APACHE NORTHWEST PTY LTD

GEOLOGICAL PROGNOSIS

FUR SEAL-1

EXPLORATION LICENCE

VIC/P-54

VICTORIA

CONTENTS

1. GENERAL INFORMATION

OPERATOR:	APACHE NORTHWEST PTY LTD		
WELL NAME:	Fur Seal-1		
WELL TYPE:	Exploration		
PERMIT:	VIC/P-54		
SURFACE LOCATION:			
	Lat:	38º 07' 47.82" S	5,779,139.3 mN
	Long:	148º 09’ 08.53" E	600,997.9 mE
		GDA94	GRS80
PRIMARY OBJECTIVE:			
	Lat:	38º 07' 47.82" S	5,779,139.3 mN
	Long:	148º 09’ 08.53" E	600,997.9 mE
		GDA94	GRS80
RT-AHD:	22.0 m		
WATER DEPTH - AHD:	58.0 m		
PROPOSED TOTAL DEPTH:	2634.0 mMDRT (-2612.0 mTVDAHD)		
MAP REFERENCE:	Melbourne SJ55		
GRATICULAR BLOCK:	1850		
RIG:	Ocean Patriot		
DRILLING CONTRACTOR:	Diamond Offshore Pty Ltd		

2. GEOLOGICAL SUMMARY

The Fur Seal structure is located approximately 30 km from the nearest landfall in the Gippsland Basin, southeastern Victoria. The surface location of the prospect lies in approximately 58.0 meters of water. Fur Seal is close to the location of several previously drilled exploration wells including the Sunfish-1 (~6.7 km to East), Remora-1 (~4.3 km to Southeast), Moonfish (~11.2 km to West), Sweetlips-1 (10.9 km to Northwest) and ~14 km to the Snapper field operated by Esso/BHPB joint venture (Figure 1).

Fur Seal-1 is an exploration well designed to test a combined stratigraphic/structural trap in the Southwest part of VIC/P-54. The trap is set up by southerly dipping, fault-tilted units of the Intra-Latrobe Group (Kingfish and Volador Formations) truncated to the north along the southern margin of the Eocene Marlin Channel, which is filled with sealing lithologies of the Turrum Formation (Figures 2 & 4). The Fortescue/Halibut fields provide an appropriate analogue of a succesful test of this trapping style for the the Fur Seal prospect, although the age of some of the units involved at Fortescue/Halibut are different to those predicted at Fur Seal.

The Fur Seal prospect is located upon a fault terrace within the Rosedale Fault system on the northern margin of the Gippsland Basin. More specifically, the prospect is ~2.0 km north of the major east-west trending Remora-Moonfish fault. This fault intially developed as a major basin-bounding extensional fault during the Late Cretaceous and Paleocene. The hanging wall section of this fault has subsequently undergone several phases of inversion during the Eocene. The footwall, northern side of the Remora-Moonfish fault has been unaffected by these pulses of inversion, although there is a much smaller synthetic fault in the footwall which does cut the southern edge of the Fur Seal prospect. There has been no inversion on this smaller fault which just displays a minimal amount of net normal displacement downthrowing to the south. Within the Latrobe Group on the footwall, on the northern side of the Remora-Moonfish fault, the bedding dip is uniformly to the south.

Fur Seal is mapped as an elongate, east-west orientated four-way dip closure with the southern flank of the structure formed by the southerly dip of the Intra-Latrobe Group, and the northern flank formed by the base of the Marlin Channel truncating the southerly dipping Intra -Latrobe Group. The Marlin Channel in this part of the Gippsland Basin has an east-west orientation to its southern margin. As mentioned above, there is a small east-west trending normal fault along the southern margin of the Fur Seal prospect. However, the dip of the beds on either side of the fault means this does not pose a serious risk to the integrity of the closure.

The upper coarse clastic units of the Latrobe Group of *P. asperopulus* and *M. diversus* have most

probably been eroded at the Fur Seal location with the *L. balmei* section of the Kingfish Formation lying directly underneath the angular unconformity at the base of the Marlin Channel. Within the Latrobe Group at Fur Seal there are two reservoir objectives in Fur Seal-1, they are the Paleocene *L. balmei* sandstones (Kingfish Formation) and Maastrichtian *F. longus* sandstones (Volador Formation). Both these levels are proven reservoir objectives in this part of the basin (eg at Sunfish, Remora, Moonfish, Emperor and Grayling).

By analogy to Sweetlips-1, the nearest offset well on the northern side of the Remora-Moonfish fault, the Kingfish Formation at Fur Seal will contain sandstones, siltstones, shales and coals. At Sweetlips the sandstones are described as medium to very coarse, poorly to moderately sorted, sub-rounded to sub-angular grains, predominantly loose with minor weak silica cements and trace argillaceous matrix, and good to excellent inferred porosity. Sandstone beds are typically in the order of 5 to 13 m thick. These were deposited in back barrier/coastal plain/lagoonal settings with the thicker sandstone beds deposited within fluvial channels and the thinner sandstone beds (<5 m) deposited as overbank crevasse splays.

The deeper reservoir objective is the Maastrichtian *F. longus* sandstones (Volador Formation). Offset well data suggests that this package comprises sandstone, siltstone and claystone. Lithologically the sandstones are described as near identical to the sandstones in the overlying Kingfish Formation, however, bed thicknesses are typically in the order of 10 to several 10's of metres (in the base of this section in Sweetlips-1 there is an amalgamated sandstone unit of ~33 m thickness). This section was deposited in a fluvial setting.

Intra-formational shales, coals and volcanics, in the case of the *L. balmei* section, have all been proven as valid top seal by nearby offset wells (Sunfish, Remora, Moonfish, Emperor and Grayling and many other examples in the basin). In the Moonfish wells, Emperor and Sweetlips, a 10 to 22 m thick interval of basaltic lava flows/volcanics is present within the *L. balmei* part of the Kingfish Formation. At Moonfish these are a proven top seal for oil, as are lithologically similar lava flows/volcanics of different stratigraphic ages elsewhere in the basin. The lava flows/volcanics do appear to thin in a west to east direction, from Emperor-1 to Sweetlips-1, over a distance of ~2 km and are not present in any wells to the east of the Fur Seal location (ie. at Remora-1 or the Sunfish wells). The lava flows/volcanics may well have pinched-out and not be present at the Fur Seal location. As there are other proven top seals within both the Kingfish and Volador Formations the presence or absence of these lava flows/volcanics is not critical to the success of the prospect.

