801.47	52	3.8	1.1	27.4	2.025	-3.1	.0	73.8	108.2	36.6	30.7	GR	2.544	94.1	73.8	23.3	2.616	.05	.02	6
801.62	48	4.2	1.6	26.7	2.162	-3.4	.0	82.4	104.0	33.8	24.5	GR	2.644	96.2	82.4	20.2	2.664	.05	.02	
801.78	43	4.9	2.1	26.1	2.301	-3.8	.0	91.3	105.9	31.0	18.3	GR	2.735	98.2	91.3	17.6	2.736	.05	.02	
801.93	43	5.0	1.7	23.2	2.334	-3.8	.0	104.0	135.8	29.3	18.2	GR	2.719	100.0	100.0	15.1	2.723	.05	.02	
802.08	46	5.0	1.7	26.9	2.300	-3.8	.0	92.9	125.1	28.7	22.6	GR	2.749	98.5	92.9	16.3	2.747	.05	.02	
802.23	50	4.9	1.6	30.6	2.266	-3.7	.0	84.6	117.0	28.1	27.1	GR	2.783	96.7	84.6	17.4	2.770	.05	.02	
802.39	50	4.9	3.4	32.5	2.273	-3.7	.0	81.2	76.7	31.4	27.3	GR	2.829	81.2	81.2	18.4	2.803	.05	.02	
802.54	50	4.5	5.2	34.4	2.280	-3.7	.0	81.4	59.2	34.6	27.5	GR	2.875	81.4	81.4	19.2	2.835	.05	.02	
802.69	55	4.2	2.4	33.6	2.138	-3.8	.0	80.3	83.5	36.7	34.7	GR	2.697	83.5	80.3	19.1	2.707	.05	.02	
802.84	57	3.7	2.1	34.2	2.088	-3.8	.0	80.5	85.1	41.0	37.3	GR	2.664	85.1	80.5	20.2	2.687	.05	.02	
803.00	59	3.1	1.7	34.9	2.038	-3.8	.0	82.2	88.3	45.3	39.9	GR	2.626	88.3	82.2	21.3	2.666	.05	.02	
803.15	59	3.0	1.4	34.7	1.998	-3.2	.0	80.0	91.6	45.0	40.2	GR	2.585	91.6	80.0	22.7	2.642	.05	.02	6
803.30	59	2.8	1.1	34.5	1.957	-2.7	.0	78.4	96.9	44.6	40.4	GR	2.539	95.3	78.4	24.3	2.615	.05	.02	6
803.45	52	3.5	.9	34.3	2.062	-3.3	.0	74.9	116.2	40.6	31.1	GR	2.650	94.4	74.9	23.9	2.673	.05	.02	
803.61	52	3.7	3.2	32.4	2.212	-3.6	.0	91.9	77.9	37.4	30.3	GR	2.754	91.9	91.9	18.3	2.749	.05	.02	
803.76	51	3.8	5.5	30.5	2.362	-3.8	.0	108.2	71.0	34.1	29.5	GR	2.904	100.0	100.0	14.8	2.852	.05	.02	5
803.91	49	5.0	4.4	28.4	2.400	-3.8	.0	101.1	84.8	30.4	26.8	GR	2.905	100.0	100.0	14.1	2.857	.05	.02	5

804.06	48	6.1	3.3	26.4	2.439	-3.8	.0	97.6	105.0	26.7	24.1	GR	2.906	99.5	97.6	13.3	2.862	.05	.02
804.21	42	7.3	9.5	20.2	2.456	-3.9	.0	108.4	74.4	26.2	17.0	GR	2.798	100.0	100.0	11.7	2.787	.05	.02
804.37	43	6.8	6.5	20.7	2.392	-3.8	.0	104.0	82.5	28.2	17.3	GR	2.736	100.0	100.0	12.8	2.737	.05	.02
804.52	43	6.2	3.7	21.2	2.328	-3.8	.0	96.2	97.0	30.2	17.7	GR	2.692	97.0	96.2	14.6	2.698	.05	.02
804.67	45	5.5	3.9	25.0	2.278	-3.8	.0	87.6	80.8	31.8	20.1	GR	2.699	87.6	87.6	16.8	2.705	.05	.02
804.82	46	4.9	4.1	28.8	2.228	-3.9	.0	81.5	68.8	33.5	22.6	GR	2.707	81.5	81.5	19.1	2.713	.05	.02
804.98	46	5.2	3.4	32.7	2.206	-3.8	.0	69.1	65.5	32.7	21.4	GR	2.752	69.1	69.1	22.4	2.749	.05	.02
805.13	43	6.2	4.3	32.7	2.285	-3.8	.0	65.4	60.1	30.1	17.7	GR	2.833	65.4	65.4	22.3	2.816	.05	.02
805.28	40	7.3	5.2	32.6	2.363	-3.8	.0	62.0	56.0	27.5	14.1	GR	2.908	62.0	62.0	22.2	2.883	.05	.02
805.43	43	6.6	10.0	24.9	2.386	-3.8	.0	87.9	55.3	27.9	18.2	GR	2.808	87.9	87.9	15.5	2.795	.05	.02

