APPENDIX 1

SMILER-1

Palynological Analysis

Palynological Analysis of Smiler-1, Gippsland Basin.

by

Alan D. Partridge

Biostrata Pty Ltd
A.C.N. 053 800 945

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Palynological Range Chart for Smiler-1 ..... Attached

INTERPRETATIVE DATA

Introduction

Eighteen sidewall cores were analysed in Smiler-1. The author selected, split and cleaned the sidewall cores and forwarded them to Laola Pty Ltd in Perth for processing to prepare the palynological slides. Lithological units and palynological zones recognised in the Latrobe Group and overlying Seaspray Group are given in the following summary. The interpretative data with zone identification and Confidence Ratings are recorded in Table 1 and basic data on residue yields, preservation and diversity are recorded on Tables 2 and 3. All species which have been identified with binomial names are tabulated on the palynomorph range chart. Relinquishment list for palynological slides and residues from samples analysed in Smiler-1 are provided at the end of the report.

Palynological Summary for Smiler-1

AGE	UNIT/FACIES (metres)	SPORE-POLLEN ZONES (MICROPLANKTON ZONES)	DEPTHS (metres)
	SEASPRAY GROUP 147-2507m		
PLIOCENE TO LATE MIOCENE	Gippsland Limestone	*M. lipsis - M. galeatus* (*Operculodinium* Superzone)	1242 (1242)
OLIGOCENE	Lakes Entrance Formation	*P. tuberculatus* (*Operculodinium* Superzone)	2475-2505 (2475-2505)
	LATROBE GROUP Pyritic claystone 2507-2508.5m		
EOCENE	Unnamed coarse grained glauconitic sandstone 2508.5-2520.5m	Eocene assemblages which are Zone indeterminate	2507.5-2520
	LATROBE GROUP Undifferentiated coarse clastics 2520.5-2611.5m.	*L. balmei*	2544-2547
PALEOCENE		Lower *L. balmei*	2595

T.D. 2611.5mKB (logger)

Between 5 to 13 grams (average 8.9 grams) of the sidewall cores were processed for palynological analysis. Residue yields were mostly low to very low except for Latrobe Group samples between 2544-2595m and two samples from the Seaspray Group (Table 2). Palynomorph concentration on the slides was moderate to high in the eight samples from the Seaspray Group but only very low to moderate from

the Latrobe Group with several samples effectively barren (Table 3). Spore-pollen diversity was generally moderate in the Seaspray Group averaging 19+ species per sample but very variable in the Latrobe Group from barren to moderate. Microplankton diversity was moderate to high in Seaspray Group, (average 11+ species/sample) but essentially negligible in the Latrobe Group.

Geological Comments

1. The palynological results from Smiler-1 are similar to wells on the adjacent Mackerel field in that age dating of the sandy section at the top of Latrobe Group was unsuccessful. Instead the Paleocene *L. balmei* Zone was identified in two siltstone/shale beds within the Latrobe Group, and the basal 37 metres of the Seaspray Group was analysed and assigned to Oligocene part of the *P. tuberculatus* Zone.

2. In addition the shallowest sidewall core in the well at 1242m on analysis gave a surprisingly young latest Miocene to Pliocene age. Based on the current correlation to the Haq *et al.* (1987, 1988) the sample would be approximately 5 million years and indicate depositional rates in excess of 200 metres/million years within the Late Neogene. This result is comparable with the thickness of the foraminiferal zones in Hapuku-1 but is in significant conflict with the current zonation in the closer Mackerel-1 and 2 wells. The shallowest sample analysed in Mackerel-3 at 2133m is Middle Miocene in age.

3. The basal 35 metres of the Seaspray Group is sampled by seven sidewall cores which are overwhelmingly dominated by dinoflagellates (53% to 85% of spore-pollen and microplankton count). Other marine fossils in the samples are the chitinous inner liners of foraminifera and rare scolecodonts. The assemblages are typical of the *P. tuberculatus* Zone and *Operculodinium* Superzone and are considered to represent a deep water open marine environment. As there is only a 2 metre sampling gap between the deepest sample and the log pick for the top of Latrobe it considered unlikely that the newly recognised *F. leos* microplankton Zone (Partridge 1994, 1995) is present.

