

**LAKES OIL N.L.****CUTTINGS DESCRIPTIONS****WELL NAME:** WOMBAT No.2**DATE:** 30-03-2004**GEOLOGIST:** David Horner**PAGE:** 1

<b>Interval (m)</b>	<b>%</b>	<b>Description</b>
15-20	100	SAND: light orange grey, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, no cement, trace orange brown argillaceous matrix, quartzose, common orange brown stained quartz grains, trace orange lithics, unconsolidated, very good inferred porosity.
20-40	100	SAND: dark brown grey, very fine to pebble, dominantly very coarse, subangular to rounded, very poorly sorted, no cement, common medium grey argillaceous and silt matrix, quartzose, common orange black stained quartz grains, trace black lithics, unconsolidated, very good inferred porosity.
40-50	100	SAND: medium brown, very fine to pebble, dominantly very coarse, subangular to rounded, very poorly sorted, no cement, trace medium grey argillaceous and silt matrix, quartzose, trace orange black stained quartz grains, trace black lithics, trace black coal detritus, unconsolidated, very good inferred porosity.
50-70	80	SAND: as for 40-50m.
	20	CLAYSTONE: medium to dark grey, very silty, soft, very dispersive, non fissile.
70-90	100	SAND: medium brown, very fine to grit, dominantly very coarse, subangular to rounded, very poorly sorted, no cement, trace very dark brown grey argillaceous and silt matrix, quartzose, trace orange black stained quartz grains, trace black lithics, trace black coal detritus, unconsolidated, very good inferred porosity.
90-110	95	SAND: light brown grey, very fine to pebble, dominantly very coarse, subangular to rounded, very poorly sorted, no cement, trace very dark brown grey argillaceous and silt matrix, quartzose, trace orange black stained quartz grains, trace black lithics, trace black coal detritus, unconsolidated, very good inferred porosity.
	5	SHELL FRAGMENTS: off white to light brown, bivalves, gastropods, forams.
110-120	60	SAND: light grey, very fine to pebble, dominantly very coarse to grit, subangular to rounded, very poorly sorted, no cement, common dark brown grey argillaceous and silt matrix, quartzose, trace black lithics, trace black coal detritus, unconsolidated, very good inferred porosity.
	40	SHELL FRAGMENTS: as for 90-110m.
120-130	30	SAND: as for 110-120m.
	30	MARL: light to medium grey to medium green grey to medium brown grey, abundant fossil fragments including bryozoa, forams, shell fragments, echinoid spines and sponge spicules, very soft, very dispersive, non fissile.
	40	SHELL FRAGMENTS: as for 90-110m.
130-140	100	CALCARENITE: light grey to light yellow grey, fine to medium grained, common to abundant fine fossil fragments, trace coarse echinoid spines, abundant bryozoa in part, moderately argillaceous, trace very fine to rarely coarse quartz sand grains, trace black glauconite, friable, poor visual porosity, no oil fluorescence.
140-150	100	CALCARENITE: light to medium grey, fine to medium grained, common to abundant fine fossil fragments, trace coarse echinoid spines, abundant bryozoa in part, moderately argillaceous, trace very fine to rarely coarse quartz sand grains, trace black glauconite, friable, poor visual porosity, no oil fluorescence.
150-170	100	CALCARENITE: as for 140-150m.