Lateral seal against the Marlin Channel is the key pre-drill risk. The channel was cut during a major tectonically forced lowstand in the Eocene and is filled by sediments of the Turrum

Formation. Remora-1 was drilled within the middle of the Marlin Channel to the Southeast of the Fur Seal prospect. At Remora-1 the Turrum Formation comprises glauconitic calcisiltite and calcarenite with minor pyrite. Marlin-4, further to the Southeast, was drilled on the edge of the Marlin Channel and intersected the Turrum Formation. In this well a gas pay section within the top of the Halibut Sub-group is directly top sealed by the Turrum Formation. Part of the Turrum Formation was cored and was described as a dark grey to black silty, micaceous, pyritic shale with rare burrows. The Turrum Formation is interpreted to be the transgressive fill to the Marlin Channel. It was deposited in an offshore marine location below storm wave base, in a sediment-starved setting. The older Tuna-Flounder channel does have coarse, quartzose shoreface sandstones within it's fill and there is still a risk that similar sandstone lenses may be present in the Turrum Formation infilling the Marlin Channel which flanks the Fur Seal prospect.

In an upside case the structural closure may extend southwards to the Remora-Moonfish fault, in which case cross-fault seal against this fault is required. On the downthrown, hangingwall side of this fault, at the level of the reservoir section in Fur Seal, there is a low net pay section of *L. balmei* age. Given the low net pay of this section (ie over ~75% shale or shale-dominated lithologies) that the reservoir section of Fur Seal would be juxtaposed against, there is a good chance of achieving a juxtaposition seal across the fault.

The source rock for hydrocarbons in the Gippsland are the coals and coaly mudstones of the Golden Beach and lower parts of the Halibut Sub-groups. The presence of several commercial fields in the area demonstrates the effectiveness of the source and migration pathway. A significant risk for Fur Seal is the nature of the charge and in particular, if the charge has solely been or is dominated by gas or an earlier oil-charge has been flushed by a later gas charge. Nearby well results include both single phase oil zones, single phase gas zones and dual phase gas caps with oil legs of varying proportions. Such is the distribution that it is difficult to predict pre-drill what phases will be present and in what proportions. It should be noted that there is no seismic anomaly at the Fur Seal prospect to suggest the presence of gas, although this sort of negative evidence does not preclude the presence of gas.

The main risks for the Fur Seal-1 exploration well is the presence of a permeable thief zone or zones within the lateral seal Turrum Formation infilling the Marlin channel, and the possible significant presence of gas instead of oil and/or a lack of oil charge.

Apache ENERGY

VIC/P 54

PROPOSED FUR SEAL-1 LOCATION MAP

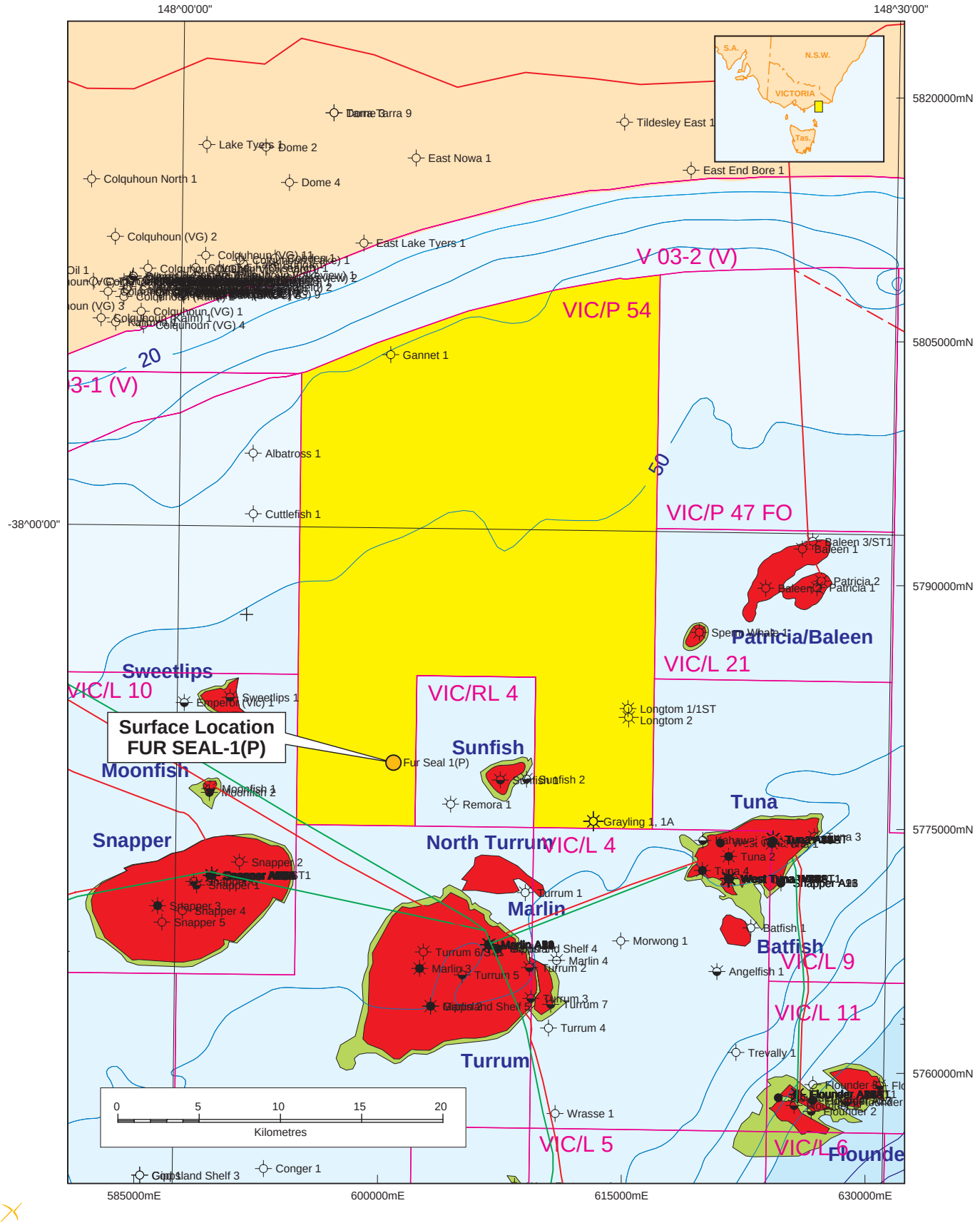
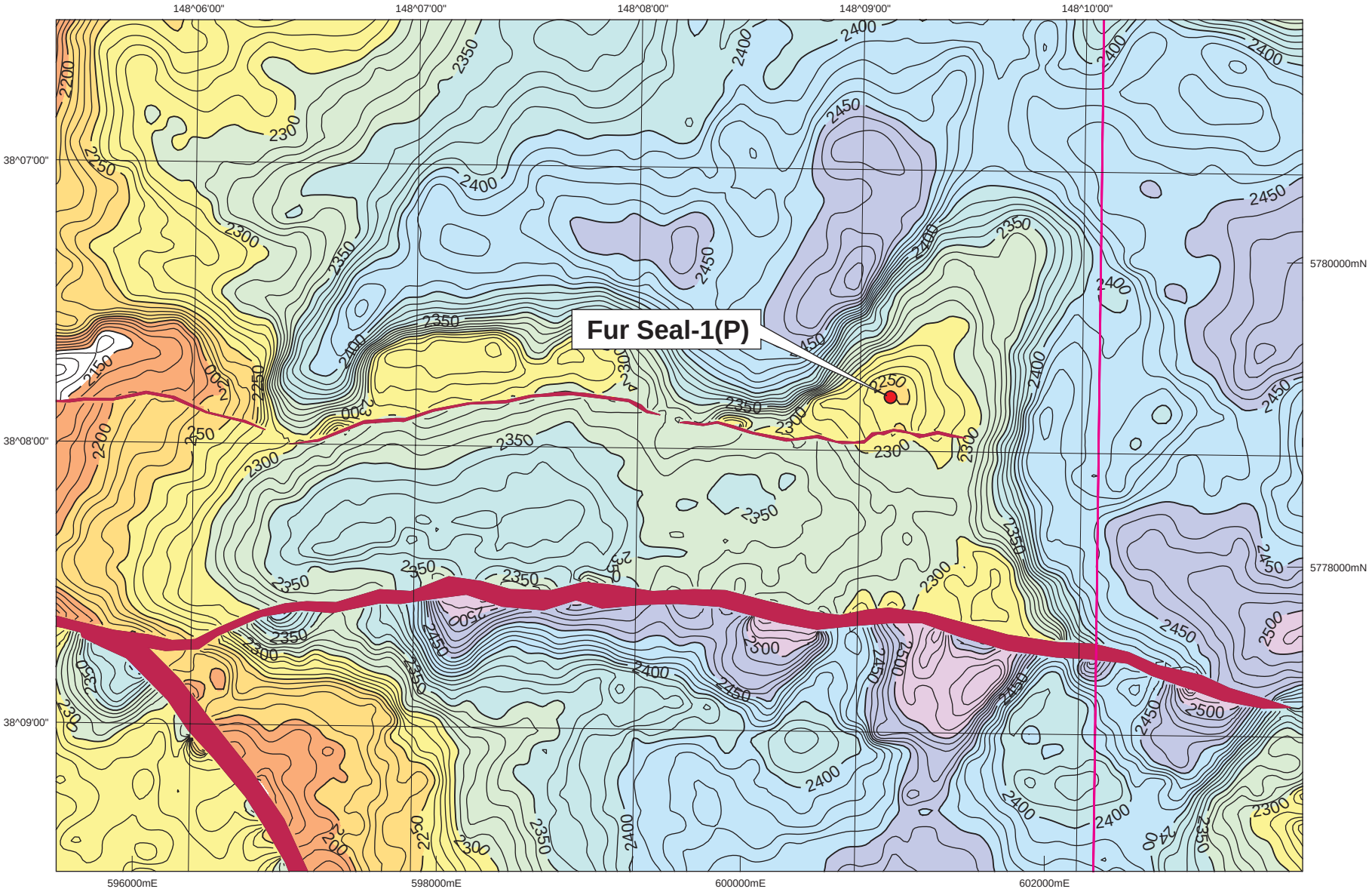


