



Esso Australia Ltd.

WELL COMPLETION REPORT PETROLEUM DIMISION GREAT WHITE 1 26 JUN 1997 VOLUME 1 BASIC DATA

GIPPSLAND BASIN VICTORIA

ESSO AUSTRALIA LIMITED

Compiled by: Mark Moore Sheryl Sazenis

January, 1997

WELL COMPLETION REPORT GREAT WHITE 1

VOLUME 1: BASIC DATA

CONTENTS

- 1. WELL DATA RECORD
- 2. OPERATIONS SUMMARY
- 3. CASING DATA
- 4. **CEMENTING DATA**
- 5. SAMPLES, CONVENTIONAL CORES, SIDEWALL CORES
- 6. WIRELINE LOGS AND SURVEYS
- 7. TEMPERATURE RECORD

FIGURES

- 1. LOCALITY MAP
- 2. WELL PROGRESS CURVE
- 3. PLUG & ABANDONMENT SCHEMATIC
- 4. HORNER TEMPERATURE PLOT SUITE 1

APPENDICES

- 1. LITHOLOGICAL (CUTTINGS) DESCRIPTIONS
- 2 CHECKSHOT SURVEY
- 3. DEVIATION SUMMARY
- 4 MUD LOG

1. WELL DATA RECORD

LOCATION		Latitude :38° 27' 7.058" South Longitude :148° 37' 37.736" East X= 641983.00 mE Y= 5742768.39 mN Map Projection: AMG Zone 55 Geographical Location: Bass Strait, Victoria Field :Wildcat
PERMIT	:	Vic/P24
ELEVATION	:	30.5m
WATER DEPTH	:	658.5m
TOTAL DEPTH	:	3472 m (Driller) 3454 m (Logger)
MOVE IN	:	15/12/96 00:00 hours
SPUDDED	:	26/12/96 14:45 hours
REACHED TD	:	06/01/97 23:20 hours
RIG RELEASED	:	17/01/97 23:00 hours
OPERATOR	:	Esso Australia Resources Ltd.
PERMITTEE OR LICENCEE	:	BHP Petroleum (Vic.) Pty Ltd and Esso Australia Resources Ltd.
ESSO INTEREST	:	50%
OTHER INTEREST	:	50%
CONTRACTOR	:	Sedco Forex International Drilling Inc.
RIG NAME	:	Sedco 703
EQUIPMENT TYPE	•	Semi-submersible
TOTAL RIG DAYS	:	34
DRILLING AFE NO	:	L66016006
TYPE COMPLETION	:	Plugged and abandoned
WELL CLASSIFICATION	• • •	Before Drilling: Wildcat After Drilling: Dry hole

Î

j.

2. OPERATIONS SUMMARY

MOBILIZATION/MOORING

The Sedco 703 Ocean was towed by the Smit Lloyd 121 to the Great White 1 location. The no.7 anchor was on bottom at 22:40 hours, December 20, 1996.

The Lady Elaine and Lady Audrey were used to set the anchors for the Sedco 703 at Great White 1. After a combination of bad weather and anchor running problems all anchors were finally in place and tensioned at 12:00 hours December 24, 1996. The rig was ballasted down to drilling draft and the TGB was run and landed at 09:00 hours, 26 December, 1996. The final rig location was 8.16 m on a bearing of 257.6° (True) from the called location. Final rig heading was 225.1° (True) Rotary table to seabed was 689 m and water depth was 658.5m.

DRILLING OPERATIONS

a)36"Hole/30" Casing

A 26" bit and 36" hole opener and BHA were made up and stabbed into the TGB. The well was spudded at 14:45 hours, 26 December, 1996 and drilled from 689 m to 723 m. The well was swept with a high viscosity gel pill prior to dropping a survey, $(1/2^{\circ} \text{ at } 717 \text{ m})$. After circulating the hole clean the well was again displaced with high viscosity mud prior to POOH to run casing. The 30" casing was run with the PGB. The 30" casing was washed from 721 m to 723 m. The slope indicator showed no deviation in the 30" casing. and wellhead stickup was 2 m above the sea floor.

30" casing plus float shoe were run with the shoe landing at 723m. The 30" casing was cemented with 621 sacks of class "G" cement with 2% BWOC CaCl at 15.8 ppg. After the running tool was backed out the slope indicator showed no change.

17 1/2" Hole/13 3/8" Casing

A 17 1/2" BHA was made up and RIH tagging top of cement at 716 m. Cement and float was drilled out to 723 m. Drilling continued from 723 m to 1466 m.