4. The top of the Latrobe Group is marked by a 1.5 metre thick spike on the density log from 2507-2508.5m. The two sidewall core shot in this unit where pyritic claystones which gave extremely low yields and are considered barren of diagnostic palynomorphs. The absence of abundant glauconite in

the samples suggests a lithological correlation to the Flounder Formation rather than the Gurnard Formation.

5. A 12 metres thick light grey to pale green coarse grained quartz sandstone with a trace to ~20% glauconite was sampled in four sidewall cores over the log interval 2508.5-2520.5m. Although kerogen was extracted from all four samples palynomorphs in the assemblages were either very rare or appeared mainly to be contaminants from the overlying Seaspray Group. The best estimate is that the section is probably Early Eocene in age. Notwithstanding the glauconite content the lithology of the unit is overall too coarse grained to be assigned to the Gurnard Formation.

6. Two siltstone/shale beds were sampled in the 90 metres of Latrobe Group coarse clastics penetrated below 2520m. The shallowest bed between 2534.5-2550m contained assemblages derived from non-marine environments and the overall similarity between the samples suggest the bed was probably rapidly deposited. The deeper bed between approximately 2593.5-2598.5m at the base of the logged interval gave a marine assemblage assigned to the Lower *L. balmei* Zone.

Biostratigraphy

Zone and age determinations are based on the spore-pollen zonation scheme proposed by Stover & Partridge (1973), and the dinoflagellate zonation scheme published in outline by Partridge (1975, 1976). Although other modifications and embellishments to both zonation schemes can be found in the many palynological reports on the Gippsland Basin wells drilled by Esso Australia Ltd this work is not collated or summarised in a single report.

Author citations for most spore-pollen species can be sourced from Stover & Partridge (1973, 1982) or other references cited herein whilst dinoflagellates author citations can be found in the index of Lentin & Williams (1993). Species names followed by "ms" are unpublished manuscript names.

***Monotocidites galeatus* to *Myrtaceidites lipsis* spore-pollen Zones.**
Interval: 1242.0 metres
Age: Late Miocene to Early Pliocene (= B1-A4 foram. zones)
The shallowest sidewall core recovered in Smiler-1 contained a high diversity spore-pollen suite in a palynomorph assemblage dominated by microplankton (> 67%). A latest Late Miocene to earliest Pliocene age is assigned to the sample based on both species abundances and key first appearances. The composition of the spore-pollen assemblage comprises nearly equal abundances of spores and

angiosperm pollen (~45% each) but only a moderate abundance of gymnosperm pollen (< 10%). *Cyathidites* spp., *Gleicheniidites* spp. and *Laevigatosporites* spp. are the dominant spores while amongst the angiosperms *Casuarina* pollen (= *Haloragacidites harrisii*) at ~22% dominates with *Chenopodipollenites chenopodiaceoides* (9%) and *Tubulifloridites antipodica* (3.2%) the next most abundant types. The abundance of *Nothofagidites* spp. in contrast is conspicuously low at less than 2% of total count. These abundances are characteristic of the transition zone above the *Cingulatisporites bifurcatus* Zone and the succeeding *Myrtaceidites lipsis* Zone (Partridge 1975, 1988). This assignment on relative abundances is supported by the first or oldest occurrences of *Cingulatisporites bifurcatus* (Couper) Martin 1973 and *Monotocidites galeatus* Macphail, Partridge & Truswell, 1993.

The *M. galeatus* Zone was defined from Murray Basin by Macphail & Truswell (1993) as the interval from the earliest appearance of eponymous species and/or consistent *M. lipsis* to the earliest consistent (or abundant) appearance of *Tubulifloridites pleistocenicus* Martin 1973. As such the definition overlaps with concept of the *Myrtaceidites lipsis* Zone established in the Gippsland Basin which in its strictest sense is the interval from the oldest occurrence of *M. lipsis* to oldest abundant occurrence of *Tubulifloridites* spp. including *T. pleistocenicus*. However, *Monotocidites galeatus* occurs below the base of *M. lipsis* in the Gippsland Basin but does not extend to the base of the *C. bifurcatus* Zone as implied by Macphail & Truswell (1993, fig.1).