Figure 1



0 500 1000 1500 2000 2500

Metres

Apache ENERGY

VIC/P54

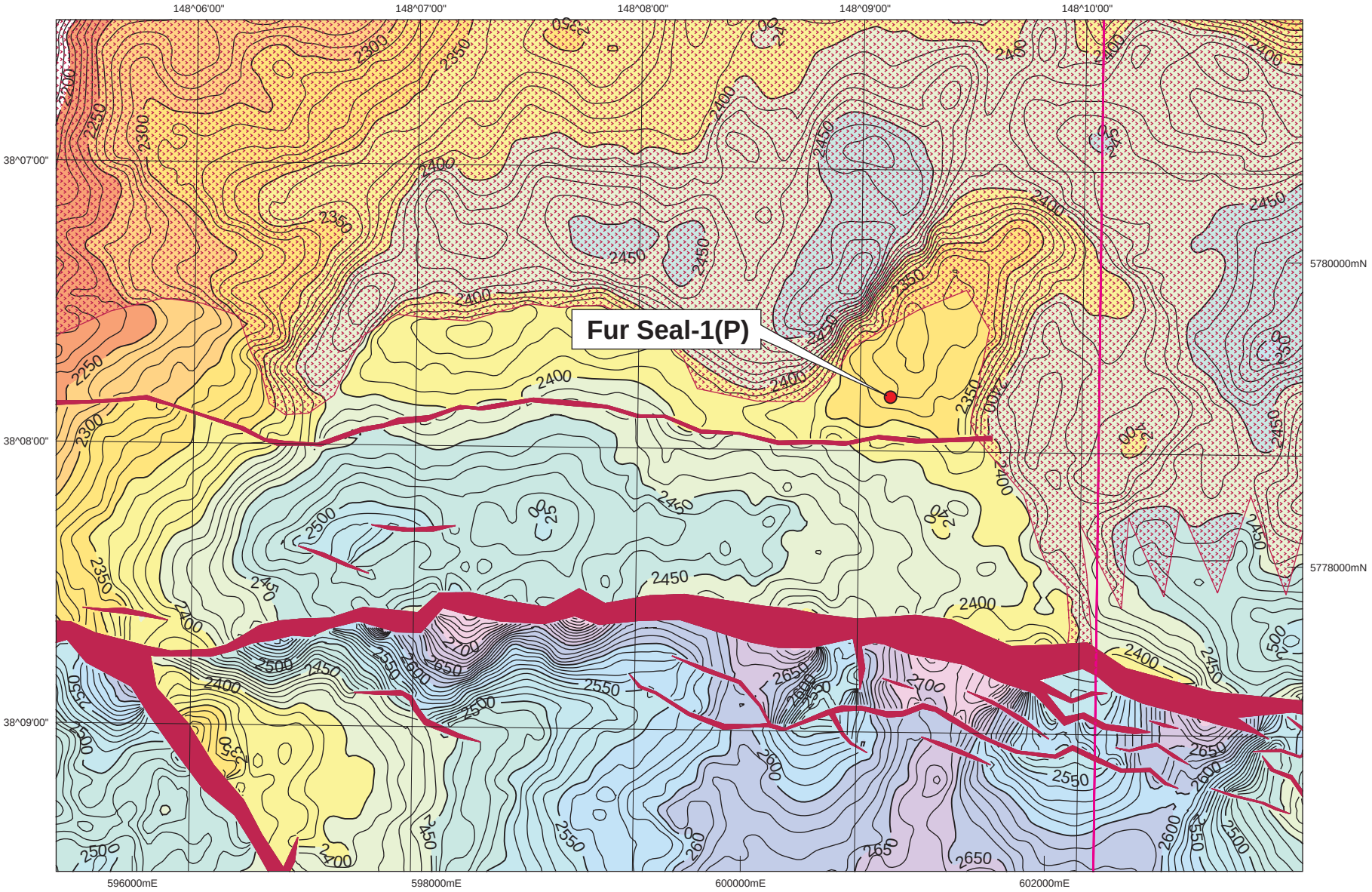
L. balmei / Base Eocene Channel Depth Structure