Zone No. 3

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
805.59	46	6.8	6.7	25.5	2.316	-3.8	.0	84.4	66.7	29.3	22.5	GR	2.742	84.4	84.4	15.1	2.742	.05	.02	
805.74	49	7.0	3.5	26.1	2.247	-3.8	.0	78.1	87.7	30.7	26.9	GR	2.689	87.7	78.1	15.5	2.699	.05	.02	
805.89	50	6.4	4.4	27.8	2.234	-3.8	.0	78.1	74.7	30.6	27.8	GR	2.699	78.1	78.1	16.3	2.707	.05	.02	
806.04	51	5.9	5.3	29.6	2.222	-3.8	.0	78.3	65.0	30.4	28.8	GR	2.711	78.3	78.3	17.0	2.720	.05	.02	
806.20	49	5.9	4.0	29.1	2.226	-3.8	.0	76.5	72.4	31.3	25.7	GR	2.708	76.5	76.5	17.9	2.716	.05	.02	
806.35	46	7.0	5.3	29.4	2.267	-3.8	.0	69.6	62.3	28.4	22.6	GR	2.760	69.6	69.6	18.6	2.755	.05	.02	
806.50	44	8.0	6.6	29.7	2.308	-3.8	.0	64.6	55.0	25.6	19.5	GR	2.810	64.6	64.6	19.3	2.795	.05	.02	
806.65	45	8.0	6.9	27.4	2.340	-3.8	.0	72.0	60.0	25.4	20.2	GR	2.804	72.0	72.0	17.0	2.790	.05	.02	
806.81	45	8.0	7.3	25.1	2.372	-3.8	.0	81.5	66.5	25.3	21.0	GR	2.799	81.5	81.5	14.7	2.785	.05	.02	
806.96	53	6.3	3.4	26.4	2.236	-3.8	.0	86.0	93.6	28.1	32.1	GR	2.682	93.6	86.0	13.8	2.696	.05	.02	
807.11	53	5.7	3.2	29.8	2.195	-3.8	.0	78.5	82.9	29.5	32.4	GR	2.694	82.9	78.5	16.5	2.704	.05	.02	
807.26	54	5.3	3.1	33.3	2.155	-3.9	.0	72.5	75.0	30.9	32.8	GR	2.706	75.0	72.5	19.2	2.715	.05	.02	
807.42	50	6.1	3.3	32.4	2.188	-3.8	.0	67.4	71.2	30.2	27.1	GR	2.726	71.2	67.4	20.2	2.730	.05	.02	
807.57	46	7.0	3.5	31.5	2.221	-3.8	.0	62.3	67.5	29.4	21.5	GR	2.746	67.5	62.3	21.3	2.745	.05	.02	
807.72	41	8.3	5.8	27.6	2.335	-3.8	.0	65.8	59.9	24.9	15.1	GR	2.797	65.8	65.8	19.4	2.788	.05	.02	
807.87	44	7.7	6.1	27.0	2.320	-3.8	.0	72.7	62.9	24.6	19.5	GR	2.775	72.7	72.7	17.4	2.767	.05	.02	
808.02	47	7.0	6.4	26.5	2.306	-3.8	.0	81.2	66.6	24.2	23.9	GR	2.749	81.2	81.2	15.4	2.746	.05	.02	
808.18	48	7.1	3.3	30.6	2.258	-3.8	.0	68.0	77.6	27.0	24.6	GR	2.772	77.6	68.0	18.7	2.763	.05	.02	
808.33	45	6.1	4.1	29.3	2.297	-3.8	.0	76.1	71.3	28.8	21.2	GR	2.791	76.1	76.1	18.6	2.779	.05	.02	
808.48	43	5.0	5.0	28.0	2.336	-3.8	.0	86.7	66.8	30.6	17.8	GR	2.808	86.7	86.7	18.5	2.795	.05	.02	
808.63	43	4.6	3.6	26.3	2.337	-3.7	.0	95.7	83.3	32.1	18.2	GR	2.779	95.7	95.7	17.2	2.771	.05	.02	
808.79	44	4.3	2.3	24.6	2.338	-3.7	.0	106.9	111.7	33.7	18.7	GR	2.750	100.0	100.0	15.8	2.748	.05	.02	
808.94	42	5.1	4.3	27.1	2.341	-3.7	.0	87.4	73.5	37.1	16.9	GR	2.796	87.4	87.4	18.2	2.786	.05	.02	
809.09	41	5.7	4.5	27.0	2.351	-3.7	.0	82.1	70.5	35.4	14.9	GR	2.804	82.1	82.1	18.8	2.794	.05	.02	
809.24	40	6.2	4.6	27.0	2.361	-3.6	.0	77.4	67.8	33.8	12.8	GR	2.812	77.4	77.4	19.5	2.802	.05	.02	
809.40	42	5.3	4.9	25.8	2.304	-3.6	.0	85.9	68.2	31.5	16.0	GR	2.734	85.9	85.9	18.4	2.735	.05	.02	
809.55	44	4.6	5.2	24.6	2.247	-3.6	.0	90.0	65.0	29.2	19.2	GR	2.678	90.0	90.0	18.3	2.688	.05	.02	
809.70	53	3.7	2.4	28.8	2.192	-3.4	.0	97.4	95.7	39.1	31.2	GR	2.680	97.4	97.4	16.8	2.695	.05	.02	
809.85	52	3.8	1.8	29.4	2.174	-3.5	.0	91.0	103.9	39.1	30.4	GR	2.675	98.1	91.0	18.1	2.691	.05	.02	
810.01	51	3.7	1.2	30.1	2.155	-3.6	.0	87.5	119.3	39.1	29.6	GR	2.670	97.4	87.5	19.4	2.687	.05	.02	
810.16	52	3.5	3.0	30.4	2.149	-3.6	.0	89.4	75.7	38.8	30.8	GR	2.669	89.4	89.4	19.2	2.686	.05	.02	
810.31	53	3.1	4.9	30.7	2.143	-3.6	.0	95.5	59.6	38.5	32.0	GR	2.667	95.5	95.5	19.1	2.686	.05	.02	
810.46	55	2.8	.9	35.6	2.094	-2.9	.0	88.1	123.5	38.7	34.4	GR	2.688	97.5	88.1	21.6	2.702	.05	.02	
810.62	51	3.1	1.1	36.3	2.102	-3.2	.0	80.9	103.8	38.7	28.8	GR	2.705	95.8	80.9	23.9	2.713	.05	.02	
810.77	47	3.3	1.3	37.0	2.108	-3.5	.0	74.0	88.7	38.6	23.3	GR	2.724	88.7	74.0	26.4	2.728	.05	.02	
810.92	46	3.5	1.5	36.9	2.141	-3.7	.0	72.9	84.2	36.7	21.9	GR	2.757	84.2	72.9	26.1	2.753	.05	.02	
811.07	45	3.7	1.7	36.8	2.174	-3.8	.0	72.0	80.6	34.8	20.5	GR	2.790	80.6	72.0	25.8	2.779	.05	.02	
811.23	47	4.2	1.4	33.4	2.288	-3.6	.0	70.7	94.1	31.5	23.0	GR	2.650	93.3	70.7	24.2	2.671	.05	.02	4 7
811.38	47	4.2	2.7	31.0	2.284	-3.7	.0	68.2	65.0	33.0	23.5	GR	2.650	68.2	68.2	25.2	2.671	.05	.02	4 7
811.53	47	3.9	4.0	28.6	2.280	-3.8	.0	68.1	51.2	34.5	24.0	GR	2.650	68.1	68.1	26.2	2.672	.05	.02	4 7
811.68	46	3.6	5.2	29.9	2.231	-3.7	.0	92.7	59.5	37.9	22.5	GR	2.729	92.7	92.7	19.7	2.732	.05	.02	
811.83	46	4.2	3.6	30.3	2.257	-3.5	.0	86.4	72.6	36.2	22.2	GR	2.764	86.4	86.4	19.5	2.758	.05	.02	
811.99	46	4.8	2.0	30.7	2.282	-3.4	.0	82.2	98.7	34.5	21.9	GR	2.800	96.1	82.2	19.4	2.786	.05	.02	
812.14	45	4.6	2.9	29.2	2.303	-3.6	.0	87.7	86.1	33.7	21.1	GR	2.795	87.7	87.7	18.4	2.782	.05	.02	
812.29	45	4.4	3.8	27.7	2.323	-3.8	.0	95.3	79.2	32.8	20.3	GR	2.790	95.3	95.3	17.5	2.779	.05	.02	
812.44	44	4.5	1.8	26.7	2.293	-3.6	.0	93.1	115.7	32.8	19.3	GR	2.738	98.6	93.1	17.7	2.738	.05	.02	

812.60	42	5.2	2.9	29.4	2.322	-3.7	.0	78.9	81.7	32.4	16.5	GR	2.816	81.7	78.9	20.1	2.803	.05	.02
812.75	40	5.8	4.0	32.2	2.351	-3.8	.0	69.5	63.5	32.0	13.7	GR	2.889	69.5	69.5	22.4	2.867	.05	.02
812.90	39	6.0	5.5	28.7	2.360	-3.8	.0	73.8	58.1	31.1	11.5	GR	2.837	73.8	73.8	21.1	2.825	.05	.02
813.05	37	6.1	7.0	25.1	2.369	-3.8	.0	79.3	55.9	30.2	9.3	GR	2.788	79.3	79.3	19.6	2.783	.05	.02
813.21	38	5.9	1.7	23.1	2.352	-3.7	.0	87.7	123.2	30.6	11.2	GR	2.737	97.4	87.7	17.7	2.738	.05	.02
813.36	39	5.9	3.4	23.9	2.350	-3.7	.0	86.6	86.7	31.9	12.1	GR	2.748	86.7	86.6	17.9	2.747	.05	.02
813.51	40	5.1	5.1	24.6	2.348	-3.8	.0	91.6	69.7	33.2	13.0	GR	2.759	91.6	91.6	18.1	2.757	.05	.02
813.66	43	4.8	5.3	24.9	2.268	-3.7	.0	89.9	65.4	34.2	17.8	GR	2.694	89.9	89.9	18.2	2.700	.05	.02
813.82	47	4.5	5.6	25.2	2.188	-3.6	.0	84.3	58.3	35.2	22.7	GR	2.647	84.3	84.3	19.3	2.665	.05	.02
813.97	46	5.4	3.0	31.2	2.181	-3.8	.0	68.9	70.4	34.5	22.0	GR	2.703	70.4	68.9	22.0	2.708	.05	.02