The well was swept with a high viscosity gel pill prior to dropping a survey, $(1/4^\circ, azimuth: 038^\circ at 1464 m)$. A wiper trip was run, tagging a bridge at 1455 m and washing and reaming from 1455 m to 1466 m. After circulating the hole clean the well was again displaced with high viscosity mud prior to tripping out of the hole to run 13 3/8" casing.

64 joints of 68 lb/ft, K55, 13 3/8" casing was run from 1451 m to 696 m with cross-over to 20", 133 lb/ft, X-56 from 696 m to the top of wellhead at 686 m. The shoe was landing at 1451 m. The casing was cemented with a lead slurry of 1350 sacks of class "G" cement with 0.45 gps econolite, (slurry weight: 12.5 ppg, slurry volume: 525 bbls) and a tail slurry of 650 sacks of class "G" neat cement, (slurry weight: 15.8 ppg, slurry volume: 133 bbls).in sea water. The plug was bumped at 1500psi with the float holding.

The BOP stack and riser was run and latched. The stack was function and pressure tested as well as the surface equipment.

2. OPERATIONS SUMMARY (CONT'D)

c)121/4" Hole/9 5/8" Casing

A 12¹/₄" Smith M-91-P PDC bit in combination with a mud motor and MWD directional/GR package was made up and used to drill out the 13 3/8" casing, clean out the rat hole and drill 3m of new formation to 1469 m.

A PIT was performed at 1469 m with leak-off a PIT limit of 700psi (EMW = 11.8ppg). Drilling continued from 1469 m to 3472 m (TD) with a NaCl/PHPA mud system.

At total depth the well circulated and condition prior to pulling out to run E-Logs.

Suite 1 of the E-Logs consisted of: Run 1, AMS-LDL-CNL-DLL-MSFL-AS-CAL-GR, Run 2, CSAT (Checkshot).

After the electric logging programme open ended drill pipe was run into the hole. Three cement plugs were spotted and tagged over the following intervals, plug #1 3278-3096m, plug #2 1501-1351m and plug #3 818-715m. An EZSV plug was set above plug #2

3. CASING DATA

CASING OD (IN)	WEIGHT (LBS/FT)	GRADE	CONN	NUMBER OF JOINTS	LENGTH (M)	SHOE DEPTH (M)	CENTRALIZERS
30	457 (1.5" WT)	X-52	Vetco ALT2	WH Joint	12.76	699	None
	310 (1.0" WT)	X-52	Vetco ST2	2	23.54	723	None
20 ×	133 (0.625" WT)	X-56	DQ FB-60	XO Swage	2.58	696	1 Rigid
13-3/8	68	K-55	Butt	65	757.36	1451	10

.

4. CEMENTING DATA

ľ

(

·

DEPTH	JOB	SACKS		ADDITIVES	MIX WATER	SLURRY
(M)	DESCRIPTION	CLASS 'G'	QTY	PRODUCT	TYPE	DENSITY
723	30" Casing	621	2% BWOC	CaCl2	sw	15.8
1451	13-3/8" Casing - Lead - Tail	1350 650	0.45 gps Neat	Econolite, extender	SW SW	12.5 15.8
3,278 - 3,096 (tagged)	Plug #1	412	0.06 gps	HR-6L, retarder	FW	15.8
1,501 - 1,351 (tested to 1,000 psi)	Plug #2	420	Neat		sw	15.9
818 - 715	Plug #3	255	1% BWOC	CaCl2	SW	15.9

.

5. SAMPLES

Interval (m) Type

1466 - 3472

Cuttings samples - 3 sets of washed and air dried and 1 set of bagged, lightly washed and air dried cuttings.

Samples from 1466 - 2000 m at 30 m intervals. Samples from 2000 - 2500 m at 10m intervals. Samples from 2500 - 2710 m, at 5m intervals. Samples from 2500 - 3110 m, at 15m intervals. Samples from 2500 - 3472 m, (TD) at 10m intervals.

Sampling frequency varied from that programmed due to very high penetration rates.

6. WIRELINE LOGS AND SURVEYS

Туре	Scale	From	То
Suite 1			
Run 1			
AMS-GR-LDL-CNL-AS-DLL-MSFL-CAL	1:200/1:500	3439.5	2500
-SP			
AMS-GR-DLL-CAL-SP]	2500	1448
Run 2			
CSAT (Checkshot)		3440	2100

7. TEMPERATURE RECORD

Logging Run (Suite 1)	Depth (m)	Max Recorded Temperature °C	Time After Circulation Stopped (t) (hours)
AMS-GR-LDL-CNL-AS-	3439.5	72	13 hrs, 45 min.
DLL-MSFL-CAL-SP			
CSAT (Checkshot)	3440		22 hrs, 15 min.

.