(using seismic velocities, MC, no welltie)

CONTOUR INTERVAL: 10m

Author : RLK	Date : May 24, 2005
Mapsheet : FURSEAL	Scale :
Map File : /vicp54_furseal_BMFvolc.map	Plan No. : SMu8914

Figure 2



GDA

0 500 1000 1500 2000 2500

Metres

Apache ENERGY

VIC/P54

F. longus / Base Eocene Channel Depth Structure

(using seismic velocities, MC, no welltie)

CONTOUR INTERVAL: 10m

Author : RLK	Date : May 24, 2005
Mapsheet : FURSEAL	Scale :
Map File : /vicp54_furseal_FLON.map	Plan No. : SMu8913

Figure 3

Fur Seal-1: Dip Line

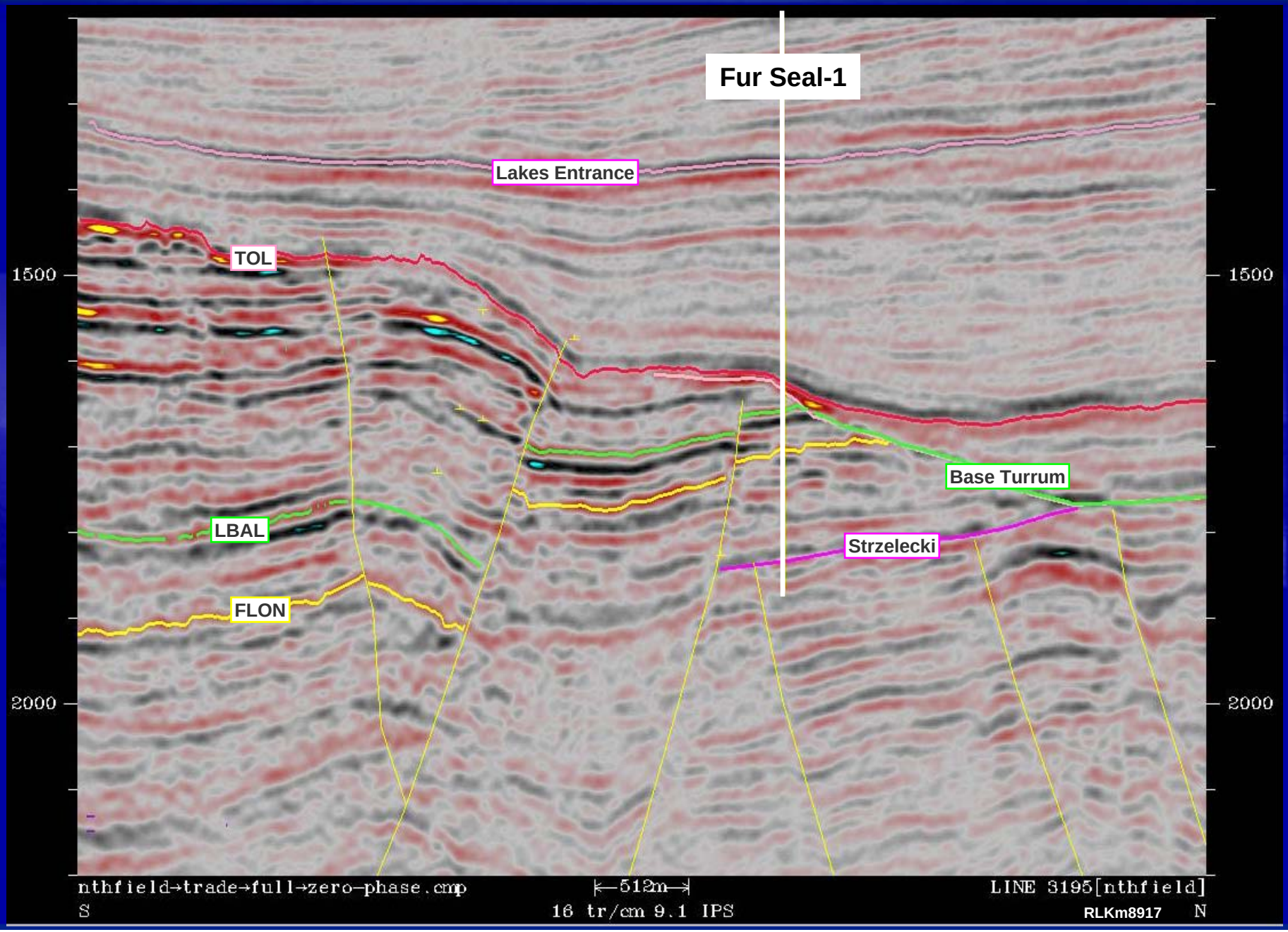


Figure 4a

Fur Seal-1: Strike Line

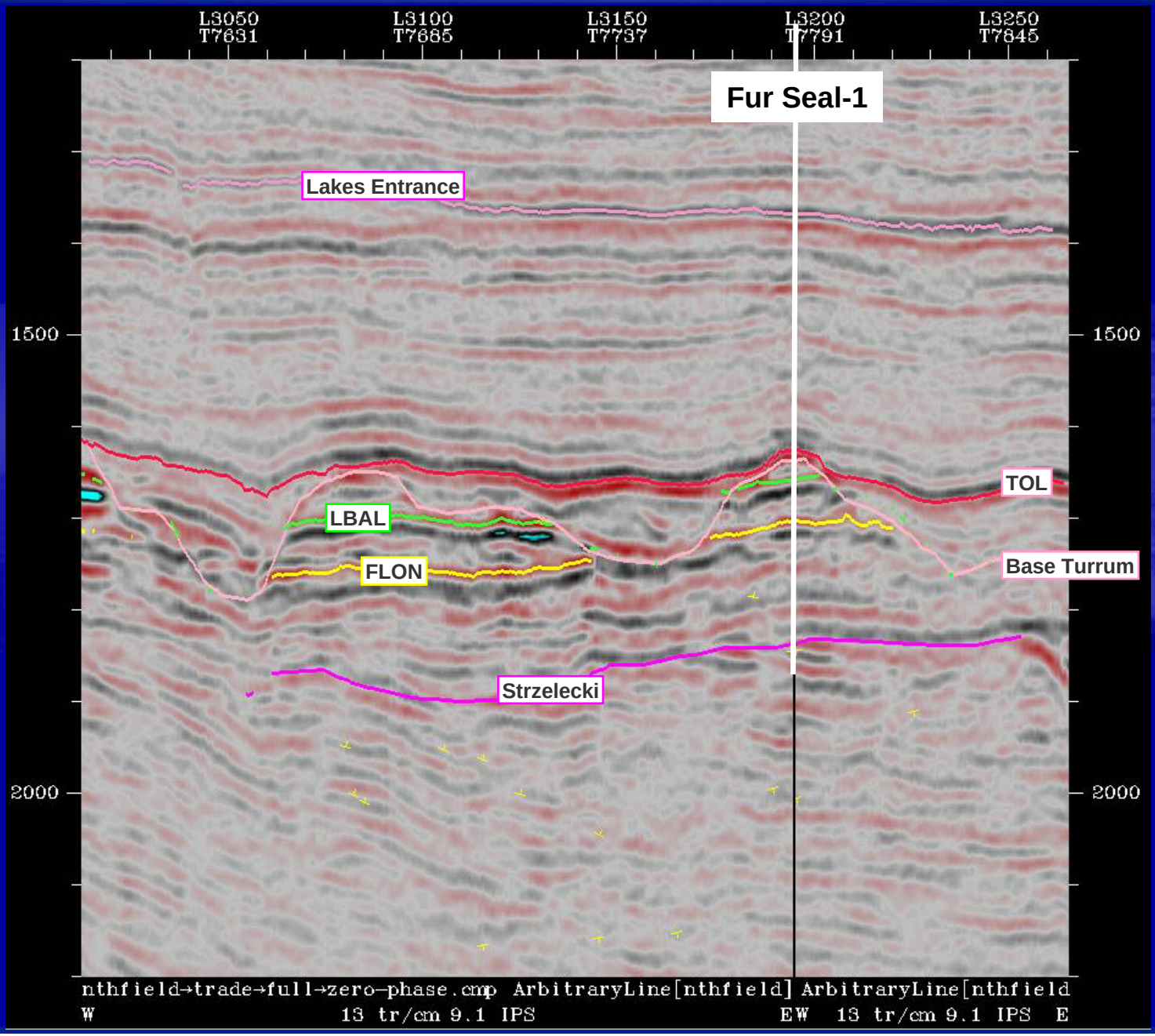


Figure 4b

RLKm8917

3. STRATIGRAPHIC PROGNOSIS

FORMATION	TRUE VERTICAL DEPTH (mTVDAHD)	THICKNESS (mTVT)	MEASURED DEPTH (mMDRT)	LITHOLOGY
RT-AHD	+22.0	N/A	0.0	
Gippsland Limestone (Sea Bed)	-60.0	1740.0	80.0	Interbedded calcarenite, calcisilite and calcilutite.
Lakes Entrance Fm	-1800.0	409.0	1822.0	Interbedded calcarenite, calcisilite, grading to calcilutite with depth.
Turrum Formation (Top Latrobe Unconformity)	-2209.0	12.0	2231.0	Silstone, grading to very fine grained sandstone
Kingfish Formation (Top Halibut Sub-Group) Primary Objective	-2221.0	30.0	2243.0	Interbedded sandstone, siltstone and coal.
L. balmei Moonfish volcanics (Top seal objective interval)	-2251.0	N/A	2273.0	Volcanics.
Kate Shale	-2320.0	11.0	2342.0	Marine mudstones and sandstones with accessory glauconite.
Volador Formation Secondary Objective	-2331.0	181.0	2353.0	Sandstone.
Kipper Shale/?Strzelecki Group (Top Emperor Formation)	-2512.0	>100.0	2533.0	Intermediate to basic variably weathered volcanics.
TD	**-2612.0**		**2634.0**	

4. GEOLOGICAL PROCEDURES

1. MUDLOGGING AND SAMPLING PROGRAMME

The following instructions are a guide and may be modified at the discretion of the Wellsite Geologist. Significant changes should be discussed with the Operations Geologist in the Perth Office. The mudlogging personnel will familiarise themselves with and follow these instructions unless directed otherwise by the Wellsite Geologist. Compliance with many of these instructions will require the co-operation of supervisory personnel of both Apache and the drilling contractor, as well as of the mudlogging engineer.

1.1 GENERAL INSTRUCTIONS

1.1.1 Collect drilling data from surface. Commence logging the 406 mm (16") hole section. Full fluid returns are expected from kickoff to total depth. Digital drilling data should be collected at the highest possible data density in a time based file from spud to 150 m below the sea bed.

1.1.2 Carbide checks are to be run at least once per day (more often if hole conditions are changing rapidly). The mathematically derived theoretical lag time and the actual lag time are to be recorded in the lithological description column as equivalent pump strokes.

1.1.3 If gas dilution of mud, mud loss or pit volume increase is noted, instruct driller to stop drilling immediately and check for flow, then notify the Wellsite Geologist and Drilling Supervisor as quickly as possible.

1.1.4 Mud logs should be kept up to date at all times.