Interval (m)	%	Description	PAGE: 2
170-190	100	CALCARENITE: light to medium grey to light brown grey, fine to medium grained, weak to moderate calcareous cement, common to abundant fine fossil fragments, trace coarse echinoid spines, abundant bryozoa in part, common forams, moderately argillaceous, trace very fine quartz sand grains in part, trace black glauconite, friable, poor visual porosity, no oil fluorescence.	
190-200	100	CALCARENITE: light brown grey to medium grey, fine to medium grained, weak to moderate calcareous cement, common to abundant fine fossil fragments, trace coarse echinoid spines, abundant bryozoa in part, common forams, moderately argillaceous, trace very fine quartz sand grains in part, trace medium to dark green glauconite occasionally as fossil infill, friable, poor visual porosity, no oil fluorescence.	
200-230	100	CALCARENITE: light brown to light brown grey, fine to coarse grained, weak to moderate calcareous cement, abundant fossil fragments including echinoid spines, bryozoa, forams, shell fragments, slightly argillaceous, trace very fine quartz sand grains in part, trace medium green glauconite occasionally as fossil infill, friable, poor visual porosity, no oil fluorescence.	
230-260	100	CALCARENITE: light brown to light brown grey, minor yellow orange, fine to coarse grained, weak to moderate calcareous cement, abundant fossil fragments including echinoid spines, bryozoa, forams, shell fragments, slightly argillaceous, trace very fine quartz sand grains in part, trace medium green glauconite occasionally as fossil infill, friable, poor visual porosity, no oil fluorescence.	
260-280	100	CALCARENITE: light brown grey to medium grey, fine to coarse grained, weak to moderate calcareous cement, common fossil fragments including echinoid spines, bryozoa, forams, shell fragments, moderately argillaceous, trace medium green glauconite occasionally as fossil infill, friable, poor visual porosity, no oil fluorescence.	
280-305	100	CALCARENITE: light brown grey to medium grey, fine to medium grained, weak to moderate calcareous cement, common fossil fragments including echinoid spines, bryozoa, forams, shell fragments, moderately argillaceous, trace medium green glauconite occasionally as fossil infill, friable, poor visual porosity, no oil fluorescence.	
305-330	100	CALCARENITE: light brown grey, fine to medium grained, weak calcareous cement, common fossil fragments including echinoid spines, bryozoa, forams, shell fragments, moderately argillaceous, trace medium green glauconite, friable, very poor visual porosity, no oil fluorescence.	
330-350	100	CALCARENITE: light brown grey to light grey, rarely medium grey, fine grained, weak calcareous cement, calcilitic in part, common fossil fragments including bryozoa and forams, slightly argillaceous, moderately argillaceous in part, trace medium green glauconite, friable, very poor visual porosity, no oil fluorescence.	
350-370	100	CALCARENITE: light brown grey to light grey, rarely medium grey, fine grained, weak calcareous cement, calcilitic in part, common fossil fragments including bryozoa and forams, slightly argillaceous, moderately to very argillaceous and marly in part, trace medium green glauconite, friable, very poor visual porosity, no oil fluorescence.	
370-400	100	CALCARENITE: light to medium brown grey, fine grained, weak calcareous cement, calcilitic in part, common fossil fragments including bryozoa and forams, slightly argillaceous, moderately to very argillaceous and marly in part, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
400-432	100	CALCARENITE: light to medium brown grey, fine grained, weak calcareous cement, calcilitic in part, common fossil fragments including bryozoa and forams, moderately argillaceous, very argillaceous and marly in part, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
432-444	100	CALCARENITE: light to medium brown grey, fine grained, weak calcareous cement, calcilitic and calcisiltitic in part, common fossil fragments including bryozoa and forams, moderately argillaceous, very argillaceous and marly in part, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
444-462	100	CALCARENITE: light to medium brown grey, fine grained, weak calcareous cement, calcilitic and calcisiltitic in part, trace to common fossil fragments including bryozoa and forams, moderately argillaceous, occasionally very argillaceous and marly, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	

Interval (m)	%	Description	PAGE: 3
462-489	100	CALCARENITE: light to medium brown grey, fine grained, weak calcareous cement, calcilitic and calcisiltitic in part, trace to common fossil fragments including bryozoa and forams, moderately argillaceous, very argillaceous and marly in part, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
489-510	100	CALCARENITE: light to medium brown grey, fine grained, weak to moderate calcareous cement, calcilitic and calcisiltitic in part, trace to common fossil fragments including bryozoa and forams, moderately argillaceous, very argillaceous and marly in part, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
510-537	100	CALCARENITE: light to medium brown grey, fine grained, weak to moderate calcareous cement, very calcilitic and calcisiltitic in part, trace to common fossil fragments including bryozoa and forams, moderately argillaceous to occasionally very argillaceous and marly, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
537-549	100	CALCARENITE: light to medium brown grey, fine grained, weak to moderate calcareous cement, very calcilitic and calcisiltitic in part, trace to common fossil fragments including bryozoa and forams, moderately argillaceous to occasionally very argillaceous and marly in part, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
549-558	100	CALCARENITE: light to medium brown grey, fine grained, weak to moderate calcareous cement, very calcilitic and calcisiltitic in part, trace to common fossil fragments including bryozoa and forams, moderately argillaceous to occasionally very argillaceous and marly, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
558-570	100	CALCARENITE: light to medium brown grey, fine grained, moderate calcareous cement, very calcilitic and calcisiltitic in part, trace fossil fragments including bryozoa and forams, moderately argillaceous to occasionally very argillaceous and marly in part, trace glauconite, friable, very poor visual porosity, no oil fluorescence.	
570-579	100	CALCARENITE: light to medium brown grey, fine grained, moderate calcareous cement, very calcilitic and calcisiltitic, trace fossil fragments including bryozoa and forams, often very argillaceous and marly, trace glauconite, friable to moderately hard, very poor visual porosity, no oil fluorescence.	
579-582	90	CALCARENITE: as for 570-579m.	
	10	MARL: medium brown grey, very calcareous, trace fossil fragments in part, soft, sticky, non fissile.	
582-594	80	CALCARENITE: as for 570-579m.	
	20	MARL: as for 579-582m.	
594-603	70	CALCARENITE: light to medium brown grey, fine grained, moderate calcareous cement, occasionally cryptocrystalline, very calcilitic and calcisiltitic, trace fossil fragments including bryozoa and forams, often very argillaceous and marly, trace glauconite, friable to moderately hard, very poor visual porosity, no oil fluorescence.	
	30	MARL: as for 579-582m.	
603-606	80	CALCARENITE: as for 594-603m.	
	20	MARL: as for 579-582m.	
606-612	70	CALCARENITE: as for 594-603m.	
	30	MARL: as for 579-582m.	
612-615	60	CALCARENITE: light to medium brown grey, fine grained, becoming very calcilitic and calcisiltitic, trace fossil fragments, often very argillaceous grading to mar, trace glauconite, soft to moderately hard, no visual porosity, no oil fluorescence.	
	40	MARL: light to medium brown grey, light to medium green grey, very calcareous grading to calcilitite, trace fossil fragments, soft, sticky, non fissile.	