Í

Ĩ

Ĵ

Î

Î

1

FIGURES

Ì





Figure 2

ESSO AUSTRALIA LTD.

GREAT WHITE-1 P&A SCHEMATIC





EXTRAPOLATED BOTTOM HOLE TEMPERATURE

Figure 4

pjburnett



.

Appendix 1

l P

<u>APPENDIX I</u>

LITHOLOGY(CUTTINGS) DESCRIPTIONS

I

LITHOLOGY DESCRIPTIONS

CUTTINGS SAMPLE DESCRIPTIONS

Depth From (m)	Depth To (m)	%	Lithology and Shows
689	1466		No returns. Drilled without riser and BOP's. Returns to sea floor.
1466	1480	100	Limestone: light grey to light grey green, occasionally grey, calcisiltite, grades to calcilutite in part, argillaceous, grades to marl in part, minor carbonaceous flecks, minor lithics, amorphous to subblocky, dispersive in part, very soft to soft.
1480	1510	100	Limestone: as above, sticky in part.
1510	1540	100	Limestone: as above.
1540	1570	1000	Limestone: light grey to grey, occasionally grey green, calcisiltite, grades to calcilutite, argillaceous, grades to marl, minor carbonaceous flecks, amorphous to subblocky, dispersive, soft.
1570	1600	100	Limestone: light grey to grey, occasionally off white, calcilutite, grades to calcisiltite in part, argillaceous, grades to marl, minor carbonaceous flecks and lithics, minor to rare fossil fragments, subblocky to amorphous, dispersive in part, soft to very soft.
1600	1630	100	Limestone: as above.
1630	1690	100	Limestone: as above.
1690	1720	100	Limestone: off white to light grey green, predominantly light grey, calcilutite grading to calcisiltite, argillaceous, grades to marl, carbonaceous flecks and lithics, rare fossil fragments, subblocky, soft.
1720	1750	100	Limestone: as above.
1750	1780	100	Limestone: as above, calcisiltite grading to calcilutite.
1780	1810	100	Limestone: as above.
1810	1840	100	Limestone: light grey to grey, predominantly light grey, calcilutite grading to calcisiltite, argillaceous, grades to marl, carbonaceous flecks and lithics, rare fossil fragments, subblocky, soft.
1840	1870	100	Limestone: as above.

1870	1900	100	Limestone: light grey to light grey brown, occasionally off white, calcisiltite, grading to calcarenite in part, argillaceous, grades to marl, carbonaceous flecks and lithics, minor fossil fragments, subblocky, occasionally blocky, soft, occasionally firm.
1900	1930	100	Limestone: as above.
1930	1960	100	Limestone: as above.
1960	1990	100	Limestone: light grey to light grey brown, calcisiltite, grading to very fine calcarenite in part, argillaceous, grades to marl, common lithics, minor carbonaceous flecks and laminae, rare pyrite, subblocky to blocky, soft to firm.
1990	2000	100	Limestone: as above.
2000	2010	100	Limestone: light grey to light grey green, occasionally grey, calcisiltite, grades to calcilutite in part, argillaceous, minor lithics and carbonaceous flecks, subblocky to blocky, amorphous in part, dispersive in part, soft to very soft.
2010	2020	100	Limestone: as above.
2020	2030	100	Limestone: as above.
2030	2040	100	Limestone: light grey to light grey green, calcisiltite grading to calcilutite, argillaceous, grades to marl, minor carbonaceous flecks and lithics, amorphous to sub blocky, dispersive, very soft to soft, occasionally firm.
2040	2050	100	Limestone: as above.
2050	2060	100	Limestone: as above.
2060	2070	100	Limestone: as above.
2070	2080	100	Limestone: light grey green to light grey brown, calcilutite, grading to calcisiltite, strongly argillaceous, grades to marl, minor lithics and carbonaceous flecks, amorphous to subblocky, dispersive in part, sticky in part, soft.
2080	2090	100	Limestone: as above, calcilutite, grading to marl.
2090	2100	100	Limestone: as above, calcilutite, grading to marl.
2100	2110	100	Limestone: as above.