1.1.5 A hard copy of the mudlog in A4 format will be provided with the Wellsite Geologist's morning report along with an Acrobat file (*.pdf) of the mudlog to be transmitted to Perth each morning. The mudlogging data engineer will submit drilling engineering reports to the Apache Drilling Representative at 06:00 and 15:30 hours covering activities over the proceeding 24 hours and 9 hours respectively.

1.1.6 The data engineer is to maintain a trip condition log plotting the occurrence and magnitude of tight hole and required reaming throughout the well.

1.1.7 The mudlogger is to maintain the hole cleaning and condition record supplied

by the client and make data available in ASCII format.

1.1.8 Calcimetry to be run every 25 m. If there is a large variation in percentages between these sampling points, run analyses every five metres. In samples described as having more than 10 percent calcite/dolomite run analysis regardless.

1.1.9 Gas ratio plots are to be run on all oil and gas shows and on any recovered gas from wireline formation tester or DST.

1.1.10 Shale densities are to be run when requested by Wellsite Geologist.

1.1.11 Cuttings gas analysis to be run every 25 m or more frequently in high gas zones, at the Wellsite Geologist's discretion.

1.1.12 A file in ASCII format of engineering and gas data is to be supplied to the Wellsite Geologist for transmission to Perth office as soon as possible at the end of each hole section.

1.1.13 The mudlogging personnel are to ensure that sufficient: sample containers - plastic and rot proof cloth bags, samplex trays, cardboard boxes and wireline formation tester fluid containers (100 and 500 ml Pyrex sample jars along with 5 litre screw top cans) are on the rig at the start of the well.

1.1.14 The quality control weekly checklist is to be given to the Wellsite Geologist each Friday, or at least once per well.

1.1.15 Two discs containing merged data in ASCII format to be provided with a provisional copy of the "Final Well Report" for proof reading as soon as possible after drilling. After completing any amendments requested by Crocker, a disc containing postscript print files (*.ps) or Acrobat files (*.pdf) of the Formation Evaluation Log and Final Well Report should also be presented.

1.2 SAMPLE REQUIREMENTS

Collect the following samples (every 5 metres) unless otherwise instructed by the Wellsite Geologist:

1.2.1 Dry Samples: lightly washed (air dried):

One (1) set 200+ grams in polythene bags for AGSO.
One (1) set 200+ grams in polythene bags for Apache.
One (1) set 200+ grams in polythene bags for DPI.
One set of washed and dried samples in plastic 'samplex' trays for Apache.

1.2.2 Sample Labelling and Shipping

- When it is not possible to catch samples, as in lost circulation zones, an empty bag should be included in the sequence of samples, and clearly labelled to show the interval of missing samples and the reason why they are missing. Such intervals should be noted on the transmittal letters together with any intervals with less than the minimum required sample volume.