Zone No. 3

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FCVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
814.12	45	5.1	5.1	29.9	2.209	-3.8	.0	74.9	57.6	32.9	20.8	GR	2.707	74.9	74.9	20.9	2.713	.05	.02	
814.27	44	4.9	7.1	28.6	2.238	-3.8	.0	80.8	51.3	31.2	19.7	GR	2.713	80.8	80.8	19.9	2.719	.05	.02	
814.43	44	6.1	1.9	30.4	2.243	-3.3	.0	68.7	94.6	29.4	19.6	GR	2.750	92.8	68.7	21.0	2.748	.05	.02	
814.58	43	5.9	4.0	30.6	2.245	-3.6	.0	67.9	62.8	29.6	17.3	GR	2.755	67.9	67.9	22.0	2.752	.05	.02	
814.73	41	5.0	6.2	30.8	2.246	-3.8	.0	71.5	48.9	29.9	15.1	GR	2.759	71.5	71.5	23.1	2.756	.05	.02	
814.88	45	4.9	3.4	30.9	2.191	-3.6	.0	72.2	66.4	30.9	20.6	GR	2.706	72.2	72.2	22.1	2.711	.05	.02	
815.04	49	4.4	.8	31.1	2.135	-3.5	.0	74.1	136.2	31.9	26.2	GR	2.671	94.2	74.1	22.0	2.685	.05	.02	
815.19	56	4.4	4.3	36.3	2.162	-3.7	.0	77.2	62.2	36.5	36.2	GR	2.776	77.2	77.2	19.2	2.762	.05	.02	
815.34	55	4.2	2.8	35.8	2.169	-3.6	.0	78.8	76.3	36.6	34.5	GR	2.773	78.8	78.8	19.4	2.761	.05	.02	
815.49	54	3.9	1.4	35.3	2.176	-3.5	.0	82.7	107.7	36.7	32.8	GR	2.771	96.3	82.7	19.7	2.760	.05	.02	
815.64	49	4.7	2.5	34.3	2.195	-3.6	.0	73.1	78.2	36.0	26.8	GR	2.771	78.2	73.1	21.3	2.762	.05	.02	
815.80	45	5.6	3.6	33.3	2.214	-3.6	.0	65.9	62.9	35.3	20.7	GR	2.772	65.9	65.9	22.9	2.765	.05	.02	
815.95	43	6.6	5.0	29.7	2.316	-3.7	.0	70.3	61.7	28.7	17.5	GR	2.816	70.3	70.3	20.0	2.802	.05	.02	
816.10	43	6.6	4.6	28.0	2.325	-3.7	.0	74.2	68.3	29.2	17.4	GR	2.794	74.2	74.2	18.8	2.784	.05	.02	
816.25	43	6.7	4.2	26.2	2.333	-3.8	.0	78.7	76.4	29.6	17.3	GR	2.772	78.7	78.7	17.6	2.766	.05	.02	
816.41	45	5.7	4.6	27.5	2.164	-3.7	.0	67.2	57.2	30.7	20.1	GR	2.658	67.2	67.2	22.2	2.671	.05	.02	
816.56	47	4.7	5.0	28.9	1.996	-3.7	.0	58.1	42.8	31.7	22.9	GR	2.554	58.1	58.1	28.3	2.632	.05	.02	6
816.71	53	3.6	1.0	34.2	1.637	-2.9	.0	53.8	79.4	37.8	32.6	GR	2.106	79.4	53.8	33.4	2.620	.05	.02	6 8
816.86	57	3.5	1.1	37.8	1.690	-2.6	.0	57.4	77.4	40.0	37.2	GR	2.219	77.4	57.4	31.1	2.626	.05	.02	6 8
817.02	60	3.3	1.3	41.5	1.744	-2.3	.0	61.6	76.5	42.2	41.8	GR	2.348	76.5	61.6	28.8	2.630	.05	.02	6 8
817.17	58	3.9	1.5	39.4	1.952	-2.7	.0	61.6	77.5	39.6	39.1	GR	2.607	77.5	61.6	26.6	2.656	.05	.02	6
817.32	56	4.5	1.7	37.2	2.159	-3.2	.0	75.0	96.3	36.9	36.3	GR	2.793	94.4	75.0	19.7	2.772	.05	.02	
817.47	48	4.8	4.4	30.1	2.228	-3.7	.0	81.7	66.4	31.4	24.7	GR	2.727	81.7	81.7	18.9	2.731	.05	.02	
817.63	49	5.3	3.0	29.2	2.191	-3.4	.0	76.0	79.1	31.5	26.1	GR	2.687	79.1	76.0	19.1	2.697	.05	.02	
817.78	50	5.2	1.6	28.3	2.157	-3.1	.0	74.7	105.6	31.6	27.5	GR	2.654	94.3	74.7	19.6	2.674	.05	.02	
817.93	48	6.0	4.8	30.7	2.252	-3.6	.0	73.5	63.8	32.5	24.7	GR	2.767	73.5	73.5	18.8	2.760	.05	.02	
818.08	47	5.7	3.4	30.9	2.256	-3.6	.0	74.5	75.0	32.8	23.8	GR	2.776	75.0	74.5	19.3	2.767	.05	.02	
818.24	47	5.0	1.9	31.2	2.260	-3.6	.0	78.1	97.0	33.1	22.8	GR	2.785	95.2	78.1	19.8	2.774	.05	.02	
818.39	54	4.4	1.8	31.9	2.142	-3.4	.0	79.3	96.5	37.1	32.7	GR	2.680	95.5	79.3	19.2	2.695	.05	.02	
818.54	61	3.8	1.7	32.6	2.026	-3.1	.0	73.3	85.9	41.1	42.8	GR	2.650	85.9	73.3	21.5	2.689	.05	.02	4 78
818.69	68	3.0	1.1	33.6	1.979	-2.1	.0	95.3	127.1	41.7	52.9	GR	2.650	99.0	95.3	16.0	2.698	.05	.02	4 78
818.85	64	3.4	1.3	34.4	2.066	-2.9	.0	90.7	117.3	39.7	47.8	GR	2.635	98.1	90.7	16.7	2.677	.05	.02	
819.00	61	3.7	1.5	35.3	2.152	-3.6	.0	92.1	116.5	37.7	42.7	GR	2.740	98.4	92.1	16.1	2.740	.05	.02	
819.15	61	4.2	2.4	34.0	2.202	-3.6	.0	93.8	100.8	35.5	42.9	GR	2.784	98.7	93.8	14.2	2.764	.05	.02	
819.30	61	4.8	3.4	32.7	2.252	-3.6	.0	96.2	94.3	33.4	43.0	GR	2.830	96.2	96.2	12.4	2.788	.05	.02	
819.45	65	3.9	.6	31.3	2.007	-3.1	.0	78.6	160.3	35.5	49.1	GR	2.650	95.3	78.6	18.0	2.695	.05	.02	4 78
819.61	69	3.6	.8	31.4	1.953	-2.1	.0	89.5	160.6	38.4	54.9	GR	2.650	97.8	89.5	15.0	2.700	.05	.02	4 78
819.76	73	3.3	.9	31.4	1.899	-1.0	.0	102.8	164.2	41.4	60.7	GR	2.650	100.0	100.0	12.2	2.705	.05	.02	4 78
819.91	74	3.3	1.0	33.7	1.826	-1.0	.0	76.9	112.9	42.2	61.2	GR	2.312	94.9	76.9	19.2	2.620	.05	.02	6 8
820.06	74	3.3	1.1	36.0	1.753	-1.0	.0	77.2	108.5	43.0	61.6	GR	1.825	95.0	77.2	19.0	2.623	.05	.02	6 8
820.22	68	4.0	.6	40.3	1.670	-1.3	.0	83.2	178.9	39.7	53.7	GR	2.650	96.4	83.2	15.6	2.699	.05	.02	4 78
820.37	67	4.6	2.0	39.9	1.765	-2.3	.0	75.9	93.1	38.9	51.6	GR	2.650	93.1	75.9	16.7	2.697	.05	.02	4 78
820.52	65	4.2	3.5	39.5	1.859	-3.3	.0	76.2	67.7	38.1	49.3	GR	2.650	76.2	76.2	17.9	2.695	.05	.02	4 78
820.67	70	3.7	.9	40.5	1.892	-2.1	.0	89.3	147.4	39.2	55.4	GR	2.650	97.8	89.3	14.8	2.700	.05	.02	4 78
820.83	69	3.8	1.1	41.8	1.915	-2.3	.0	66.6	100.0	40.6	54.6	GR	2.555	92.2	66.6	22.3	2.656	.05	.02	6
820.98	69	3.8	1.2	43.2	1.937	-2.5	.0	66.6	94.4	42.0	53.8	GR	2.623	92.2	66.6	22.2	2.684	.05	.02	