2110	2120	100	Limestone: light grey green to light brown, calcilutite, grading to marl, strongly argillaceous, minor lithics and carbonaceous flecks, amorphous to subblocky, dispersive in part, soft.
2120	2130	100	Limestone: as above.
2130	2140	100	Limestone: as above.
2140	2150	100	Limestone: light grey to light grey green brown, occasionally grey, (mottled), calcisiltite, grades to marl, commonly argillaceous, common carbonaceous flecks, occasional carbonaceous laminae, lithics, subblocky, amorphous in part, soft, occasionally firm.
2150	2160	100	Limestone: as above.
2160	2170	100	Limestone: as above.
2170	2180	100	Limestone: light grey, greenish grey to grey, (mottled), calcisiltite grading to calcilutite, grades to marl, commonly argillaceous, as above.
2180	2190	100	Limestone: as above.
2190	2200	100	Limestone: as above.
2200	2210	100	Limestone: as above.
2210	2220	100	Limestone: light grey to grey, occasionally grey brown, (mottled), calcisiltite, commonly argillaceous, common carbonaceous flecks, lithics, fine laminae, subblocky to blocky, soft, occasionally firm.
2220	2230	100	Limestone: as above.
2230	2240	100	Limestone: as above.
2240	2250	100	Limestone: as above.
2250	2260	100	Limestone: light grey to grey, predominantly grey, calcisiltite, as above.
2260	2270	100	Limestone: as above, commonly argillaceous, grades to marl.
2270	2280	100	Limestone: as above.
2280	2290	100	Limestone: light grey to grey, occasionally grey brown, calcisiltite, commonly argillaceous, common carbonaceous flecks, lithics, very fine laminae, subblocky to blocky, soft, occasionally firm.

,

2290	2300	100	Limestone: as above.
2300	2310	100	Limestone: as above.
2310	2320	100	Limestone: as above.
2320	2330	100	Limestone: light grey to grey, calcisiltite, argillaceous, grades to marl, as above.
2330	2340	100	Limestone: as above.
2340	2350	100	Limestone: as above.
2350	2360	100	Limestone: light grey to grey, occasionally grey green, calcsiltite, argillaceous, grades to marl, common lithics and carbonaceous flecks, minor very fine carbonaceous laminae, subblocky to blocky, soft to firm.
2360	2370	100	Limestone: as above.
2370	2380	100	Limestone: as above.
2380	2390	100	Limestone: as above.
2390	2400	100	Limestone: light grey to grey, calcisiltite, grades to calcilutite in part, minor calcarenite, argillaceous, grades to marl, minor carbonaceous flecks and laminae, subblocky, amorphous in part, soft, occasionally firm.
2400	2410	100	Limestone: as above.
2410	2420	100	Limestone:: as above, becoming darker grey with increasing depth.
2420	2430	100	Limestone: as above.
2430	2440	100	Limestone: light grey to grey to grey brown, becoming dark grey with increasing depth, calcisiltite, grades to calcilutite in part, common lie argillaceous, grades to marl, common carbonaceous flecks and lithics, very fine laminae, subblocky, firm to soft.
2440	2450	100	Limestone: as above.
2450	2460	100	Limestone: as above.
2460	2470	100	Limestone: as above.

E

2470	2480	100	Limestone: grey to grey brown, occasionally light grey brown and dark grey brown, calcisiltite, grades to calcilutite, strongly argillaceous, grades to marl, minor carbonaceous flecks and lithics in part, blocky, firm.
2480	2490	100	Limestone: as above.
2490	2500	100	Limestone: as above.
2500	2505	100	Limestone: as above.
2505	2510	100	Limestone: as above.
2510	2515	100	Limestone: grey to grey brown, calcisiltite, grades to calcilutite, strongly argillaceous, grades to marl, minor carbonaceous flecks and lithics in part, blocky, firm.
2515	2520	100	Limestone: as above.
2525	2530	100	Limestone: as above.
2530	2535	100	Limestone: as above.
2535	2540	100	Limestone: off white to light grey, occasionally grey, (mottled), calcisiltite, grading to calcilutite, argillaceous, grades to marl, minor carbonaceous flecks, lithics, subblocky, soft, occasionally firm.
2540	2545	100	Limestone: as above.
2545	2550	100	Limestone: as above.
2550	2555	100	Limestone: as above,
2555	2560	100	Limestone: as above, becoming darker grey with increasing depth.
2560	2565	100	Limestone: as above.
2565	2570	100	Limestone: light grey to grey, occasionally light grey, calcisiltite, grading to calcilutite, argillaceous, grades to marl, minor carbonaceous flecks, lithics, rare glauconite, subblocky, soft, occasionally firm.
2570	2575	100	Limestone: as above.

.