Interval (m)	%	Description	PAGE: 4
615-624	40	CALCILUTITE: white to very light brown white, slightly to very argillaceous, soft, sticky, non fissile.	
	60	MARL: as for 612-615m.	
621-624	60	CALCILUTITE: as for 615-624m.	
	40	MARL: as for 612-615m.	
624-636	50	CALCILUTITE: as for 615-624m.	
	50	MARL: as for 612-615m.	
636-642	30	CALCILUTITE: as for 615-624m.	
	70	MARL: light to medium green grey, light to medium brown grey, very light grey to medium grey, very calcareous grading to calcilutite, trace fossil fragments, soft, sticky, non fissile.	
642-648	20	CALCILUTITE: white to very light brown white, slightly to very argillaceous, siltitic in part, soft, sticky, non fissile.	
	80	MARL: as for 636-642m.	
648-663	10	CALCILUTITE: as for 642-648m.	
	90	MARL: as for 636-642m.	
663-684	100	MARL: light green grey to light to medium brown grey, very calcareous grading to calcilutite, trace fossil fragments, soft, sticky, non fissile.	
684-690	100	MARL: light green grey to light to medium brown grey, very calcareous grading to calcilutite, trace fossil fragments, trace pyrite, soft, sticky, non fissile.	
690-714	100	MARL: light to medium green grey, light to medium brown grey, very calcareous grading to calcilutite, trace fossil fragments, trace pyrite, soft to firm, non fissile.	
714-723	100	MARL: light to medium green to light green grey, very calcareous grading to calcilutite, trace fossil fragments, trace pyrite, soft to firm, non fissile.	
723-750	100	MARL: light to medium green to green grey, very calcareous grading to calcilutite, trace fossil fragments, trace pyrite, firm, non fissile.	
750-759	100	MARL: light to medium green to light green grey, very calcareous grading to calcilutite, trace fossil fragments, trace glauconite, trace pyrite, soft to firm, non fissile.	
759-768	100	MARL: light to medium green to light green grey, very calcareous grading to calcilutite, trace fossil fragments, trace glauconite, trace pyrite, soft to firm, non fissile.	
768-774	100	MARL: light to medium green to light green grey, very calcareous grading to calcilutite, trace fossil fragments, trace glauconite, trace pyrite, soft to firm, non fissile.	
774-777	10	MARL: as for 768-774m.	
	80	SILTY CLAYSTONE: medium to dark brown grey, trace coarse clear quartz sand grains, moderately to very carbonaceous, common black coal detritus, soft, non fissile.	
	10	COAL: black, earthy to subvitreous, blocky fracture, very argillaceous in part, hard, brittle.	
777-780	90	SILTY CLAYSTONE: as for 774-777m.	
	10	COAL: as for 774-777m.	
780-783	80	SILTY CLAYSTONE: medium to dark brown grey, light brown in part, trace clear coarse quartz sand grains, often very carbonaceous, common black coal detritus, soft, non fissile.	
	20	COAL: black, often dark brown and very argillaceous, earthy to subvitreous, blocky fracture, hard, brittle.	

Interval (m)	%	Description	PAGE: 5
783-786	30	SANDSTONE: off white to light grey, very fine to fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix, quartzose, common black coaly detritus, friable, poor visual porosity, no oil fluorescence.	
	40	SILTY CLAYSTONE: as for 780-783m.	
	30	COAL: as for 780-783m.	
786-789	20	SANDSTONE: as for 783-786m.	
	40	SILTY CLAYSTONE: as for 780-783m.	
	40	COAL: as for 780-783m.	
789-804	100	SANDSTONE: light brown, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica cement, trace medium brown argillaceous and silt matrix, quartzose often with orange brown stain, trace green and grey black cherty lithics, trace black coaly detritus, friable, very good inferred porosity, no oil fluorescence.	
804-807	70	SANDSTONE: as for 789-804m.	
	20	SILTY CLAYSTONE: medium to dark brown grey, occasionally light brown, very finely arenaceous and kaolinitic in part, often very carbonaceous, common black coal detritus, soft, non fissile.	
	10	COAL: as for 780-783m.	
807-810	80	SANDSTONE: light brown, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica and calcareous cements, common medium brown argillaceous and silt matrix, quartzose often with orange brown stain, trace green and grey black cherty lithics, trace coarse brown mica flakes, trace black coaly detritus, friable, good inferred porosity, no oil fluorescence.	
	20	SILTY CLAYSTONE: as for 804-807m.	
801-813	60	SANDSTONE: as for 807-810m.	
	40	SILTY CLAYSTONE: as for 804-807m.	
813-816	80	SANDSTONE: as for 807-810m.	
	20	SILTY CLAYSTONE: as for 804-807m.	
816-819	70	SANDSTONE: as for 807-810m.	
	30	SILTY CLAYSTONE: as for 804-807m.	
819-825	100	SANDSTONE: light brown, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica and calcareous cements, trace to common medium brown argillaceous and silt matrix, quartzose often with orange brown stain, trace green and grey black cherty lithics, trace coarse brown mica flakes, trace black coaly detritus, friable, very good inferred porosity, no oil fluorescence.	
825-828	50	SANDSTONE: light brown, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica and calcareous cements, common medium brown argillaceous and silt matrix, quartzose often with orange brown stain, trace green and grey black cherty lithics, trace coarse brown mica flakes, trace black coaly detritus, friable, good inferred porosity, no oil fluorescence.	
	50	SILTY CLAYSTONE: medium to dark brown grey, very finely arenaceous in part, very carbonaceous, trace to common black coal detritus, soft, non fissile.	