821.13	68	3.7	1.2	40.6	1.936	-2.4	.0	68.9	98.1	38.9	53.1	GR	2.570	92.8	68.9	21.7	2.658	.05	.02	6	
821.28	68	3.6	1.1	38.0	1.936	-2.3	.0	71.6	102.0	35.7	52.4	GR	2.522	93.5	71.6	21.2	2.633	.05	.02	6	
821.44	64	4.8	1.6	41.1	2.016	-2.4	.0	64.3	89.7	34.3	47.8	GR	2.689	89.7	64.3	20.8	2.709	.05	.02		
821.59	64	6.4	3.2	38.4	2.176	-3.1	.0	69.7	80.4	30.0	47.1	GR	2.862	80.4	69.7	15.4	2.802	.05	.02		
821.74	63	7.8	4.9	35.7	2.335	-3.7	.0	76.6	80.6	25.7	46.2	GR	3.054	80.6	76.6	11.6	2.901	.05	.02	5	
821.89	65	6.7	5.1	34.2	2.260	-3.7	.0	83.3	80.0	26.5	48.3	GR	2.898	83.3	83.3	11.0	2.817	.05	.02	5	
822.05	66	5.8	5.4	32.8	2.186	-3.6		78.0	67.2	27.2	50.5	GR	2.650	78.0	78.0	13.5	2.696	.05	.02	4	7
822.20	73	4.0	1.1	41.2	1.957	-2.6		91.3	150.0	38.4	59.8	GR	2.650	98.2	91.3	12.6	2.704	.05	.02	4	78
822.35	76	3.9	1.0	42.7	1.946	-2.5	.0	74.6	119.8	39.0	64.0	GR	2.592	94.3	74.6	17.3	2.684	.05	.02	6	
822.50	79	3.8	1.0	44.3	1.936	-2.4	.0	78.9	127.7	39.6	68.2	GR	2.595	95.4	78.9	15.8	2.693	.05	.02	6	8

Zone No. 3

BROADBILL-1  
AMITY OIL NLComplex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
822.66	76	3.8	1.0	41.6	1.976	-2.1	.0	81.5	129.2	39.4	65.0	GR	2.616	96.0	81.5	15.3	2.692	.05	.02	
822.81	74	3.8	1.1	39.0	2.017	-1.9		97.2	153.8	39.1	61.8	GR	2.650	99.4	97.2	11.7	2.706	.05	.02	4 78
822.96	67	4.6	.8	39.7	2.132	-2.8	.0	80.9	159.8	33.3	51.6	GR	2.834	95.8	80.9	15.2	2.783	.05	.02	
823.11	66	5.9	2.1	36.0	2.237	-3.3	.0	84.8	118.5	30.9	50.2	GR	2.913	96.7	84.8	11.7	2.821	.05	.02	5
823.26	65	6.3	3.5	32.3	2.346	-3.7	.0	98.8	113.9	28.5	48.8	GR	2.997	99.8	98.8	8.5	2.864	.05	.02	5
823.42	68	5.6	2.5	32.1	2.178	-3.5	.0	98.0	125.0	31.3	53.6	GR	2.698	99.6	98.0	9.0	2.717	.05	.02	
823.57	72	4.4	1.6	31.9	2.011	-3.2		85.6	119.6	34.2	58.5	GR	2.650	96.9	85.6	13.3	2.703	.05	.02	4 78
823.72	72	3.8	1.4	37.7	1.828	-1.5		92.3	129.3	40.7	58.9	GR	2.650	98.4	92.3	13.1	2.703	.05	.02	4 78
823.87	71	3.8	1.2	39.8	1.895	-2.2	.0	67.7	97.9	40.3	56.9	GR	2.464	92.5	67.7	21.4	2.625	.05	.02	6 8
824.03	69	3.7	1.0	42.0	1.962	-2.8		88.0	140.6	39.9	54.9	GR	2.650	97.5	88.0	15.0	2.700	.05	.02	4 78
824.18	68	3.6	1.0	36.0	1.955	-3.3		87.7	139.7	37.3	53.4	GR	2.650	97.4	87.7	15.8	2.698	.05	.02	4 78
824.33	68	3.3	.8	34.7	1.902	-2.6	.0	74.2	121.3	39.3	52.5	GR	2.411	94.2	74.2	21.4	2.622	.05	.02	6
824.48	67	3.0	.6	33.5	1.847	-1.9	.0	72.1	125.3	41.3	51.3	GR	2.299	93.7	72.1	23.7	2.633	.05	.02	6
824.64	70	3.0	.7	34.7	1.850	-1.5	.0	75.1	129.5	41.1	55.6	GR	2.279	94.4	75.1	22.0	2.626	.05	.02	6 8
824.79	73	3.0	.7	36.0	1.852	-1.1	.0	79.6	136.5	40.9	60.0	GR	2.253	95.5	79.6	19.8	2.619	.05	.02	6 8
824.94	69	3.0	1.0	37.8	1.899	-1.4	.0	76.4	105.5	41.3	53.8	GR	2.451	94.7	76.4	22.0	2.628	.05	.02	6
825.09	66	3.0	.9	39.3	1.935	-1.6	.0	75.6	108.6	41.6	50.6	GR	2.553	94.6	75.6	22.4	2.646	.05	.02	6
825.25	64	3.1	.9	40.9	1.971	-1.7	.0	74.9	112.1	41.9	47.4	GR	2.636	94.4	74.9	22.8	2.681	.05	.02	
825.40	64	3.4	1.0	40.3	1.995	-2.0	.0	75.0	109.2	41.5	47.7	GR	2.653	94.4	75.0	21.5	2.690	.05	.02	
825.55	64	3.6	1.2	39.7	2.019	-2.2	.0	75.6	107.6	41.1	48.1	GR	2.670	94.6	75.6	20.2	2.698	.05	.02	
825.70	65	4.2	1.9	36.6	2.081	-2.3	.0	81.9	98.1	37.0	49.0	GR	2.682	96.1	81.9	16.3	2.704	.05	.02	
825.86	69	4.1	1.7	35.3	2.095	-2.4	.0	92.1	120.0	37.3	53.8	GR	2.669	98.4	92.1	13.3	2.700	.05	.02	
826.01	72	4.0	1.4	34.0	2.109	-2.5	.0	103.8	151.6	37.6	58.5	GR	2.653	100.0	100.0	10.2	2.695	.05	.02	
826.16	74	4.1	1.4	35.4	2.094	-1.8		93.2	135.7	37.5	61.9	GR	2.650	98.6	93.2	11.6	2.706	.05	.02	4 78
826.31	77	4.2	1.4	36.9	2.079	-1.0		96.7	143.3	37.4	65.3	GR	2.650	99.3	96.7	10.1	2.709	.05	.02	4 78
826.47	74	4.6	1.8	38.6	2.017	-1.6		87.6	118.1	40.2	61.3	GR	2.650	97.4	87.6	11.9	2.706	.05	.02	4 78
826.62	75	4.7	1.7	38.8	2.040	-1.9	.0	83.6	118.2	38.2	63.6	GR	2.655	96.5	83.6	12.4	2.701	.05	.02	
826.77	77	4.8	1.5	38.9	2.063	-2.2	.0	88.3	134.2	36.3	65.7	GR	2.688	97.5	88.3	10.6	2.717	.05	.02	
826.92	75	5.3	2.3	37.5	2.060	-2.8	.0	81.4	105.2	35.8	62.5	GR	2.657	96.0	81.4	11.7	2.701	.05	.02	
827.07	72	5.3	3.1	36.1	2.055	-3.4	.0	79.3	87.1	35.3	59.4	GR	2.629	87.1	79.3	12.8	2.686	.05	.02	
827.23	72	4.0	.8	31.3	1.949	-2.7	.0	80.5	149.3	42.4	58.4	GR	2.388	95.8	80.5	15.9	2.623	.05	.02	6
827.38	70	4.1	.9	32.2	1.970	-2.9	.0	79.2	136.3	40.9	55.7	GR	2.455	95.4	79.2	16.5	2.624	.05	.02	6
827.53	68	4.2	1.1	33.0	1.991	-3.1	.0	77.3	125.8	39.4	52.9	GR	2.513	95.0	77.3	17.1	2.623	.05	.02	6
827.68	68	4.1	1.4	36.9	2.058	-3.3	.0	83.5	115.7	36.2	53.2	GR	2.658	96.5	83.5	15.5	2.694	.05	.02	
827.84	71	3.9	1.4	37.1	2.005	-3.0	.0	80.8	110.5	37.3	56.6	GR	2.590	95.8	80.8	16.3	2.667	.05	.02	6
827.99	73	3.8	1.4	37.4	1.951	-2.8	.0	78.3	105.6	38.3	60.1	GR	2.495	95.2	78.3	17.1	2.637	.05	.02	6
828.14	74	3.8	1.0	35.5	1.917	-2.5	.0	76.4	123.2	38.5	61.0	GR	2.384	94.8	76.4	17.4	2.619	.05	.02	6
828.29	74	3.9	.6	33.6	1.884	-2.1	.0	73.8	156.9	38.7	61.9	GR	2.260	94.1	73.8	17.8	2.620	.05	.02	6
828.45	73	4.1	1.7	32.1	1.933	-2.9	.0	77.1	99.1	38.7	59.4	GR	2.365	94.9	77.1	16.4	2.620	.05	.02	6
828.60	71	3.9	1.2	32.9	1.943	-2.5	.0	77.7	115.8	38.6	57.3	GR	2.415	95.1	77.7	17.1	2.633	.05	.02	6
828.75	69	3.8	.7	33.7	1.953	-2.0	.0	77.0	148.5	38.4	55.0	GR	2.460	94.9	77.0	18.0	2.626	.05	.02	6
828.90	69	4.2	1.3	35.2	1.996	-1.9	.0	76.9	114.6	43.0	55.0	GR	2.547	94.9	76.9	16.7	2.644	.05	.02	6
829.06	69	4.9	1.9	36.7	2.038	-1.7		77.1	102.3	47.5	55.0	GR	2.650	94.9	77.1	15.0	2.700	.05	.02	4 78
829.21	72	4.7	1.4	38.2	2.096	-2.2		82.7	126.0	40.6	58.6	GR	2.650	96.3	82.7	13.2	2.703	.05	.02	4 78
829.36	72	4.6	1.1	37.6	2.036	-1.9		84.8	143.9	40.8	59.0	GR	2.650	96.7	84.8	13.0	2.703	.05	.02	4 78
829.51	73	4.4	.8	37.0	1.975	-1.5		87.3	170.7	41.0	59.4	GR	2.650	97.3	87.3	12.8	2.704	.05	.02	4 78