Because *M. lipsis* was not recorded in Smiler-1 this sample does not strictly conform to the zone of that name. However, it also does not conform to character of underlying *C. bifurcatus* Zone which typically has *Nothofagidites* abundances of between 5% to 10%. Instead it must lie in either the as yet inadequately documented transition between the *C. bifurcatus* and *M. lipsis* Zones as found in Flounder-5 (Partridge, 1988) or belong to the younger zone even though the eponymous species is absent.

The associated microplankton assemblage is dominated by *Operculodinium* spp. > 40% (all considered different species to *O. centrocarpum*) and *Spiniferites* spp. ~35%. Although diverse the assemblage is largely undocumented or undescribed. The assemblage readily conforms to *Operculodinium* Superzone but is clearly high within this microflora based on the oldest occurrence of *Melitasphaeridium choanophorum*.

***Proteacidites tuberculatus* spore-pollen Zone.**
Interval: 2475.0-2505.0 metres
Age: Oligocene.

The seven sidewall cores analysed from the basal 35 metres of the Lakes Entrance Formation of the Seaspray Group all contain the spore *Cyatheacidites annulatus* which is diagnostic of the *P. tuberculatus* Zone. Other index species are a single specimen of *Granodiporites nebulosus* in the basal sample at 2505m which is considered diagnostic of the Lower *P. tuberculatus* Zone and key index spore species *Foveotriletes lacunosus* (at 2497m) and *Cyathidites subtilis* (at 2495m) which are both diagnostic of the Middle *P. tuberculatus* Zone. Although the spore-pollen assemblages in individual samples are of moderate diversity (17+ species/sample), with an overall diversity of 40+ species for the zone, most species are long ranging.

The associated microplankton assemblages belonging to the *Operculodinium* Superzone are either dominated by abundant *Spiniferites* spp. as at 2475m and 2487m (41% and 59% respectively) or abundant *Operculodinium centrocarpum* between 2495-2505m (average 48%). The next most common and consistent species is *Tectatodinium scabroellipticus* ms which has a maximum abundance of 13% at 2487m. The consistent presence of *Protoellipsodinium simplex* ms and somewhat less consistent but often frequent occurrence of *Pyxidinopsis pontus* ms and *Dapsilidinium pseudocolligerum* suggest that this section is somewhat younger than the *Fromea leos* microplankton Zone of Partridge (1994, 1995) found in the wells Blackback-3 and Gudgeon-1 to the southeast of Smiler-1.

Frequent to abundant microforaminiferal inner liners in all samples and rare but consistent scolecodonts (chitinous mouthparts or teeth of marine annelid worms) support the abundant microplankton in indicating a distal open marine environment of deposition.

Zone indeterminate interval: 2507.5-2520.0 metres.
Age: Eocene.

The six sidewall cores over this interval were either barren of palynomorphs or those identified were mostly considered to be contaminants. The highest sample at 2507.5m contained virtually nothing on the kerogen slide while the oxidised slide was a sparse mixture of amorphous kerogen (~75%) and biodegraded terrestrial kerogen (~25%). The few palynomorphs recorded are all considered contaminants. In the next sample at 2508m the kerogen slide appeared to be mostly organically bound clumps of fine pyrite crystals while the oxidised slide was composed of either a chemical reaction product or organic pseudomorphs of the pyrite crystal clumps. The next three samples at 2509m, 2511.5m and 2514m

were all fairly similar. The slides contained clumps of amorphous or biodegraded terrestrial kerogen which were heavily impregnated with very fine pyrite. These clumps are possibly derived from the glauconite grains in the sample which may have originated as faecal pellets. Most of the few palynomorphs identified in the samples are probably contaminants from the overlying Seaspray Group section. The exceptions are single fragments of the dinoflagellates *Glaphrocysta* sp. at 2511.5m and *Homotryblium tasmanense* at 2514m. Neither of these specimens can be taken as zone diagnostic although the latter would suggest an Early Eocene age. The deepest sample at 2520m contained the largest recorded assemblages but all are long ranging species and could all be contaminants from the overlying Seaspray Group.