2575	2580	100	Limestone: grey to dark grey to grey brown, calcilutite, grading to calcisiltite, strongly argillaceous, becoming more argillaceous with increasing depth, subblocky to blocky, firm to soft.
2580	2585	100	Limestone: as above.
2585	2590	100	Limestone: as above.
2590	2595	100	Limestone: as above.
2595	2600	100	Limestone: grey to dark grey to grey brown, calcisiltite, grading to calcilutite, argillaceous, minor carbonaceous flecks, subblocky to blocky, firm to soft.
2600	2605	90 10	Limestone: as above. Claystone: grey to grey brown to dark grey brown, strongly calcareous, grades to marl in part, minor carbonaceous flecks, blocky to subblocky, firm to soft.
2605	2610	50 50	Claystone: as above. Limestone: as above.
2610	2615	90 10	Claystone: as above. Limestone: as above.
2615	2620	100	Claystone: grey to grey brown, strongly calcareous, as above.
2620	2625	100	Claystone: as above.
2625	2630	100	Claystone: as above.
2630	2635	100	Claystone: grey to grey brown to dark grey brown, strongly calcareous, minor carbonaceous flecks, blocky to subblocky, firm to soft.
2635	2640	100	Claystone: as above.
2640	2645	100	Claystone: as above.
2645	2650	100	Claystone: as above.
2650	2655	100	Claystone: grey brown to dark grey brown, strongly calcareous, minor carbonaceous flecks, blocky to subblocky, firm to soft.
2655	2670	100	Claystone: as above.
2670	2675	100	Claystone: as above.

•

I

2675	2680	100	Claystone: as above.
2680	2685	100	Claystone: as above.
2685	2690	100	Claystone: grey brown to dark grey brown, strongly calcareous, minor carbonaceous flecks, blocky to subblocky, firm to soft.
2690	2695	100	Claystone: as above.
2695	2700	100	Claystone: as above.
2700	2705	100	Claystone: as above.
2705	2710	100	Claystone: grey to grey green, occasionally dark grey green, strongly calcareous, trace carbonaceous flecks and laminae, subblocky, occasionally amorphous, soft, occasionally firm.
2710	2715	100	Claystone: as above.
2715	2730	100	Claystone: as above.
2730	2760	100	Claystone: as above.
2760	2775	100	Claystone: grey to grey green, occasionally light grey green, calcareous, minor to trace carbonaceous flecks and laminae, minor lithics, rare pyrite, rare glauconite, subblocky to amorphous, dispersive in part, sticky in part, soft to very soft.
2775	2790	100	Claystone: as above.
2790	2805	100	Claystone: grey to grey green, light grey green in part, calcareous, trace lithics and carbonaceous flecks, rare pyrite, rare forams, rare glauconite, subblocky to amorphous, dispersive in part, soft to very soft.
2805	2820	100	Claystone: as above.
2820	2835	100	Claystone: as above.
2835	2850	100	Claystone: as above.
2850	2865	100	Claystone: light grey to grey green, calcareous, trace lithics, silty in part, rare pyrite, rare glauconite, subblocky to blocky, soft to firm.
2865	2880	100	Claystone: as above.
2880	2895	100	Claystone: as above

I

`

2895	2910	100	Claystone: light green grey to grey, (mottled) calcareous, silty in part, as above, blocky to subblocky, soft to firm.
2910	2940	100	Claystone: as above.
2940	2970	100	Claystone: light grey to grey, (mottled), calcareous silty in part, trace lithics, rare pyrite, rare glauconite, subblocky to blocky, soft to firm.
2985	3000	100	Claystone: as above.
3000	3015	100	Claystone: as above.
3015	3030	100	Claystone: as above.
3030	3045	100	Claystone: light grey to grey, occasionally dark grey, calcareous, silty in part, minor lithics, blocky to subblocky, soft, occasionally firm.
3045	3060	100	Claystone: as above.
3060	3075	100	Claystone: as above.
3075	3090	100	Claystone: as above.
3090	3105	100	Claystone: light grey to grey, occasionally dark grey, calcareous, silty in part, minor lithics, rare pyrite, blocky to subblocky, soft, occasionally firm.
3105	3110	100	Claystone: as above.
3110	3120	100	Claystone: as above.
3120	3130	100	Claystone: light grey to grey, occasionally dark grey, calcareous, silty in part, minor lithics, rare pyrite, blocky to subblocky, soft, occasionally firm.
3130	3140	100	Claystone: as above.
3140	3150	100	Claystone: as above.
3150	3160	100	Claystone: light grey to grey, occasionally dark grey, calcareous, silty, minor lithics, rare pyrite, subblocky to blocky, sott.
3160	3170	100	Claystone: as above, becoming silty with increasing depth.