829.67	74	4.1	.8	36.1	1.949	-1.6		91.8	180.9	40.6	61.1	GR	2.650	98.5	91.8	12.0	2.705	.05	.02	4	78
829.82	75	3.9	.7	35.2	1.923	-1.6		96.7	192.0	40.3	62.9	GR	2.650	99.3	96.7	11.2	2.707	.05	.02	4	78
829.97	73	4.4	1.6	36.3	2.007	-3.1		87.5	121.8	38.8	59.8	GR	2.650	97.4	87.5	12.6	2.704	.05	.02	4	78
830.12	73	4.0	1.4	37.5	1.979	-3.0		92.1	130.8	41.6	59.8	GR	2.650	98.4	92.1	12.7	2.704	.05	.02	4	78
830.28	73	3.7	1.2	38.8	1.951	-2.9	.0	77.4	112.3	44.4	59.7	GR	2.526	95.0	77.4	17.7	2.650	.05	.02	6	
830.43	71	3.3	.9	43.8	1.948	-2.9	.0	75.0	112.9	42.7	57.2	GR	2.644	94.4	75.0	20.5	2.696	.05	.02		
830.58	70	3.2	1.1	43.1	1.965	-2.8	.0	77.3	108.6	43.0	55.8	GR	2.657	95.0	77.3	20.2	2.699	.05	.02		
830.73	69	3.1	1.2	42.4	1.983	-2.8	.0	79.8	105.2	43.2	54.4	GR	2.668	95.6	79.8	19.8	2.703	.05	.02		
830.88	71	3.2	1.0	42.2	1.993	-2.4	.0	82.3	121.4	41.9	57.1	GR	2.675	96.2	82.3	18.2	2.707	.05	.02		
831.04	73	3.3	.8	42.1	2.003	-2.1	.0	85.3	143.2	40.6	59.9	GR	2.683	96.9	85.3	16.6	2.712	.05	.02		