***Lygistepollenites balmei* spore-pollen Zone.**
Interval: 2544.0-2547.0 metres
Age: Paleocene.
The three sidewall cores analysed from the siltstone/shale bed evident on the gamma and density/porosity logs between 2534.5-2550m gave high yields with relatively high palynomorph concentrations. Average diversity was 20+ species/sample and total diversity 33+ species. All three samples were very similar in composition being dominated by the two gymnosperm pollen *Phyllocladidites mawsonii* (average 35%) and *Lygistepollenites balmei* (average 22%). The abundance of the latter species together with the rare occurrence of *Gambierina rudata* provides confident assignment to the undifferentiated *L. balmei* Zone. Strangely, other key index spore-pollen species and microplankton were absent. Neither the preservation nor the concentrations of the palynomorphs on the slides is considered to be a significant factor in their absence. Another feature of the spore-pollen species composition is the absence of high abundances of the gymnosperm pollen species *Araucariacites australis* and *Dilwynites granulatus/tuberculatus* which were found associated with high microplankton abundances and diversity at shale/siltstone beds interpreted to represent condensed section in Roundhead-1 (Partridge 1989).

Combining these observations the three assemblages in Smiler-1 are interpreted to reflect non-marine environments. The striking similarity between the assemblages also suggests that the siltstone/shale bed was relatively rapidly deposited. It is uncertain, however, whether the non-marine character of the assemblages is consequence of the provenance of the sediments or is reflecting the environment of deposition. The former interpretation is a distinct possibility considering the palaeoshoreline location of Smiler-1 during the Paleocene. In contrast it is considered highly unlikely that the siltstone/shale bed could represent a condensed section.

Lower *Lygistepollenites balmei* spore-pollen Zone.
Interval: 2595.0 metres
Age: Paleocene.

The deepest sidewall core in Smiler-1 at 2595m from a shale at the base of the electric log readings gave a moderate yield with low palynomorph concentrations but did contain a single specimen of the index pollen species *Proteacidites angulatus* as well as the dinoflagellates *Deflandrea speciosus, Glaphrocysta retiintexta* and *Senegalinium dilwynense* and can confidently be assigned to the Lower *L. balmei* Zone. In contrast to the siltstone/shale between 2534.5-2550m this basal shale is clearly marine and could represent a condensed section. Unfortunately the microplankton are not zone diagnostic.

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Table-1: Interpretative Palynological Data for Smiler-1, Gippsland Basin.

SAMPLE TYPE	DEPTH (Metres)	Spore-Pollen Zone (Microplankton Zone)	*CR	Comments and Key Species
SWC 30	1242.0	*M. lipsis-M. galeatus* (*Operculodinium* Sz)	B1 B2	Microplankton 67%. FAD *Monotocidites galeatus*.
SWC 27	2475.0	*P. tuberculatus* (*Operculodinium* Sz)	B2 B2	Microplankton 78%. LAD *Dapsilidinium pseudocolligerum*
SWC 25	2487.0	*P. tuberculatus* (*Operculodinium* Sz)	B2 B2	Microplankton 82%. *Selenophemphix nephroides* present.
SWC 23	2495.0	Middle *P. tuberculatus* (*Operculodinium* Sz)	B2 B2	Microplankton 85%. FAD *Cyathidites subtilis*.
SWC 22	2497.0	Middle *P. tuberculatus* (*Operculodinium* Sz)	B2 B2	FAD *Foveotriletes lacunosus*.
SWC 20	2501.0	*P. tuberculatus* (*Operculodinium* Sz)	B2 B2	Microplankton 81%. *Selenophemphix nephroides* present.
SWC 19	2503.0	*P. tuberculatus* (*Operculodinium* Sz)	B2 B2	
SWC 18	2505.0	Lower *P. tuberculatus* (*Operculodinium* Sz)	B2 B2	Microplankton 53%. LAD *Granodiporites nebulosus* FAD *Cyatheacidites annulatus*.
SWC 17	2507.5	Indeterminate		All fossils are contaminants.
SWC 16	2508.0	Indeterminate		No fossils recorded.
SWC 15	2509.0	Indeterminate		No fossils recorded.
SWC 14	2511.5	Indeterminate		All fossils are contaminants.
SWC 13	2514.0	Indeterminate		Single specimen of *Homotryblium tasmaniense*.
SWC 12	2520.0	Indeterminate		Most fossils recorded are contaminants.
SWC 7	2544.0	*L. balmei*	B2	*Phyllocladidites mawsonii* 27%. *Lygistepollenites balmei* 28%
SWC 6	2545.0	*L. balmei*	B2	*P. mawsonii* 38%. *L. balmei* 22%.
SWC 5	2547.0	*L. balmei*	B2	*P. mawsonii* 41%. *L. balmei* 17%.
SWC 1	2595.0	Lower *L. balmei*	B2	*Proteacidites angulatus* present with dinoflagellates *Glaphrocysta retiintexta* and *Senegalinium dilwynense*.