- Water resistant felt tip pens and labels are required for polythene bags, and marker pens with paper bags. Lead pencils must not be used. Samples should be well packed in order.

- All samples are to be sent to: Core Laboratories Pty Ltd, 447 – 449 Belmont Ave, KEWDALE, WA, 6109 Attn: Paul Stephenson at the completion of drilling. Each box should be individually marked with the well name and depth interval.

- Dry samples are to be boxed separately and clearly labelled so the individual sets are easily identifiable.

  Set 1: Apache
  Set 2: AGSO
  Set 3: DPI

- "Samplex" trays are to be placed in the small wooden boxes supplied by the manufacturer, depths are to be written on the end of each tray as well as the lids.

- Wireline formation tester and DST samples to be sent as soon as possible from the rig to Core Laboratories or to a laboratory as advised by the Operations Geologist.

- All sample shipments must be accompanied by a transmittal advice. A copy of this advice is to be sent to Apache Energy Limited, Level 3, 256 St. George's Terrace, Perth, WA 6000 - Attention: Operations Geologist.

1.3 CIRCULATING INSTRUCTIONS

1.3.1 Circulate bottoms up routinely before all trips, but with slow drilling this may be waived at the discretion of the Wellsite Geologist.

1.3.2 Circulate after all operations or occurrences that could affect a proper evaluation of any new hydrocarbon-bearing zones below that depth, i.e:

1. Drill-stem tests.
2. Lost circulation regained below possible oil zones, etc.
3. High trip gas.

Circulating instructions may be communicated directly to the driller but the Apache Drilling Supervisor must be informed directly afterwards.

2. CORING PROGRAMME

Coring may be conducted in a sidetrack hole through the objective should a significant hydrocarbon column be indicated from shows and LWD logs. Core barrel lengths of up to 18 m per core run may be required with capacity on location to cut up to 36 m of core. The coring programme is designed to define reservoir properties and determine GOC and OWC contacts through the reservoir section as required in the event of a hydrocarbon discovery.

2.1 CORE HANDLING

2.1.1 Thin sleeve system fibreglass inner core sleeves will be used for conventional core recovery. The core should be retained in 9 m lengths and shipped in a modified testing basket. Prior to sealing, representative rock chips will be removed from the end of each core section for well-site lithology and show description.

2.1.2 Each core sleeve section is to be marked with adjacent red and black lines along its length (red on the left); arrows pointing downhole will be marked at regular intervals on each piece of core sleeve on the black line. Measured RT depths should be marked on each sleeve at 0.5 metre intervals, on the top and bottom of each sleeve and on the end caps.

2.1.3 Core sleeve sections and contained core should be packed firmly in core crates and transported to Perth via helicopter and then air frieght to Perth. For air transport, individual core crates must not weigh more than 100 kg as airline staff safe work practices prevent handling items exceeding this limit. Care will be taken to damage the core as little as possible during transprt.

2.2 CORE LABELLING AND SHIPPING

2.2.1 The following information should be taped to the outside and inside (in thick transparent envelopes) of the lid of each core crate or attached to the shipping basket:

Well Name
Core Number
Total cored interval

Recovery (in metres)

Interval in crate

No. of lengths of core in crate

Note: a photocopy of this information should also be faxed to Apache Perth attention: Operations Geologist.

2.2.2 Core boxes should be shipped to Core Laboratories as soon as possible. Transportation method for the core to be agreed with Apache, Perth, who should also be notified of the shipment.

Core Samples:

1/3 of core samples for AGSO.

1/3 of core samples for DPI.

1/3 of core samples for Apache Energy Ltd.

3. WIRELINE LOGGING PROGRAMME (OPEN HOLE)

Suite No. 1 Total depth to 340 mm (13 3/8") casing shoe.

Run 1 MDT (To define hydrocarbon contacts and obtain fluid samples - if required)

Run 2 FMI (if required)

Run 3 DUAL CSAT (VSP)

Run 4 PEX – AIT/HALS (if required)

Run 5 MSCT - rotary sidewall coring tool (if required).

Run 6 SCT (if required)

Note: All primary logging measurements will be replaced by quad-combo LWD. A conventional wireline supercombo toolstring will be available in all circumstances as backup.

Objective: Provide a complete suite of formation evaluation logs for detailed petrophysical analysis. An MDT pressure survey may be conducted to confirm any hydrocarbon contacts by intersection of gradients if hydrocarbon contacts can not be adequately defined. MDT sampling will be required to determine the exact nature of any indicated hydrocarbons. All possible precautions must be taken to avoid differential sticking of the MDT tool. EMI to obtain stratigraphic dip information in a discovery well and have electromagnetic image capability to investigate detailed stratigraphy/sedimentology if required. CNSG to provide spectral gamma ray data. Provide a high quality VSP or checkshot survey. Provide sidewall core coverage for measurement of reservoir properties, lithological determination, hydrocarbon content, dating and geochemical analyses, if required.

3.1 The Apache Logging Supervisor is to hand the Logging Engineer an "Order on Wireline Logging" at least 1 hour before logging commences. Any problems should be discussed. The "Order on Wireline Logging" will detail the generalities laid out in this programme.

3.2 The Wireline Logging Engineer is to measure mud and mud filtrate resistivity on a mud sample taken from the flow line by the Mud Engineer before POOH to log. The temperature of resistivity measurements should be recorded.

3.3 The Apache Logging Supervisor is to provide the Logging Engineer with the hole size, casing size, intervals of any hydrocarbon occurrences, all mud properties and other data required for a complete log heading.

3.4 The Apache Logging Supervisor is to record circulating time on bottom and time circulation stopped on the appropriate form and ensure that the Wireline Engineer includes these comments in the remarks portion of the header.

3.5 Two thermometers are to be run on each tool. The Apache Logging Supervisor should note the time the tool was last on bottom, ensuring that these times are in agreement with those on the log. If the DTD is used, both digital and analogue temperatures will be noted on the log header. The maximum of these values will be used for the bottom hole temperature.

3.6 Overlap previous logging run with all curves by at least 40 m or with gamma ray if overlap interval is in casing. Overlap scale changes.

3.7 Unless otherwise instructed, basic (GR-RES) logs should be acquired while running in (fastest possible acquisition mode). If logging tools hang up, logs should be acquired on the first trip out of the hole.

3.8 The repeat section should be acquired over the reservoir interval (this instruction may be modified at the discretion of the Apache Logging Supervisor).

3.9 In the event a Toolpusher run is made, depths will be tied to the drillers' pipe tally.

3.10 In the event the logging tool becomes stuck the Drilling Supervisor will be informed immediately.

3.11 No playbacks or quicklooks will be required in Fur Seal-1.
Office based data processing of the checkshot data will be required as soon as possible. Intervals and timing of processing should be arranged with the Apache office.

3.12 All logs will be taped (4 mm DAT tape or EXABYTE in LIS format) and an ASCII file will be made available. The ASCII file will include data from all tools.