Zone No. 3 BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
831.19	76	3.5	1.1	38.2	2.003	-1.9	.0	92.5	139.1	40.1	64.4	GR	2.581	98.4	92.5	13.4	2.675	.05	.02	6
831.34	76	3.6	1.3	37.7	1.978	-1.4	.0	87.7	120.7	40.6	64.7	GR	2.525	97.4	87.7	14.1	2.657	.05	.02	6
831.49	76	4.0	1.6	37.2	1.953	-.9	.0	81.2	106.7	41.2	65.0	GR	2.463	95.9	81.2	14.9	2.637	.05	.02	6
831.65	79	3.5	1.1	36.8	1.957	-.5	.0	91.0	134.9	42.6	68.3	GR	2.435	98.1	91.0	13.2	2.636	.05	.02	6
831.80	81	3.2	.7	36.5	1.961	-.1		121.4	234.3	44.1	71.7	GR	2.650	100.0	100.0	7.5	2.715	.05	.02	4 78
831.95	82	3.4	1.2	36.4	1.966	-1.5		118.8	182.0	46.3	72.3	GR	2.650	100.0	100.0	7.2	2.715	.05	.02	4 78
832.10	79	3.4	1.1	38.9	2.009	-2.1	.0	98.2	146.8	45.2	68.3	GR	2.595	99.6	98.2	11.7	2.685	.05	.02	6
832.26	76	3.4	1.1	41.5	2.052	-2.7	.0	96.3	145.4	44.0	64.3	GR	2.748	99.3	96.3	12.7	2.742	.05	.02	
832.41	76	4.0	1.4	41.6	2.098	-2.7		98.9	141.5	42.5	65.0	GR	2.650	99.8	98.9	10.3	2.709	.05	.02	4 78
832.56	77	4.5	1.8	41.7	2.143	-2.6		93.8	127.2	41.0	65.6	GR	2.650	98.7	93.8	10.0	2.709	.05	.02	4 78
832.71	78	4.2	1.3	40.9	2.101	-2.4		101.3	159.3	37.2	67.8	GR	2.650	100.0	100.0	9.0	2.711	.05	.02	4 78
832.87	77	4.1	1.5	41.2	2.081	-2.2		100.0	140.2	38.4	66.3	GR	2.650	100.0	100.0	9.7	2.710	.05	.02	4 78
833.02	76	4.0	1.8	41.6	2.061	-2.1		98.5	125.3	39.7	64.8	GR	2.650	99.7	98.5	10.3	2.709	.05	.02	4 78
833.17	77	3.9	1.6	40.8	1.985	-1.7		99.9	136.2	41.0	65.1	GR	2.650	100.0	99.9	10.2	2.709	.05	.02	4 78
833.32	77	3.9	1.3	40.0	1.908	-1.2		101.1	149.9	42.3	65.3	GR	2.650	100.0	100.0	10.1	2.709	.05	.02	4 78
833.48	76	3.7	.6	39.2	1.850	-1.1	.0	75.6	152.6	41.2	64.7	GR	2.370	94.6	75.6	17.5	2.629	.05	.02	6 8
833.63	74	3.7	.8	39.5	1.878	-1.4	.0	72.7	128.8	40.0	61.9	GR	2.373	93.8	72.7	18.9	2.630	.05	.02	6 8
833.78	72	3.8	1.0	39.7	1.905	-1.7		93.3	154.3	38.8	59.2	GR	2.650	98.6	93.3	12.9	2.704	.05	.02	4 78
833.93	75	3.6	.6	37.5	1.946	-.7		100.0	216.3	39.7	62.5	GR	2.650	100.0	100.0	11.4	2.707	.05	.02	4 78
834.09	75	3.9	.8	37.7	1.968	-.6	.0	80.7	150.3	39.1	62.3	GR	2.521	95.8	80.7	15.5	2.651	.05	.02	6
834.24	74	4.2	1.0	37.9	1.990	-.4	.0	80.0	137.7	38.4	62.1	GR	2.564	95.6	80.0	14.8	2.666	.05	.02	6
834.39	76	4.0	.8	37.5	1.939	-.6	.0	77.5	143.6	38.7	63.8	GR	2.450	95.0	77.5	16.0	2.631	.05	.02	6
834.54	77	3.9	.6	37.1	1.888	-.7	.0	75.0	154.9	39.1	65.5	GR	2.297	94.4	75.0	17.1	2.635	.05	.02	6 8
834.69	82	3.8	.5	36.9	1.832	-.1		114.2	288.6	40.5	73.1	GR	2.650	100.0	100.0	6.9	2.716	.05	.02	4 78
834.85	82	3.8	.5	37.8	1.903	.2		113.8	291.3	40.0	72.6	GR	2.650	100.0	100.0	7.1	2.716	.05	.02	4 78
835.00	81	3.7	.4	38.8	1.974	.4		113.4	294.0	39.6	72.1	GR	2.650	100.0	100.0	7.3	2.715	.05	.02	4 78
835.15	83	3.7	.5	40.7	1.968	.6		117.2	279.0	41.1	74.6	GR	2.650	100.0	100.0	6.4	2.718	.05	.02	4 78
835.30	85	3.8	.6	42.7	1.962	.8		120.9	268.7	42.6	77.1	GR	2.650	100.0	100.0	5.4	2.720	.05	.02	4 78
835.46	82	4.0	.4	42.0	1.938	-.1		110.2	319.1	39.0	72.2	GR	2.650	100.0	100.0	7.2	2.715	.05	.02	4 78
835.61	80	4.2	.8	40.1	1.985	-.7		102.8	202.7	38.5	69.4	GR	2.650	100.0	100.0	8.4	2.713	.05	.02	4 78
835.76	78	4.4	1.3	38.2	2.031	-1.4		96.2	153.3	38.1	66.5	GR	2.650	99.2	96.2	9.6	2.710	.05	.02	4 78
835.91	78	4.7	1.4	39.2	2.073	-1.6		94.0	151.1	38.9	66.8	GR	2.650	98.8	94.0	9.5	2.711	.05	.02	4 78
836.07	78	4.9	1.4	40.2	2.115	-1.9		92.0	148.9	39.7	67.1	GR	2.650	98.4	92.0	9.4	2.711	.05	.02	4 78
836.22	74	6.3	4.1	38.5	2.234	-2.7		74.4	77.9	35.7	61.0	GR	2.650	77.9	74.4	12.1	2.705	.05	.02	4 78
836.37	74	6.3	3.8	35.6	2.207	-2.6		74.1	80.5	35.8	60.9	GR	2.650	80.5	74.1	12.1	2.705	.05	.02	4 78
836.52	73	6.4	3.5	32.7	2.179	-2.5		73.4	83.4	36.0	60.8	GR	2.650	83.4	73.4	12.2	2.705	.05	.02	4 78
836.68	73	4.8	.9	31.9	2.021	-2.3	.0	84.3	160.5	33.6	60.3	GR	2.501	96.6	84.3	12.4	2.631	.05	.02	6
836.83	76	4.8	1.0	33.7	2.001	-2.4	.0	83.3	152.3	35.0	64.4	GR	2.481	96.4	83.3	12.0	2.635	.05	.02	6
836.98	79	4.8	1.1	35.4	1.982	-2.5	.0	82.6	145.1	36.4	68.4	GR	2.453	96.2	82.6	11.7	2.638	.05	.02	6
837.13	79	5.1	1.9	36.5	2.034	-2.8	.0	88.1	125.7	36.0	69.1	GR	2.576	97.5	88.1	9.6	2.678	.05	.02	6
837.29	80	5.0	2.6	37.6	2.086	-3.1	.0	97.9	119.2	35.6	69.8	GR	2.684	99.6	97.9	7.6	2.718	.05	.02	
837.44	77	4.6	1.6	37.3	2.047	-2.4	.0	89.2	129.0	37.9	65.3	GR	2.627	97.7	89.2	11.0	2.691	.05	.02	
837.59	77	4.5	1.3	37.8	2.045	-2.1	.0	89.9	141.1	37.0	65.9	GR	2.635	97.9	89.9	10.9	2.695	.05	.02	
837.74	78	4.4	1.1	38.3	2.043	-1.7	.0	90.2	157.4	36.1	66.5	GR	2.643	98.0	90.2	10.9	2.699	.05	.02	
837.90	76	4.6	1.3	37.9	2.097	-1.8		91.3	147.7	35.9	64.3	GR	2.650	98.2	91.3	10.6	2.708	.05	.02	4 78
838.05	74	4.8	1.5	37.5	2.152	-1.8		86.5	130.6	35.7	62.0	GR	2.650	97.1	86.5	11.6	2.706	.05	.02	4 78

838.20	76	4.2	1.4	36.6	2.182	-1.3		96.5	145.4	38.1	64.7	GR	2.650	99.3	96.5	10.4	2.709	.05	.02	78
838.35	78	3.8	1.0	38.7	2.035	-1.1		104.5	171.7	41.5	66.5	GR	2.650	100.0	100.0	9.6	2.710	.05	.02	4 78
838.50	79	3.4	.7	40.9	1.889	-.8	.0	83.0	149.5	44.9	68.4	GR	2.358	96.4	83.0	15.7	2.631	.05	.02	6 8
838.66	78	3.2	.6	42.7	1.788	-1.2	.0	83.3	163.6	47.4	66.6	GR	1.839	96.4	83.3	16.6	2.617	.05	.02	6 8
838.81	76	3.0	.4	44.5	1.686	-1.7	.0	83.8	185.7	50.0	64.7	GR	1.207	96.5	83.8	17.5	2.631	.05	.02	6 8
838.96	80	3.0	.6	47.9	1.731	-1.7	.0	123.8	243.8	51.9	70.6	GR	2.650	100.0	100.0	7.9	2.627	.05	.02	8
839.11	80	3.2	.8	49.6	1.823	-1.7	.0	120.2	217.4	53.3	70.3	GR	2.650	100.0	100.0	8.0	2.676	.05	.02	8
839.27	80	3.3	.9	51.4	1.914	-1.8	.0	116.4	197.5	54.7	70.0	GR	2.650	100.0	100.0	8.1	2.772	.05	.02	8
839.42	77	3.2	.8	47.3	1.874	-2.1	.0	82.9	136.8	48.1	66.2	GR	2.546	96.3	82.9	16.7	2.685	.05	.02	6 8
839.57	75	3.1	.7	43.1	1.833	-2.3	.0	80.4	136.1	41.5	62.5	GR	2.321	95.7	80.4	18.6	2.635	.05	.02	6 8