Sz = Superzone

* Confidence Rating
LAD = Last Appearance Datum
FAD = First Appearance Datum

Confidence Ratings

The concept of Confidence Ratings applied to palaeontological zone picks was originally proposed by Dr. L.E. Stover in 1971 to aid the compilation of micropalaeontological and palynological data and to expedite the revision of the then rapidly evolving zonation concepts in the Gippsland Basin. The original scheme which mixed confidence in fossil species assemblage with confidence due to sample type gradually proved to be rather limiting as additional refinements to existing zonations were made. With the development of the STRATDAT computer database as a replacement for the increasingly unwieldy paper based Palaeontological Data Sheet files a new format for the Confidence Ratings was proposed. These are given for individual zone assignments on Table 1, and their meanings are summarised below:

Alpha codes: Linked to sample type

- **A** Core
- **B** Sidewall core
- **C** Coal cuttings
- **D** Ditch cuttings
- **E** Junk basket
- **F** Miscellaneous/unknown
- **G** Outcrop

Numeric codes: Linked to fossil assemblage

1	**Excellent confidence:**	High diversity assemblage recorded with key zone species.
2	**Good confidence:**	Moderately diverse assemblage recorded with key zone species.
3	**Fair confidence:**	Low diversity assemblage recorded with key zone species.
4	**Poor confidence:**	Moderate to high diversity assemblage recorded without key zone species.
5	**Very low confidence:**	Low diversity assemblage recorded without key zone species.

BASIC DATA

Table 2: Basic Sample Data - Smiler-1, Gippsland Basin.

SAMPLE TYPE	DEPTH (Metres)	REC (cm)	LITHOLOGY	SAMPLE WT (g)	RESIDUE YIELD
SWC 30	1242.0	3.0	Medium grey calcilutite - well cleaned.	12.8	Moderate
SWC 27	2475.0	2.0	Medium grey calcareous claystone - moderately well cleaned.	7.2	Low
SWC 25	2487.0	<1.5	Medium grey calcareous claystone - poorly cleaned.	5.5	Low
SWC 23	2495.0	2.3	Dark grey calcareous claystone. Firm - moderately well completed.	10.3	Low
SWC 22	2497.0	2.0	Medium-dark grey calcilutite. Friable sample - poorly cleaned.	7.8	Very low
SWC 20	2501.0	2.5	Medium grey calcareous claystone - moderately well cleaned.	9.7	Moderate
SWC 19	2503.0	~2.0	Brown-grey calcareous claystone. Sample broken - poorly cleaned.	7.4	Very low
SWC 18	2505.0	1.5	Medium grey calcareous claystone - poorly cleaned.	7.3	Very low
SWC 17	2507.5	~1.5	Mottled brown green pyritic claystone with minor glauconite - poorly cleaned.	9.6	Very low
SWC 16	2508.0	1.5	Dark grey pyritic claystone with floating coarse quartz grains. Sample broken - poorly cleaned.	11.5	Very low
SWC 15	2509.0	3.3	Light grey to pale green coarse grained quartz sandstone with ~10-20% glauconite and white clay matrix - moderately well cleaned.	13.6	Moderate
SWC 14	2511.5	<2.5	Light grey to pale green coarse grained quartz sandstone with ~15% glauconite - poorly cleaned.	10.4	Very low
SWC 13	2514.0	~2.5	Off white coarse grained quartz sandstone with ~10% glauconite. Rare pebbles up to 6mm diameter - moderately well cleaned.	8.1	Very low
SWC 12	2520.0	<2.0	Coarse quartz sandstone with light brown matrix (~40%) and trace (<5%) glauconite. Poorly cleaned - some mud contamination.	6.0	Low
SWC 7	2544.0	~2.0	Dark grey/brown siltstone. Sample broken - poorly cleaned.	8.5	High
SWC 6	2545.0	~1.5	Dark grey/brown siltstone. Moderately well cleaned.	8.8	Moderate
SWC 5	2547.0	~2.0	Dark grey siltstone. Sample well cleaned.	9.4	High
SWC 1	2595.0	<1.5	Medium grey, medium to coarse grained sandstone with argillaceous matrix. Not cleaned.	6.7	Moderate