Interval (m)	%	Description	PAGE: 6
828-846	100	SANDSTONE: light brown, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica and calcareous cements, trace medium brown argillaceous and silt matrix, quartzose with minor orange brown stain, trace green and grey black cherty lithics, trace coarse brown mica flakes, trace black coaly detritus, friable, very good inferred porosity, no oil fluorescence.	
846-852	30	SANDSTONE: as for 828-846m.	
	70	SILTY CLAYSTONE: as for 825-828m.	
	Trace	COAL: black, often dark brown and very argillaceous, earthy texture, blocky fracture, hard, brittle.	
852-855	100	SILTY CLAYSTONE: medium to dark brown grey, very finely arenaceous in part, very carbonaceous, trace to common black coal detritus, trace micromica, soft, non fissile.	
855-861	10	SANDSTONE: as for 828-846m.	
	90	SILTY CLAYSTONE: as for 852-855m.	
861-864	90	SANDSTONE: light brown to light brown grey, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica and calcareous cements, common medium brown argillaceous and silt matrix, quartzose with minor brown stain, trace green and grey black cherty lithics, trace coarse brown mica flakes, trace black coaly detritus, friable, very good inferred porosity, no oil fluorescence.	
	10	SILTY CLAYSTONE: as for 852-855m.	
864-867	50	SANDSTONE: as for 861-864m.	
	50	SILTY CLAYSTONE: as for 852-855m.	
867-873	20	SANDSTONE: as for 861-864m.	
	80	SANDSTONE: light brown to light brown grey, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica and calcareous cements, common to abundant medium brown argillaceous and silt matrix, quartzose with minor brown stain, trace green and grey black cherty lithics, trace coarse brown mica flakes, trace black coaly detritus, friable, good inferred porosity, no oil fluorescence.	
873-879	40	SANDSTONE: as for 861-864m.	
	60	SILTY CLAYSTONE: as for 867-873m.m.	
879-882	50	SANDSTONE: as for 861-864m.	
	50	SILTY CLAYSTONE: as for 867-873m.m.	
	Trace	COAL: black, often dark brown and very argillaceous, earthy texture, blocky fracture, hard, brittle.	
882-885	80	SANDSTONE: as for 861-864m.	
	10	SILTY CLAYSTONE: as for 867-873m.m.	
	10	COAL: as for 882-885m.	
885-891	100	SANDSTONE: light brown to light brown grey, very fine to very coarse, dominantly coarse, subangular to rounded, poorly sorted, very weak silica and calcareous cements, trace to common medium brown argillaceous and silt matrix, quartzose with minor brown stain, trace green and grey black cherty lithics, trace coarse brown mica flakes, trace black coaly detritus, friable, very good inferred porosity, no oil fluorescence.	
891-897	30	SANDSTONE: as for 885-891m.	