Zone No. 3

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	R XO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
839.72	78	3.0	.8	44.8	1.784	-2.4	.0	87.4	144.1	44.2	67.3	GR	1.774	97.3	87.4	16.2	2.615	.05	.02	6 8
839.88	79	2.9	.9	44.6	1.846	-2.2	.0	90.0	136.7	45.6	68.7	GR	2.197	97.9	90.0	15.5	2.639	.05	.02	6 8
840.03	80	2.9	1.0	44.4	1.909	-2.0	.0	125.3	186.4	46.9	70.1	GR	2.650	100.0	100.0	8.1	2.678	.05	.02	8
840.18	82	2.9	.7	38.8	1.887	-1.6	.0	128.8	236.7	44.9	72.4	GR	2.650	100.0	100.0	7.2	2.630	.05	.02	8
840.33	82	3.1	.8	38.9	1.844	-2.0	.0	125.7	218.6	44.3	72.9	GR	2.650	100.0	100.0	7.0	2.621	.05	.02	8
840.49	82	3.3	.9	38.9	1.801	-2.4	.0	122.5	204.3	43.8	73.3	GR	2.650	100.0	100.0	6.9	2.629	.05	.02	8
840.64	83	3.4	1.2	39.4	1.818	-2.3	.0	121.1	181.4	42.6	73.6	GR	2.650	100.0	100.0	6.7	2.627	.05	.02	8
840.79	83	3.6	1.5	39.9	1.834	-2.3	.0	117.9	165.1	41.5	74.0	GR	2.650	100.0	100.0	6.6	2.624	.05	.02	8
840.94	79	4.1	2.1	39.7	1.943	-2.2	.0	78.7	91.8	44.1	67.9	GR	2.479	91.8	78.7	14.8	2.654	.05	.02	6
841.10	76	3.9	1.5	40.8	1.929	-2.2	.0	75.2	101.0	42.9	65.0	GR	2.500	94.5	75.2	17.0	2.656	.05	.02	6
841.25	74	3.5	.9	41.9	1.916	-2.1	.0	75.2	123.9	41.6	62.1	GR	2.519	94.4	75.2	18.8	2.658	.05	.02	6 8
841.40	76	3.9	1.7	42.1	1.871	-1.6	.0	72.9	90.6	39.5	63.9	GR	2.399	90.6	72.9	17.9	2.631	.05	.02	6 8
841.55	77	3.8	2.6	42.3	1.826	-1.0	.0	76.0	75.9	37.3	65.7	GR	2.161	76.0	76.0	17.0	2.622	.05	.02	6 8
841.71	81	3.9	3.8	44.6	1.797	-.1		110.8	99.5	35.2	72.1	GR	2.650	100.0	100.0	7.3	2.715	.05	.02	4 78
841.86	80	4.2	3.6	44.7	1.862	-.9	.0	70.9	63.7	27.9	64.7	S	2.452	70.9	70.9	17.5	2.651	.05	.02	6 8
842.01	79	4.5	3.3	44.8	1.927	-1.6	4.2	57.4	53.4	20.5	50.0	S	2.649	57.4	57.4	24.7	2.693	.05	.02	
842.16	77	5.1	3.1	42.5	2.062	-2.3	.0	66.0	68.9	20.7	50.2	S	2.787	68.9	66.0	18.9	2.763	.05	.02	
842.31	74	5.8	2.8	40.1	2.196	-2.9	.0	74.2	87.7	20.8	50.5	S	2.955	87.7	74.2	14.5	2.842	.05	.02	5
842.47	73	5.1	.5	39.4	2.242	-2.8	.0	85.5	225.6	21.4	51.7	S	3.024	96.9	85.5	12.8	2.870	.05	.02	5
842.62	72	5.5	.5	41.0	2.249	-2.8	.0	78.0	206.8	20.7	50.3	S	3.073	95.1	78.0	14.1	2.898	.05	.02	5
842.77	72	6.0	.6	42.7	2.257	-2.8	.0	71.7	190.9	19.9	48.8	S	3.119	93.5	71.7	15.3	2.926	.05	.02	5
842.92	61	4.7	1.6	37.9	2.136	-2.7	2.8	70.4	96.1	13.5	35.9	S	2.775	93.2	70.4	20.8	2.761	.05	.02	
843.08	53	5.0	34.1	39.1	2.083	-2.2	8.5	60.5	17.9	12.5	31.2	GR	2.734	60.5	60.5	24.8	2.736	.05	.02	
843.23	44	4.7	68.6	40.4	2.031	-1.8	17.6	51.8	10.3	11.5	18.8	GR	2.706	51.8	51.8	32.3	2.711	.05	.02	
843.38	39	7.4	68.6	36.6	2.179	-2.5	20.8	48.0	11.8	2.9	12.3	GR	2.787	48.0	48.0	29.1	2.781	.09	.05	\$
843.53	35	10.8	68.6	32.9	2.324	-3.3	27.4	42.6	12.5	.0	.0	S	2.853	42.6	42.6	29.0	2.853	.13	.07	\$
843.69	34	18.9	55.0	15.7	2.628	-3.6	3.9	81.7	36.1	.4	5.4	GR	2.885	81.7	81.7	11.3	2.878	.13	.07	
843.84	37	24.6	27.3	15.6	2.638	-3.6	.0	78.5	57.2	12.5	9.1	GR	2.901	78.5	78.5	9.7	2.886	.13	.07	5
843.99	40	19.7	1.0	15.6	2.648	-3.6	.0	96.3	336.9	24.7	12.9	GR	2.918	99.2	96.3	8.1	2.894	.13	.07	5
844.14	43	20.0	2.1	16.9	2.653	-3.5	.0	95.9	239.6	23.4	17.6	GR	2.959	99.2	95.9	7.1	2.919	.13	.07	5
844.30	46	19.9	3.2	18.2	2.658	-3.5	.0	96.3	198.6	22.2	22.3	GR	3.004	99.2	96.3	6.2	2.944	.13	.07	5
844.45	60	9.3	2.1	17.2	2.503	-3.3	.0	100.0	100.0	22.9	41.4	GR	2.853	100.0	100.0	.0	2.786	.13	.07	
844.60	70	6.5	1.7	21.5	2.277	-3.0	.0	169.9	330.0	26.2	52.6	N	2.587	100.0	100.0	.3	2.677	.13	.07	6
844.75	79	3.8	1.3	25.8	2.048	-2.7		98.1	143.2	29.5	61.7	N	2.650	99.6	98.1	11.3	2.706	.13	.07	4 7
844.91	83	3.7	1.3	34.5	1.968	-1.7		132.9	191.4	15.8	40.6	S	2.650	100.0	100.0	9.4	2.687	.13	.07	4 7
845.06	87	3.6	1.2	43.3	1.887	-.7		577.4	863.7	2.2	13.0	S	2.650	100.0	100.0	1.9	2.662	.13	.07	4 7
845.21	84	3.6	1.2	42.6	1.966	.0		110.1	161.9	24.6	58.1	S	2.650	100.0	100.0	10.3	2.703	.13	.07	4 7
845.36	87	3.4	.9	45.3	1.946	-.1		111.4	181.1	26.1	61.1	S	2.650	100.0	100.0	10.1	2.705	.13	.07	4 7
845.52	90	3.2	.7	48.1	1.926	-.2		113.7	211.5	27.6	64.2	S	2.650	100.0	100.0	9.9	2.708	.13	.07	4 7
845.67	93	3.2	.8	45.3	1.935	-.3	.0	120.8	214.8	30.8	70.6	S	2.650	100.0	100.0	7.9	2.702	.13	.07	8
845.82	96	3.2	.9	42.5	1.944	-.5	.0			34.0	77.1	S	2.650	100.0	100.0	10.2	2.680	.13	.07	3
845.97	100	3.6	1.0	41.7	2.063	-.1				45.6	95.1	N	2.650	100.0	100.0	2.0	2.736	.13	.07	1 4
846.12	97	3.8	1.1	43.2	2.063	-.1		141.0	258.5	47.0	93.8	GR	2.650	100.0	100.0	.8	2.735	.13	.07	4 78
846.28	94	4.0	1.2	44.7	2.062	-.1		134.6	240.0	48.4	90.0	GR	2.650	100.0	100.0	1.6	2.732	.13	.07	4 78
846.43	93	5.2	1.7	50.2	2.070	-.5	.0	116.6	200.1	48.2	88.9	GR	2.650	100.0	100.0	1.8	2.879	.13	.07	8
846.58	96	4.2	1.1	47.1	2.083	-.4	.0	133.8	252.4	46.5	93.0	GR	2.650	100.0	100.0	.9	2.843	.13	.07	8