Table-3: Basic Palynomorph Data for Smiler-1.

SAMPLE TYPE	DEPTH (Metres)	Palynomorph Concentration	Palynomorph Preservation	Number S-P Species*	Microplankton Abundance	Number MP Species*
SWC 30	1242.0	High	Poor-good	39+	Abundant	10+
SWC 27	2475.0	High	Poor-fair	15+	Abundant	12+
SWC 25	2487.0	High	Poor-good	17+	Abundant	13+
SWC 23	2495.0	High	Poor-good	17+	Abundant	13+
SWC 22	2497.0	High	Poor-fair	9+	Abundant	11+
SWC 20	2501.0	Moderate	Poor-fair	19+	Abundant	12+
SWC 19	2503.0	High	Poor-fair	19+	Abundant	7+
SWC 18	2505.0	Moderate	Poor-fair	25+	Abundant	12+
SWC 17	2507.5	Very low	Poor	(4+)	NA	
SWC 16	2508.0	Barren				
SWC 15	2509.0	Barren				
SWC 14	2511.5	Very low	Poor	(3+)	Rare	(3+)
SWC 13	2514.0	Very low	Poor		Very rare	2+ (1)
SWC 12	2520.0	Low	Very poor-good	11+	Frequent	(5+)
SWC 7	2544.0	Low	Poor-fair	19+	NR	
SWC 6	2545.0	Moderate	Fair	21+	NR	
SWC 5	2547.0	Moderate	Poor-fair	19+	NR	
SWC 1	2595.0	Low	Poor-fair	13+	Rare	3+

NR = Not recorded
( )* = Caved S-P or MP Species

Diversity:

Very low	= 1-5	species
Low	= 6-10	species
Moderate	= 11-25	species
High	= 26-74	species
Very high	= 75+	species