I

3170	3180	90 10	Claystone: as above, silty in part. Siltstone: light grey brown to brown grey, grades to claystone, moderately calcareous, micromicaceous in part, rare glauconite, rare pyrite, subblocky to blocky, soft to firm.
3180	3190	90 10	Claystone: as above, silty in part. Siltstone: as above.
3190	3200	80 20	Claystone: as above. Siltstone: as above.
3200	3210	70 30	Claystone: as above. Siltstone: as above.
3210	3220	50 50	Claystone: as above. Siltstone: as above.
3220	3230	100	Siltstone: light grey to brown, occasionally grey brown, very finely arenaceous, grades to very fine sandstone, very fine to fine sandstone grains, common lithics, rare pyrite, trace glauconite, blocky to subblocky, soft to firm.
3230	3240	60 40	Siltstone: as above. Sandstone: clear, white to light grey, very fine to medium, predominantly fine, subrounded to rounded, occasionally angular, moderate sorting, lithics, minor glauconite, calcareous cement, argillaceous matrix, friable to loose, fair to good visual porosity, no fluorescence.
3240	3250	80 20	Sandstone: as above, fair to good visual porosity, no fluorescence. Siltstone: as above.
3250	3260	90 10	Sandstone: as above, fine to coarse, occasionally very coarse, predominantly medium, poorly sorted, clean, loose, good visual porosity, no fluorescence. Siltstone: as above.
3260	3270	90 10	Sandstone: as above, fair to good visual porosity, no fluorescence. Siltstone: light grey to brown, occasionally grey brown, very finely arenaceous, grades to very fine sandstone, very fine to fine sandstone grains, common lithics, rare pyrite, trace glauconite, blocky to subblocky, soft t0 firm.
3270	3280	100	Sandstone: as above, generally clean and loose, fair to good visual porosity, no fluorescence.

Î

I

3280	3290	90 10	Sandstone: clear, white to light grey, fine to coarse, predominantly medium to coarse, occasionally very coarse, subrounded to rounded, poorly sorted, weak calcareous cement, minor argillaceous matrix, trace lithics and pyrite, generally clean, generally loose, fair to good visual porosity, no fluorescence. Siltstone: light grey to brown, occasionally grey brown, very finely arenaceous, grades to very fine sandstone, very fine to fine sandstone grains, common lithics, rare pyrite, trace glauconite, blocky to subblocky, soft to firm.
3290	3300	90 10	Sandstone: as above. Siltstone: as above.
3300	3310	100	Sandstone: as above, predominantly medium, common coarse to very coarse, weak calcareous cement, generally clean, good visual porosity, no fluorescence.
3310	3320	100	Sandstone: as above, good visual porosity.
3320	3330	100	Sandstone: as above.
3330	3340	85 10 5	Sandstone: as above, coarse to very coarse in part, good visual porosity no fluorescence. Siltstone: brown to grey brown, grades to claystone, weakly calcareous, finely laminated in part, micromicaceous in part, carbonaceous flecks, trace pyrite, blocky, firm. Coal: black, brown black in part, finely laminated, vitreous lustre, minor pyrite, blocky to hackly fracture, brittle, firm.
3340	3350	85 10 15	Sandstone: as above, good visual porosity. Siltstone: as above. Coal: as above.
3350	3360	85 10 5	Sandstone: as above, good visual porosity. Siltstone: as above. Coal: as above.
3360	3370	85 10 5	Sandstone: as above, good visual porosity. Siltstone: as above. Coal: as above.

3370	3380	50 40	Sandstone: clear, white to light grey, very fine to coarse, predominantly medium to coarse, subangular to subrounded, occasionally angular fracture grains, poorly sorted, weak calcareous cement, argillaceous matrix, trace pyrite, , friable to loose, generally loose, fair to good visual porosity, no fluorescence. Siltstone:: brown grey to light grey, argillaceous in part, grading to claystone, weak to moderately calcareous, micromicaceous in part,
			trace pyrite, trace to minor carbonaceous material, blocky to amorphous, dispersive in part, soft,
3380	3390	50 40	Sandstone: as above, fair visual porosity, no fluorescence. Siltstone. as above.
3390	3400	50 50	Sandstone: as above. Siltstone: as above
3400	3410	60 40	Siltstone: as above. Sandstone: as above.
3410	3420	80 20	Siltstone: brown grey to grey, occasionally light grey, grades to claystone in part, weak to moderately calcareous trace glauconite, trace pyrite, very fine laminae, subblocky to amorphous, dispersive in part, soft. Sandstone: as above, fair visual porosity.
3420	3430	90 10	Siltstone: as above. Sandstone: clear, white, fine to coarse, predominantly medium to coarse, subangular to subrounded, occasionally angular, moderate sorting, poorly sorted in part, weak calcareous cement, trace pyrite, friable to loose, fair visual porosity, no fluorescence.
3430	3440	90 10	Siltstone: as above. Sandstone: as above, fair visual porosity.
3440	3450	70 30	Siltstone: as above. Sandstone: clear, white, fine to coarse, predominantly medium to coarse, subangular to subrounded, occasionally angular, moderate sorting, poorly sorted in part, weak calcareous cement, trace pyrite, friable to loose, fair visual porosity, no fluorescence.
3450	3460	60 40	Siltstone: as above. Sandstone: as above.
3460	3472	70 30	Sandstone: as above. Siltstone: as above.