3.13 Two sets of field prints of all logs and the tapes will be forwarded to Perth as soon as possible. Liaise with Head Office re fax/remote transmission of key intervals.

3.14 One set of all logs should be retained on the rig for wellsite use. The Apache Logging Supervisor should ensure that the Drilling Supervisor has copies of all logs that he requires.

3.15 The Apache Logging Supervisor should be especially careful to ensure that all logs, computer interpretations and replays are properly labelled, with any anomalies, scale changes and reasons for parameter changes documented.

3.16 The Logging Engineer/Seismic Specialist should not leave the location until all quicklooks and Apache office personnel have reviewed logs.

3.17 The log heading will include the tool configuration, suite and run numbers (as per above

logging programme), depth interval, scale and date. TD latitudes and longitudes for deviated holes will also, if possible, be noted in the remarks.

3.18 The following standard environmental corrections will be applied to generate an NPHI curve:

Limestone matrix
DSN borehole size correction
Casing/cement correction

3.19 Scale should normally be as follows:-

LOG	VERTICAL	HORIZONTAL	TRACK	REMARKS
DLL-MSFL	1/200, 1/500	0.2 to 2000	2	logarithmic
GR (& CSNG)	1/200, 1/500	0 to 200	1	Backup 150-300. Standard scales for K, Th and U.
CALIPER	1/200, 1/500	6 to 16"	1	
FWS/LSS	1/200, 1/500	140 to 40	3	140-240 backup to extend into track 2.
SLD	1/200, 1/500	1.95 to 2.95	2 + 3	
DSN	1/200, 1/500	+.45 to -.15	2 + 3	
PEF	1/200, 1/500	0 to 10	3	
DRHO	1/200, 1/500	-.25 to .25	3	

4. LOGGING WHILE DRILLING PROGRAMME (LWD)

LWD formation evaluation logging will be undertaken on Fur Seal-1.

Logging of the 406 mm (16") hole section will be by LWD quad-combo wireline replacement to give high quality directional, gamma ray, resistivity and sonic data (GR-EWRP4-BAT). This consists of a mud pulse telemetry system for real time transmission, with probes to record all the data downhole.

Logging of the 216 mm (8 $^1/_2$") hole section will be by LWD quad-combo wireline replacement to give high quality directional, gamma ray, resistivity and sonic data (DGR-EWRP4-SDL-CNP-ACAL-BAT). This consists of a mud pulse telemetry system for real time transmission, with probes to record all the data downhole.

4.1 A short repeat section will be conducted in recorded only mode (with the pumps off to minimise hole erosion) across the reservoir after reaching TD. The Apache Wellsite Geologist will provide the interval and the data will be acquired at the fastest possible rate to obtain a recorded only log for repeatability.

4.2 During the logging of any section the LWD crew are to obtain measurements of the mud and mud filtrate resistivity and temperature as required (at least once per tour) to accurately determine the corrected formation resistivity response. These data should be recorded on the log along with all other pertinent information concerning the well.

4.3 All depth related information should be checked with the Apache Wellsite Geologist and Drilling Supervisor before any final logs are produced. It is important to note that with the wireline replacement technique, LWD provides the primary depth reference for the well and a great deal of attention must be payed to pipe/BHA measurements.

4.4 The LWD crew are to provide, to the Apache Wellsite Geologist a daily 24 hr record of the logs recorded (in ASCII format). These data will be transmitted to the Perth office together with the mudlogging data to be available by no later than 6:30 am each morning. The data are to be recorded against regular depth intervals of 0.1m.

4.5 Any geologically significant or anomalous responses should be reported to the Apache Wellsite Geologist or Drilling Supervisor immediately.

4.6 The LWD crew is to ensure a real-time, on-line log is available at all times for the Apache Wellsite Geologist and Drilling Supervisor and those key intervals can be transmitted to

the Perth office as soon as possible if required.

4.7 A set of all logs should be retained on the rig for wellsite use. The Apache Wellsite Geologist should ensure that the Drilling Supervisor has copies of all logs that are required.

4.8 It is the responsibility of the Apache Wellsite Geologist to ensure that all wellsite logs, computer interpretations and replays are properly labelled, with any anomalies, scale changes and reason for parameter changes documented. Special attention should be paid to the details recorded in the log header and remarks in track 5 ensuring these are correct and all information required is present.

4.9 Scales should normally be as follows:-

Log	Vertical	Horizontal	Track	Remarks
GR	1/200, 1/500	0-200 API	1	API equivalent. Backup to wrap.
ROP	1/200, 1/500	100-0 m/hr	1	
RES	1/200, 1/500	0.2-2000 ohmn	2	App. & Corr. Data logarithmic
NEUTRON POR.	1/200, 1/500	+.45 to -.15	3	Backup to extend into track 2.
BULK DENSITY	1/200, 1/500	1.95-2.95 gm/cc	3	Backup to extend into track 2.
ΔT	1/200, 1/500	140 - 40	3	140 - 240 Backup to extend into track 2.
CAL	1/200, 1/500	6 – 16”	1	Azimuthal borehole geometry as separate display.

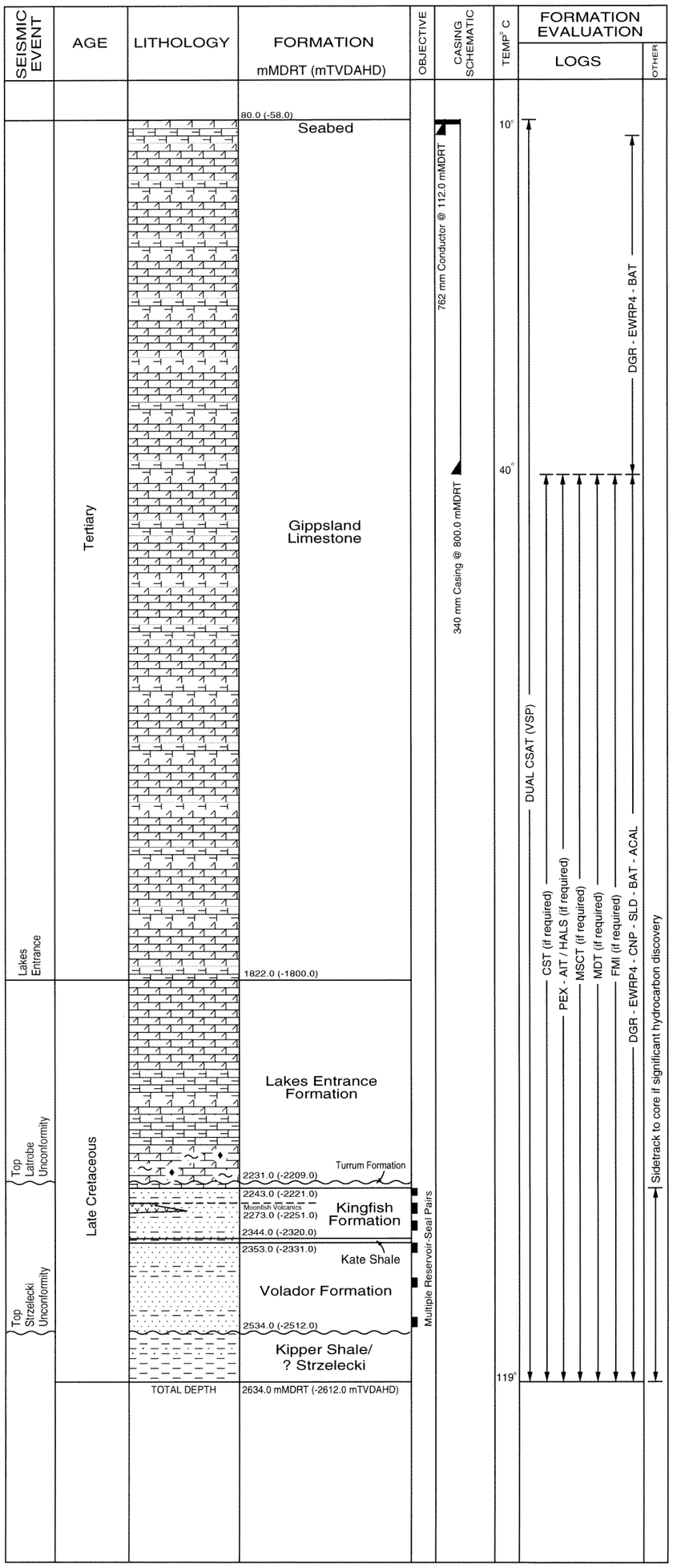
Directional information and pertinent remarks concerning the LWD operation should be included in Track 4.