RELINQUISHMENT LIST - PALYNOLOGY SLIDES

WELL NAME & NO: SMILER-1
PREPARED BY: A.D. PARTRIDGE
DATE: 9 AUGUST 1995 Sheet 1 of 2

SAMPLE TYPE	DEPTH (M)	CATALOGUE NUMBER	DESCRIPTION
SWC 30	1242.0	P196798	Kerogen slide: filtered/unfiltered
SWC 30	1242.0	P196799	Oxidised slide 2: 8μm filter
SWC 30	1242.0	P196800	Oxidised slide 3: 8μm filter
SWC 30	1242.0	P196801	Oxidised slide 4: 15μm filter - 1/2 cover slip
SWC 27	2475.0	P196802	Kerogen slide: filtered/unfiltered
SWC 27	2475.0	P196803	Oxidised slide 2: 8μm filter - 1/2 cover slip
SWC 25	2487.0	P196804	Kerogen slide: filtered/unfiltered
SWC 25	2487.0	P196805	Oxidised slide 2: 8μm filter - 1/2 cover slip
SWC 23	2495.0	P196806	Kerogen slide: filtered/unfiltered
SWC 23	2495.0	P196807	Oxidised slide 2: 8μm filter - 18mm cover slip
SWC 22	2497.0	P196808	Kerogen slide: filtered/unfiltered
SWC 22	2497.0	P196809	Oxidised slide 2: 8μm filter - 18mm cover slip.
SWC 20	2501.0	P196810	Kerogen slide: filtered/unfiltered
SWC 20	2501.0	P196811	Oxidised slide 2: 8μm filter
SWC 19	2503.0	P196812	Kerogen slide: filtered/unfiltered
SWC 18	2505.0	P196813	Kerogen slide: filtered/unfiltered
SWC 18	2505.0	P196814	Oxidised slide 2: 8μm filter - 1/4 cover slip.
SWC 17	2507.5	P196815	Oxidised slide 2: 8μm filter - 1/2 cover slip.
SWC 17	2507.5	P196816	Kerogen slide: filtered/unfiltered - 1/4 cover slip.
SWC 16	2508.0	P196817	Kerogen slide: filtered/unfiltered - 1/4 cover slip.
SWC 16	2508.0	P196818	Oxidised slide 2: 8μm filter - 1/2 cover slip.
SWC 15	2509.0	P196819	Kerogen slide: filtered/unfiltered - 18mm cover slip
SWC 15	2509.0	P196820	Oxidised slide 2: 8μm filter
SWC 15	2509.0	P196821	Oxidised slide 3: 8μm filter
SWC 14	2511.5	P196822	Kerogen slide: filtered/unfiltered
SWC 14	2511.5	P196823	Oxidised slide 2: 8μm filter - 1/2 cover slip.
SWC 13	2514.0	P196824	Kerogen slide: filtered/unfiltered
SWC 13	2514.0	P196825	Oxidised slide 2: 8μm filter - 1/2 cover slip.
SWC 12	2520.0	P196826	Kerogen slide: filtered/unfiltered
SWC 12	2520.0	P196827	Oxidised slide 2: 8μm filter - 1/2 cover slip.

RELINQUISHMENT LIST - PALYNOLOGY SLIDES

WELL NAME & NO: SMILER-1
PREPARED BY: A.D. PARTRIDGE
DATE: 9 AUGUST 1995

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SAMPLE TYPE	DEPTH (M)	CATALOGUE NUMBER	DESCRIPTION
SWC 7	2544.0	P196828	Kerogen slide: filtered/unfiltered
SWC 7	2544.0	P196829	Oxidised slide 2: 8μm filter
SWC 7	2544.0	P196830	Oxidised slide 3: 8μm filter
SWC 7	2544.0	P196831	Oxidised slide 4: 15μm filter
SWC 7	2544.0	P196832	Oxidised slide 5: 15μm filter
SWC 6	2545.0	P196833	Kerogen slide: filtered/unfiltered
SWC 6	2545.0	P196834	Oxidised slide 2: 8μm filter
SWC 6	2545.0	P196835	Oxidised slide 3: 8μm filter
SWC 5	2547.0	P196836	Kerogen slide: filtered/unfiltered
SWC 5	2547.0	P196837	Oxidised slide 2: 8μm filter
SWC 5	2547.0	P196838	Oxidised slide 3: 8μm filter
SWC 5	2547.0	P196839	Oxidised slide 4: 15μm filter
SWC 5	2547.0	P196840	Oxidised slide 5: 15μm filter
SWC 1	2595.0	P196841	Kerogen slide: filtered/unfiltered - 1/4 cover slip.
SWC 1	2595.0	P196842	Oxidised slide 2: 8μm filter
SWC 1	2595.0	P196843	Oxidised slide 3: 8μm filter
SWC 1	2595.0	P196844	Oxidised slide 4: 15μm filter - 1/2 cover slip.

RELINQUISHMENT LIST - PALYNOLOGY RESIDUES

WELL NAME & NO: SMILER-1
PREPARED BY: A.D. PARTRIDGE
DATE: 14 AUGUST 1995 Sheet 1 of 1

SAMPLE TYPE	DEPTH (M)	DESCRIPTION
SWC 15	2509.0	Oxidised residue
SWC 7	2544.0	Kerogen residue
SWC 7	2544.0	Oxidised residue
SWC 6	2545.0	Kerogen residue
SWC 5	2547.0	Kerogen residue
SWC 5	2547.0	Oxidised residue