Interval (m)	%	Description	PAGE: 7
	70	SILTY CLAYSTONE: medium to dark brown grey, occasionally light brown and very finely arenaceous and kaolinitic, very carbonaceous, trace to common black coal detritus, soft, non fissile.	
897-900	80	SANDSTONE: as for 885-891m.	
	20	SILTY CLAYSTONE: as for 891-897m.	
900-906	100	SANDSTONE: as for 885-891m.	
906-909	10	SANDSTONE: as for 885-891m.	
	90	SILTY CLAYSTONE: medium to dark brown grey, occasionally light brown and very finely arenaceous and kaolinitic, very carbonaceous, trace to common black coal detritus, soft, non fissile.	
909-920	100	SILTY CLAYSTONE: as for 906-909m.	
920-924	30	SILTY CLAYSTONE: medium to very dark brown, occasionally light brown and very finely arenaceous and kaolinitic, very carbonaceous, trace to common black coal detritus, soft, non fissile.	
	70	COAL: dark brown to black, very argillaceous, earthy texture, blocky fracture, trace amber, hard, brittle.	
924-933	40	SILTY CLAYSTONE: as for 920-924m.	
	60	COAL: as for 920-924m.	
933-939	60	SANDSTONE: light brown to light brown grey, very fine to very coarse, dominantly medium to coarse, subangular to rounded, poorly sorted, very weak silica cement, trace to common medium brown argillaceous and silt matrix, quartzose with minor brown stain, trace green and grey black cherty lithics, common black coaly detritus, friable, good inferred porosity, no oil fluorescence.	
	30	SILTY CLAYSTONE: as for 920-924m.	
	10	COAL: as for 920-924m.	
939-942	10	SANDSTONE: as for 933-939m.	
	80	SILTY CLAYSTONE: as for 920-924m.	
	10	COAL: as for 920-924m.	
942-948	60	SILTY CLAYSTONE: as for 920-924m.	
	40	COAL: as for 920-924m.	
948-954	80	SILTY CLAYSTONE: medium to very dark brown, occasionally light brown, very carbonaceous, common black coal detritus, soft, non fissile.	
	20	COAL: as for 920-924m.	
954-960	20	SANDSTONE: light brown to light brown grey, very fine to very coarse, dominantly medium to coarse, subangular to rounded, poorly sorted, very weak silica cement, trace to common medium brown argillaceous and silt matrix, clear to opaque quartz grains, trace green and grey black cherty lithics, common black coaly detritus, friable, good inferred porosity, no oil fluorescence.	
	60	SILTY CLAYSTONE: as for 948-954m.	
	20	COAL: as for 920-924m.	

Interval (m)	%	Description	PAGE: 8
960-966	50	SANDSTONE: as for 954-960m.	
	40	SILTY CLAYSTONE: as for 948-954m.	
	10	COAL: as for 920-924m.	
966-969	90	SILTY CLAYSTONE: medium to very dark brown, occasionally light brown, very carbonaceous, common black coal detritus, soft, non fissile.	
	10	COAL: dark brown to black, very argillaceous, earthy texture, blocky fracture, trace amber, hard, brittle.	
969-975	10	SANDSTONE: light brown to light brown grey, very fine to very coarse, dominantly medium to coarse, subangular to rounded, poorly sorted, very weak silica cement, trace to common medium brown argillaceous and silt matrix, clear to opaque quartz grains, trace green and grey black cherty lithics, common black coaly detritus, friable, good inferred porosity, no oil fluorescence.	
	80	SILTY CLAYSTONE: as for 966-969m.	
	10	COAL: as for 966-969m.	
975-978	80	SANDSTONE: light brown grey to light grey, very fine to very coarse, dominantly medium to coarse, subangular to rounded, very poorly sorted, weak silica cement, trace brown argillaceous and silt matrix, clear to opaque quartz grains, trace green and grey black cherty lithics, common black coaly detritus, friable, very good inferred porosity, no oil fluorescence.	
	20	SILTY CLAYSTONE: as for 966-969m.	
	Trace	COAL: as for 966-969m.	
978-984	30	SANDSTONE: as for 975-978m.	
	60	SILTY CLAYSTONE: as for 966-969m.	
	10	COAL: as for 966-969m.	
984-987	20	SANDSTONE: as for 975-978m.	
	70	SILTY CLAYSTONE: medium to dark brown, occasionally light brown and kaolinitic, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	10	COAL: as for 966-969m.	
987-990	10	SANDSTONE: as for 975-978m.	
	80	SILTY CLAYSTONE: as for 984-987m.	
	10	COAL: as for 966-969m.	
990-993	20	SANDSTONE: light brown grey to light grey, very fine to very coarse, dominantly medium to coarse, subangular to rounded, very poorly sorted, weak silica cement, trace brown argillaceous and silt matrix, clear to opaque quartz grains, trace green and grey black cherty lithics, common black coaly detritus, friable, very good inferred porosity, no oil fluorescence.	
	70	SILTY CLAYSTONE: as for 984-987m.	
	10	COAL: as for 966-969m.	
993-1002	10	SANDSTONE: as for 990-993m.	
	90	SILTY CLAYSTONE: light to medium to dark brown, very carbonaceous, common black coal detritus, soft, non fissile.	