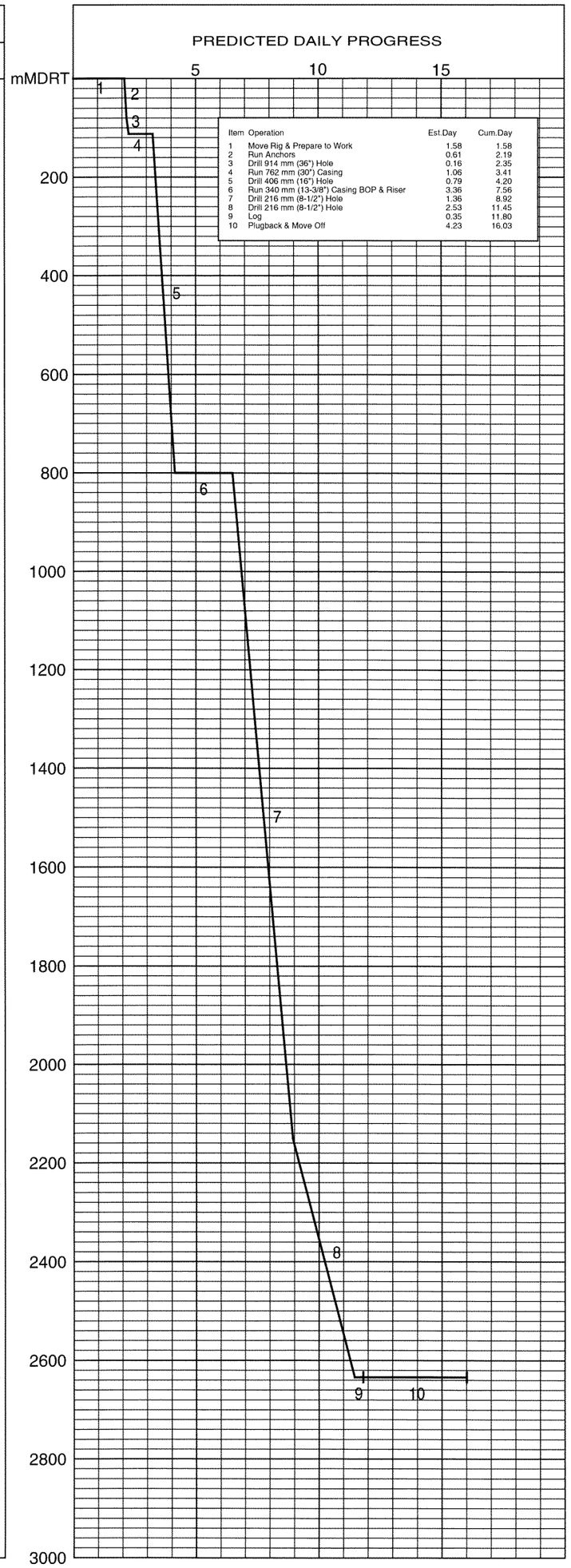
The log scales above are offered as a guide and can be changed for clarity of data presentation by the Apache Wellsite Geologist in consultation with the Perth office.

4.10 Final log copies, film and tapes should be sent to the Head office in Perth as soon as possible. Tapes should be provided at 1600 BPI in LIS format and contain all raw and corrected field data. Tapes and disks carry Apache data labels, have verifications listings provided and have been checked for data integrity before delivery.

Logs and a provisional copy of the "End of Well Report" for proof reading are to be provided as soon as possible after drilling. After completing any amendments requested by Crocker, a disc containing Acrobat files (*.pdf) of the Logs at 1:200 and 1:500 scales (MD and TVD), and Final Well Report should also be presented.

Fur Seal-1





Item	Operation	Est.Day	Cum.Day
1	Move Rig & Prepare to Work	1.58	1.58
2	Run Anchors	0.61	2.19
3	Drill 914 mm (36") Hole	0.16	2.35
4	Run 762 mm (30") Casing	1.06	3.41
5	Drill 406 mm (16") Hole	0.79	4.20
6	Run 340 mm (13-3/8") Casing BOP & Riser	3.36	7.56
7	Drill 216 mm (8-1/2") Hole	1.36	8.92
8	Drill 216 mm (8-1/2") Hole	2.53	11.45
9	Log	0.35	11.80
10	Plugback & Move Off	4.23	16.03

Surface Location

Latitude:	38° 07' 47.82" S	GDA94	5,779,139.3 mN
Longitude:	148° 09' 08.53" E		600,997.9 mE
Proposed water depth	58.0 m	RT to AHD	22.0 m
		RT to Seabed	80.0 m

Seismic line Inline 3195 Xline 7787

TD 2634.0 mMDRT (-2612.0 mTVDAHD)

PREPARED BY:	NAME	DATE
OPERATIONS GEOLOGIST		19/9/05
DRILLING ENGINEER		19/9/05
APPROVED BY:		
DRILLING MANAGER		19/9/05
EXPLORATION MANAGER		20-9-05

Apache ENERGY

VIC/P-54

GIPPSLAND BASIN

Fur Seal-1

PREDICTED SECTION & DRILLING TIME vs DEPTH CURVE

Author :	Fiona O'Sullivan	Date :	15 September, 2005
Drawn :	Perth Exploration Dept.	Plan No.	PSu9117