.

I

I

ſ

I

Appendix 2

<u>APPENDIX II</u>

CHECKSHOT SURVEY

PE600647

÷.,

This is an enclosure indicator page. The enclosure PE600647 is enclosed within the container PE900826 at this location in this document.

The enclosure PE600647 has the following characteristics: ITEM_BARCODE = PE600647 CONTAINER_BARCODE = PE900826 NAME = Checkshot survey Suite #1 Run #2 BASIN = GIPPSLAND PERMIT = VIC/P24TYPE = WELL SUBTYPE = VELOCITY_CHART DESCRIPTION = Checkshot survey (appendix 2 of WCR) for Great White-1 REMARKS = $DATE_CREATED = 08/01/1997$ DATE_RECEIVED = 26/06/1997 $W_NO = W1162$ WELL_NAME = Great White-1 CONTRACTOR = Schlmberger CLIENT_OP_CO = Esso Australia Resources Limited

(Inserted by DNRE - Vic Govt Mines Dept)

Appendix 3



5th Cut A4 Dividers Re-order Code 97052 Appendix 3

<u>APPENDIX III</u>

DEVIATION SUMMARY

•

ECI DRILLING ORGANIZATION DEVIATION SUMMARY

WELL NAME: GREAT WHITE-1

EVENT: DRL **DATE:** 01/15/97

.

WELLBORE SECTION	GENERAL INFOR	KICK OFF DATE	12/26/96
DEPTH (m)	3,472.00	AFE NUMBER	L66016007
RIG NAME:	SEDCO 703	SPUD DATE	12/26/96
DRILLING CONTRACTOR	SEDCO	RIG RELEASE DATE	
CALCULATION METHOD	Minimum Curvature	SECTION PLANE	268.24
CLOSURE DISTANCE (m)	28,25	CLOSURE DIRECTION	268.24

DEVIATION SUMMARY										
DEPTH	TIE	ANGLE	AZIMUTH	T.V.D.	N/S (-)	E/W (-)	SECTION	DLS	BUR	TYPE
<u>(m KB)</u>	IN			(m KB)	<u>(m)</u>	<u>(m)</u>	(m)	(*/30)	(*/30)	
0.00	Y	0.000		0.00	0.00	0.00	0.00	0.00	0.00	
717.00		0.500	0.00	716.99	3.13	0.00	-8.14	0.02	0.02	то
1,023.00		0.250	90.00	1,022.99	4.47	0.67	-8.85	0.05	-0.02	MS
1,464.00		0.250	38.00	1,463.99	5.23	2.22	-10.43	0.01	0.00	MS
1,524.20		0.700	220.30	1,524.19	5.05	2.06	-10.26	0.47	0.22	MD
1,693.20		1.000	233.80	1,693.17	3.39	0.20	-8.35	0.06	0.05	MD
1,721.80		1.000	250.60	1,721.77	3.16	-0.24	-7.90	0.31	0.00	MD
1,805.80		1.300	239.20	1,805.75	2.43	-1.75	-6.37	0.13	0.11	MD
1,836.00		1.300	241.40	1,835.94	2.09	-2.35	-5.76	0.05	0.00	MD
1,866.00		1.400	242.60	1,865.93	1.76	-2.97	-5.13	0.10	0.10	MD
1,895.00		1.400	247.70	1,894.92	1.46	-3.61	-4.48	0.13	0.00	MD
1,924.00		1.500	247.20	1,923.91	1.18	-4.29	-3.79	0.10	0.10	MD
2,013.00		1.900	241.10	2,012.87	0.02	-6.66	-1.39	0.15	0.13	MD
2,042.00		1.800	256.50	2,041.86	-0.32	-7.52	-0.52	0.52	-0.10	MD
2,158.00		1.900	259.30	2,157.80	-1.10	-11.18	3.16	0.03	0.03	MD
2,244.00		1.900	263.80	2,243.75	-1.52	-14.00	5.99	0.05	0.00	MD
2,273.00		2.000	265.10	2,272.73	-1.62	-14.98	6.98	0.11	0.10	MD
2,360.00		1.800	270.60	2,359.68	-1.74	-17.86	9.86	0.09	-0.07	MD
2,386.00		1.800	268.80	2,385.67	-1.74	-18.68	10.68	0.07	0.00	MD
2,413.00		1.700	271.80	2,412.66	-1.74	-19.50	11.50	0.15	-0.11	MD
2,444.00		1.700	272.00	2,443.65	-1.71	-20.42	12.42	0.01	0.00	MD
2,471.00		1.400	272.00	2,470.64	-1.68	-21.15	13.15	0.33	-0.33	MD
2,499.00		1.400	272.50	2,498.63	-1.65	-21.83	13.82	0.01	0.00	MD
2,526.00		1.400	273.10	2,525.62	-1.62	-22.49	14.48	0.02	0.00	MD