Interval (m)	%	Description	PAGE: 9
	Trace	COAL: as for 966-969m.	
1002-1005	20	SANDSTONE: as for 990-993m.	
	80	SILTY CLAYSTONE: medium to dark brown, occasionally light brown and kaolinitic, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	Trace	COAL: as for 966-969m.	
1005-1014	70	SANDSTONE: as for 990-993m.	
	30	SILTY CLAYSTONE: as for 1002-1005m.	
	Trace	COAL: as for 966-969m.	
1014-1017	40	SANDSTONE: light brownish grey, very fine to very coarse, dominantly medium, subangular to rounded, very poorly sorted, weak silica cement, trace to common brown argillaceous and silt matrix, clear to opaque quartz grains, trace green and grey black cherty lithics, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
	60	SILTY CLAYSTONE: as for 1002-1005m.	
	Trace	COAL: as for 966-969m.	
1017-1020	20	SANDSTONE: as for 1014-1017m.	
	80	SILTY CLAYSTONE: as for 1002-1005m.	
1020-1026	30	SANDSTONE: as for 1014-1017m.	
	70	SILTY CLAYSTONE: medium brown, occasionally dark brown, occasionally light brown and kaolinitic, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	Trace	COAL: as for 966-969m.	
1026-1029	10	SANDSTONE: as for 1014-1017m.	
	90	SILTY CLAYSTONE: medium to dark brown, occasionally light brown and kaolinitic, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	Trace	COAL: as for 966-969m.	
1029-1032	Trace	SANDSTONE: as for 1014-1017m.	
	100	SILTY CLAYSTONE: off white to medium brown, occasionally dark brown, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	Trace	COAL: as for 966-969m.	
1032-1041	70	SANDSTONE: light brown grey, very fine to very coarse, dominantly medium to coarse, subangular to rounded, very poorly sorted, weak silica cement, trace to common brown argillaceous and silt matrix, clear to opaque quartz grains, trace green and grey black cherty lithics, trace black coal detritus, friable, good inferred porosity, no oil fluorescence.	
	30	SILTY CLAYSTONE: as for 1029-1032m.	
	Trace	COAL: as for 966-969m.	
1041-1047	30	SANDSTONE: as for 1032-1041m.	
	40	SILTY CLAYSTONE: as for 1029-1032m.	

<b>Interval (m)</b>	<b>%</b>	<b>Description</b>	<b>PAGE: 10</b>
	40	COAL: dark brown to black, very argillaceous, earthy texture, blocky fracture, trace amber, hard, brittle.	
1047-1050	40	SANDSTONE: as for 1032-1041m.	
	50	SILTY CLAYSTONE: off white to light brown, occasionally medium to dark brown, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	10	COAL: as for 1041-1047m.	
1050-1053	30	SANDSTONE: as for 1032-1041m.	
	70	SILTY CLAYSTONE: as for 1047-1050m.	
	Trace	COAL: as for 1041-1047m.	
1053-1056	100	SANDSTONE: light grey to light brown grey, very fine to very coarse, dominantly coarse to very coarse, subangular to rounded, very poorly sorted, weak silica cement, trace to common brown argillaceous and silt matrix, clear to opaque quartz grains, trace green and grey black cherty lithics, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
	Trace	COAL: as for 1041-1047m.	
1056-1059	90	SANDSTONE: as for 1053-1056m.	
	10	SILTY CLAYSTONE: off white to medium to dark brown, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	Trace	COAL: as for 1041-1047m.	
1059-1071	100	SANDSTONE: light grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, weak to moderate silica cement, trace off white argillaceous matrix, clear to opaque quartz grains, trace green and black cherty lithics, trace coarse clear mica flakes, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
1071-1074	80	SANDSTONE: as for 1059-1071m.	
	20	COAL: black to occasionally dark brown, earthy to subvitreous lustre, blocky to subconchoidal fracture, very argillaceous in part, trace amber, hard, brittle.	
1074-1077	10	SANDSTONE: as for 1059-1071m.	
	70	SILTY CLAYSTONE: off white dark brown, dominantly medium brown, very carbonaceous, common black coal detritus, trace micromica, soft, non fissile.	
	20	COAL: as for 1071-1074m.	
1077-1080	10	SANDSTONE: as for 1059-1071m.	
	90	SILTY CLAYSTONE: as for 1074-1077m.	
	Trace	COAL: as for 1071-1074m.	
1080-1083	80	SANDSTONE: light grey to very light brown grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, weak to moderate silica cement, trace to common off white argillaceous matrix, clear to opaque quartz grains, trace green and black cherty lithics, trace coarse clear mica flakes, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
	20	SILTY CLAYSTONE: as for 1074-1077m.	
1083-1086	90	SANDSTONE: as for 1080-1083m.	

Interval (m)	%	Description	PAGE: 11
	10	SILTY CLAYSTONE: as for 1074-1077m.	
1086-1092	100	SILTY CLAYSTONE: medium brown, moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1092-1095	20	SANDSTONE: light grey to very light brown grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, weak to moderate silica cement, trace to common off white argillaceous matrix, clear to opaque quartz grains, trace green and black cherty lithics, trace coarse clear mica flakes, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
	80	SILTY CLAYSTONE: off white to medium brown, moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1095-1101	90	SANDSTONE: as for 1092-1095m.	
	10	SILTY CLAYSTONE: as for 1092-1095m.	
1101-1104	60	SANDSTONE: as for 1092-1095m.	
	20	SILTY CLAYSTONE: off white to dark brown, very carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
	20	COAL: black to occasionally dark brown, earthy to subvitreous lustre, blocky to subconchoidal fracture, very argillaceous in part, hard, brittle.	
1104-1107	70	SANDSTONE: very light brown grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, weak to moderate silica cement, trace off white argillaceous matrix, clear to opaque quartz grains, trace green and black cherty lithics, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
	30	COAL: as for 1101-1104m.	
1107-1110	70	SANDSTONE: as for 1104-1107m.	
	30	SILTY CLAYSTONE: light to medium brown, moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1110-1119	100	SANDSTONE: light grey to light brown grey, very fine to grit, dominantly very coarse, angular to subrounded, poorly sorted, weak to moderate silica cement, trace off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
1119-1131	100	SANDSTONE: light grey to light brown grey, very fine to grit, dominantly very coarse, angular to subrounded, poorly sorted, weak to moderate silica cement, common off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
1131-1134	30	SANDSTONE: as for 1119-1131m.	
	70	CLAYSTONE: light to medium brown, moderately silty, moderately carbonaceous in part, trace black coal detritus, trace micromica, soft, non fissile.	
1134-1137	50	SANDSTONE: as for 1119-1131m.	
	50	CLAYSTONE: as for 1131-1134m.	
1137-1140	30	SANDSTONE: as for 1119-1131m.	
	70	CLAYSTONE: off white to light brown, slightly silty, moderately carbonaceous in part, trace black coal detritus, trace micromica, soft, non fissile.	
1140-1143	100	CLAYSTONE: as for 1137-1140m.	