846.73	99	3.8	.6	43.9	2.096	-.4	.0			44.8	97.1	GR	2.650	100.0	100.0	1.2	2.809	.13	.07	1		
846.89	99	3.9	.7	44.6	2.057	-.6	.0			45.7	96.6	GR	2.650	100.0	100.0	1.4	2.788	.13	.07	1		
847.04	99	4.0	.7	45.2	2.018	-.7	.0			46.6	96.1	GR	2.650	100.0	100.0	1.7	2.767	.13	.07	1		
847.19	94	4.4	1.1	51.4	1.995	-.8	.0			36.4	82.0	S	2.650	100.0	100.0	8.4	2.838	.13	.07	3		
847.34	93	5.7	1.9	50.2	2.046	-1.0	.0			34.4	77.8	S	2.650	100.0	100.0	9.8	2.860	.13	.07	3		
847.50	93	5.7	2.7	48.9	2.097	-1.2	.0	93.5	121.4	32.3	73.7	S	2.650	98.7	93.5	6.7	2.880	.13	.07		8	
847.65	95	5.9	2.6	49.5	2.054	-1.3	.0			33.6	76.2	S	2.650	100.0	100.0	10.4	2.856	.13	.07	3		
847.80	97	6.0	2.5	50.0	2.012	-1.3	.0			34.8	78.8	S	2.650	100.0	100.0	9.6	2.830	.13	.07	3		
847.95	102	5.4	2.8	42.9	2.039	-.8	.0			48.7	97.7	N	2.650	100.0	100.0	1.0	2.751	.13	.07	1		
848.11	103	5.4	2.2	40.9	2.097	-.8	.0			46.4	93.4	N	2.650	100.0	100.0	2.5	2.770	.13	.07	2		

Zone No. 3

BROADBILL-1  
AMITY OIL NL

Complex Lithology Results  
28-01-98

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	RVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
848.26	103	5.4	1.6	38.8	2.156	-.8	.0			44.2	89.2	N	2.650	100.0	100.0	3.9	2.791	.13	.07	2
848.41	103	5.4	1.4	41.9	2.099	-.7	.0			44.2	95.7	N	2.650	100.0	100.0	1.7	2.785	.13	.07	1
848.56	102	4.4	1.2	45.0	2.042	-.7	.0			44.2	97.7	S	2.650	100.0	100.0	1.0	2.783	.13	.07	1
848.72	104	4.7	1.2	48.2	1.956	-.3	.0			44.8	98.8	S	2.650	100.0	100.0	.6	2.759	.13	.07	1
848.87	103	4.7	1.2	48.2	1.996	-.2				44.7	98.6	S	2.650	100.0	100.0	.6	2.739	.13	.07	1 4
849.02	101	4.8	1.2	48.3	2.035	-.2				44.6	98.4	S	2.650	100.0	100.0	.7	2.739	.13	.07	1 4
849.17	102	4.7	1.1	47.2	2.080	-.2				41.5	92.1	S	2.650	100.0	100.0	3.3	2.733	.13	.07	34
849.33	104	4.6	1.1	46.1	2.126	-.2				38.4	85.9	S	2.650	100.0	100.0	5.7	2.728	.13	.07	34
849.48	94	5.6	1.3	45.9	2.099	-.2				38.0	85.2	S	2.650	100.0	100.0	6.0	2.727	.13	.07	34
849.63	91	6.9	1.8	47.0	2.086	-.1				36.9	82.9	S	2.650	100.0	100.0	7.1	2.725	.13	.07	34
849.78	89	9.4	2.2	48.1	2.074	.0				35.7	80.6	S	2.650	100.0	100.0	8.3	2.723	.13	.07	34
849.93	92	10.1	2.5	48.7	2.219	.0		67.6	118.6	30.7	70.5	S	2.650	92.5	67.6	7.9	2.714	.13	.07	4 78



BROADBILL-1

AMITY OIL NL

Complex Lithology Results 28-01-98

Zone No. 3

Hydrocarbon Volume Report  
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Formation Name	
FROM M	779.983
TO M	849.935
INTERVAL M	69.952
PHIE Cut off	.050
SW Cut Off	.500
Vclay Cut Off	.300
Net Pay M	.000
Average PHIE %	.000
Average SW %	.000
Average Vclay %	.000
Integrated PHI M	.000
Sum PHI*(1-SW) M	.000

PE602721

This is an enclosure indicator page.  
The enclosure PE602721 is enclosed within the  
container PE903925 at this location in this  
document.

The enclosure PE602721 has the following characteristics:

ITEM\_BARCODE = PE602721  
CONTAINER\_BARCODE = PE903925  
NAME = Broadbill 1 Composite Well Log  
BASIN = GIPPSLAND  
ON\_OFF = OFFSHORE  
PERMIT = VIC/P36  
TYPE = WELL  
SUBTYPE = LOG  
DESCRIPTION = Broadbill 1 Composite Well Log  
(enclosure 1 from WCR)  
REMARKS = 1 sheet of 1  
DATE\_CREATED =  
DATE\_RECEIVED = 04/08/98  
W\_NO = W1219  
WELL\_NAME = Broadbill 1  
CONTRACTOR = Schlumberger  
CLIENT\_OP\_CO = Amity Oil N.L

(Inserted by DNRE - Vic Govt Mines Dept)

PE602722

This is an enclosure indicator page.  
The enclosure PE602722 is enclosed within the  
container PE903925 at this location in this  
document.

The enclosure PE602722 has the following characteristics:

ITEM\_BARCODE = PE602722  
CONTAINER\_BARCODE = PE903925  
NAME = Broadbill 1 Mud Log (Formation  
Evaluation Log)  
BASIN = GIPPSLAND  
ON\_OFF = OFFSHORE  
PERMIT = VIC/P36  
TYPE = WELL  
SUBTYPE = LOG  
DESCRIPTION = Broadbill 1 Mud Log (Formation  
Evaluation Log); enclosure 2 from WCR  
REMARKS =  
DATE\_CREATED =  
DATE\_RECEIVED = 04/08/98  
W\_NO = W1219  
WELL\_NAME = Broadbill 1  
CONTRACTOR = Halliburton  
CLIENT\_OP\_CO = Amity Oil N.L

(Inserted by DNRE - Vic Govt Mines Dept)

PE602723

This is an enclosure indicator page.  
The enclosure PE602723 is enclosed within the  
container PE903925 at this location in this  
document.

The enclosure PE602723 has the following characteristics:

ITEM\_BARCODE = PE602723  
CONTAINER\_BARCODE = PE903925  
NAME = Broadbill 1 Complex Lithology Log  
BASIN = GIPPSLAND  
ON\_OFF = OFFSHORE  
PERMIT = VIC/P36  
TYPE = WELL  
SUBTYPE = LOG  
DESCRIPTION = Broadbill 1 Complex Lithology Log  
(enclosure 3 from WCR)  
REMARKS =  
DATE\_CREATED = 21/07/98  
DATE\_RECEIVED = 04/08/98  
W\_NO = W1219  
WELL\_NAME = Broadbill 1  
CONTRACTOR =  
CLIENT\_OP\_CO = Amity Oil N.L

(Inserted by DNRE - Vic Govt Mines Dept)