PAGE: 1

ECI DRILLING ORGANIZATION DEVIATION SUMMARY

PAGE: 2

WELL NAME: GREAT WHITE-1

-

EVENT: DRL

DATE: 01/15/97

DEVIATION SUMMARY										
DEPTH	TIE	ANGLE	AZIMUTH	T.V.D.	N/S (-)	E/W (-)	SECTION	DLS	BUR	TYPE
(m KB)	IN		(*)	<u>(m KB)</u>	<u>(m)</u>	(m)	<u>(m)</u>	<u>(°/30)</u>	<u>(°/30)</u>	
2,584.00		1.200	271.20	2,583.61	-1.57	-23.80	15.79	0.11	-0.10	MD
2,613.00		1.100	273.70	2,612.60	-1.55	-24.38	16.37	0.12	-0.10	MD
2,647.00		1.100	286.10	2,646.59	-1.44	-25.02	17.01	0.21	0.00	MD
2,705.00		1.000	276.00	2,704.58	-1.23	-26.06	18.04	0.11	-0.05	MD
2,734.00 2,763.00		1.000	273.70	2,704.58 2,733.58 2,762.58	-1.19	-26.56	18.54	0.04	0.00	MD
2,792.00		0.800 0.900	281.60 274.00	2,762.58	-1.13	-27.01	18.99	0.24	-0.21	MD
2,820.00		0.800	279.90	2,791.58 2,819.58	-1.07 -1.02	-27.44 -27.85	19.41	0.16	0.10	MD
2,849.00		0.900	281.60	2,848.58	-0.94	-28.27	19.82 20.24	0.14 0.11	-0.11 0.10	MD MD
2,907.00		0.700	284.80	2,906.57	-0.76	-29.06	21.02	0.11	-0.10	MD MD
2,936.00		0.600	287.80	2,935.57	-0.67	-29.38	21.34	0.11	-0.10	MD
2,965.00		0.600	283.20	2,964.57	-0.59	-29.67	21.63	0.05	0.00	MD
3,023.00		0.600	280.90	3,022.57	-0.46	-30.26	22.21	0.01	0.00	MD
3,080.00		0.500	285.00	3,079.57	-0.34	-30.79	22.74	0.06	-0.05	MD
3,138.00		0.000	231.90	3,137.57	-0.27	-31.03	22.98	0.26	-0.26	MD
3,224.00		1.100	86.30	3,223.56	-0.22	-30.21	22.16	0.38	0.38	MD
3,253.00		$0.400 \\ 0.400$	107.00 85.80	3,252.56	-0.23	-29.84	21.79	0.76	-0.72	MD
3,321.00		0.500	101.40	3,280.56 3,320.56	-0.25 -0.27	-29.65	21.60	0.16	0.00	MD
3,339.00		0.500	115.30	3,338.56	-0.32	-29.34 -29.19	21.29 21.14	0.12	0.07	MD
3,398.00		0.600	112.10	3,397.56	-0.55	-28.67	20.63	0.20 0.05	0.00 0.05	MD MD
3,447.00		0.700	138.80	3,446.56	-0.87	-28.24	20.21	0.19	0.05	MD
				\$7110100	0.07	20.24	20.21	0.19	0.00	MD
								[
L										

,

.

Appendix 4



5th Cut A4 Dividers Re-order Code 97052 Appendix 4

APPENDIX IV

MUDLOG

PE600648

This is an enclosure indicator page. The enclosure PE600648 is enclosed within the container PE900826 at this location in this document.

The enclosure PE600648 has the following characteristics: ITEM_BARCODE = PE600648 CONTAINER_BARCODE = PE900826 NAME = Master log BASIN = GIPPSLAND PERMIT = VIC/P24TYPE = WELLSUBTYPE = MUD_LOG DESCRIPTION = mudlog (appendix 4 of WCR) for Great White-1 REMARKS = Date produced = TD date $DATE_CREATED = 06/01/1997$ $DATE_RECEIVED = 26/06/1997$ $W_NO = W1162$ WELL_NAME = Great White-1 CONTRACTOR = Geoservices logging CLIENT_OP_CO = Esso Australia Resources Limited

(Inserted by DNRE - Vic Govt Mines Dept)