Interval (m)	%	Description	PAGE: 12
1143-1146	40	SANDSTONE: light grey to light brown grey, very fine to grit, dominantly very coarse, angular to subrounded, poorly sorted, weak to moderate silica cement, abundant off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, friable, good inferred porosity, no oil fluorescence.	
	60	CLAYSTONE: as for 1137-1140m.	
1146-1155	100	SANDSTONE: light grey to light brown grey, very fine to grit, dominantly very coarse, angular to subrounded, poorly sorted, moderate silica cement, trace to common off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence.	
1155-1158	80	SANDSTONE: as for 1146-1155m.	
	20	CLAYSTONE: off white to light brown, moderately silty, moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1158-1170	100	SANDSTONE: light grey to light brown grey, very fine to grit, dominantly very coarse, angular to subrounded, poorly sorted, moderate silica cement, trace to common off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace coarse clear mica flakes, trace black coal detritus, trace pyrite, friable, very good inferred porosity, no oil fluorescence.	
1170-1173	10	SANDSTONE: as for 1158-1170m.	
	90	CLAYSTONE: light to medium brown, moderately silty, moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1173-1176	50	SANDSTONE: as for 1158-1170m.	
	50	CLAYSTONE: off white to medium brown, moderately silty, moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1176-1179	30	SANDSTONE: as for 1158-1170m.	
	70	CLAYSTONE: as for 1173-1176m.	
1179-1182	80	SANDSTONE: light grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, moderate silica cement, trace to abundant off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace coarse clear mica flakes, trace black coal detritus, trace pyrite, friable, good inferred porosity, no oil fluorescence.	
	20	CLAYSTONE: as for 1173-1176m.	
1182-1188	50	SANDSTONE: as for 1179-1182m.	
	50	CLAYSTONE: as for 1173-1176m.	
1188-1194	20	SANDSTONE: as for 1179-1182m.	
	80	CLAYSTONE: off white to medium brown, moderately silty, slightly to moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1194-1197	40	SANDSTONE: as for 1179-1182m.	
	60	CLAYSTONE: as for 1188-1194m.	
1197-1200	60	SANDSTONE: as for 1179-1182m.	
	40	CLAYSTONE: as for 1188-1194m.	

Interval (m)	%	Description	PAGE: 13
1200-1203	90	SANDSTONE: light grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, moderate silica cement, trace to abundant off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace coarse clear mica flakes, trace black coal detritus, trace pyrite, friable, good inferred porosity, no oil fluorescence.	
	10	CLAYSTONE: as for 1188-1194m.	
1203-1206	70	SANDSTONE: as for 1200-1203m.	
	30	CLAYSTONE: off white to medium brown, moderately silty, slightly to moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1206-1212	90	SANDSTONE: as for 1200-1203m.	
	10	CLAYSTONE: as for 1203-1206m.	
1212-1215	70	SANDSTONE: light brown grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, moderate silica cement, common to abundant off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, trace pyrite, friable, good inferred porosity, no oil fluorescence.	
	30	CLAYSTONE: as for 1203-1206m.	
1215-1221	40	SANDSTONE: as for 1212-1215m.	
	60	CLAYSTONE: off white to light brown, rarely medium brown, moderately silty, slightly to moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1221-1223	20	SANDSTONE: as for 1212-1215m.	
	80	CLAYSTONE: as for 1215-1221m.	
1223-1227	70	SANDSTONE: light brown grey, very fine to grit, dominantly coarse to very coarse, angular to subrounded, poorly sorted, moderate silica cement, common to abundant off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, trace coarse clear mica flakes, trace pyrite, friable, very good inferred porosity, no oil fluorescence.	
	30	CLAYSTONE: off white to light brown, rarely medium brown, moderately silty, slightly to moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1227-1230	90	SANDSTONE: as for 1223-1227m.	
	10	CLAYSTONE: off white to light brown, rarely medium to dark brown, moderately silty, slightly to moderately carbonaceous, trace black coal detritus, trace micromica, soft, non fissile.	
1230-1236	80	SANDSTONE: as for 1223-1227m.	
	20	CLAYSTONE: as for 1227-1230m.	
1236-1242	90	SANDSTONE: as for 1223-1227m.	
	10	CLAYSTONE: as for 1227-1230m.	
1242-1245	80	SANDSTONE: light grey to light brown grey, very fine to very coarse, dominantly medium to coarse, angular to subrounded, poorly sorted, moderate silica cement, common off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, trace coarse clear mica flakes, trace pyrite, friable, very good inferred porosity, no oil fluorescence.	
	20	CLAYSTONE: as for 1227-1230m.	
1245-1254	90	SANDSTONE: as for 1242-1245m.	

Interval (m)	%	Description	PAGE: 14
	10	CLAYSTONE: as for 1227-1230m.	
1254-1257	100	SANDSTONE: as for 1242-1245m.	
1257-1260	40	SANDSTONE: as for 1242-1245m.	
	60	CLAYSTONE: off white to medium brown, moderately silty, slightly to moderately carbonaceous, trace black coal flecks and detritus, trace micromica, trace pyrite, soft, non fissile.	
1260-1266	20	SANDSTONE: as for 1242-1245m.	
	80	CLAYSTONE: off white to medium brown, rarely medium grey, moderately to very silty, slightly to moderately carbonaceous, trace black coal flecks and detritus, trace micromica, trace pyrite, soft, non fissile.	
1266-1269	10	SANDSTONE: as for 1242-1245m.	
	90	CLAYSTONE: off white to medium brown, moderately to very silty, slightly to moderately carbonaceous, trace black coal flecks and detritus, trace micromica, trace pyrite, soft, non fissile.	
1269-1272	100	CLAYSTONE: as for 1266-1269m.	
1272-1275	20	SANDSTONE: light grey to light brown grey, very fine to coarse, dominantly fine, angular to subrounded, poorly sorted, moderate silica cement, abundant off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, common pyrite, friable, poor inferred porosity, no oil fluorescence.	
	80	CLAYSTONE: as for 1266-1269m.	
1275-1278	50	SANDSTONE: as for 1272-1275m.	
	50	CLAYSTONE: as for 1266-1269m.	
1278-1281	70	SANDSTONE: light grey to light brown grey, very fine to very coarse, dominantly medium, angular to subrounded, poorly sorted, moderate silica cement, common to abundant off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, trace coarse clear mica flakes, common pyrite, friable, fair to good inferred porosity, no oil fluorescence.	
	30	CLAYSTONE: off white to light brown, occasionally medium brown, moderately to very silty, slightly to moderately carbonaceous, trace fine black coal detritus, trace micromica, trace pyrite, soft, non fissile.	
1281-1287	90	SANDSTONE: light grey to light brown grey, very fine to very coarse, dominantly coarse, angular to subrounded, poorly sorted, moderate silica cement, common off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, trace coarse clear mica flakes, common pyrite, friable, good inferred porosity, no oil fluorescence.	
	10	CLAYSTONE: as for 1278-1281m.	
1287-1296	100	SANDSTONE: as for 1281-1287m.	
1296-1302	40	SANDSTONE: as for 1281-1287m.	
	60	CLAYSTONE: off white to medium brown, moderately to very silty, slightly to moderately carbonaceous, trace black coal flecks and detritus, trace micromica, trace pyrite, soft, non fissile.	

Interval (m)	%	Description	PAGE: 15
1302-1323	100	SANDSTONE: light grey, very fine to pebble, dominantly very coarse, angular to subrounded, poorly sorted, moderate silica cement, trace to common off white argillaceous matrix, clear to opaque quartz grains, trace green and black volcanogenic lithics, trace black coal detritus, trace coarse clear mica flakes, common pyrite, friable, good inferred porosity, no oil fluorescence.	
1323-1326	90	SANDSTONE: as for 1302-1323m.	
	10	CLAYSTONE: as for 1296-1302m.	
1326-1329	100	SANDSTONE: as for 1302-1323m.	
1329-1332	80	SANDSTONE: as for 1302-1323m.	
	20	CLAYSTONE: off white to light brown, moderately to very silty, slightly to moderately carbonaceous, trace black coal flecks and detritus, trace micromica, trace pyrite, soft, non fissile.	
1332-1335	20	SANDSTONE: as for 1302-1323m.	
	80	CLAYSTONE: light to medium brown, moderately to very silty, slightly to moderately carbonaceous, trace black coal flecks and detritus, trace micromica, trace pyrite, soft, non fissile.	
1335-1341	100	CLAYSTONE: as for 1332-1335m.	
1341-1345	40	SANDSTONE: as for 1302-1323m.	
	60	CLAYSTONE: as for 1332-1335m.	
1345-1349	NR	Samples lost in hole due to twist off.	
1349-1350	80	SANDSTONE: as for 1302-1323m.	
	20	CLAYSTONE: as for 1332-1335m.	
1350-1353	70	SANDSTONE: light grey, very fine to pebble, dominantly very coarse, angular to subrounded, poorly sorted, moderate silica cement, common off white argillaceous matrix, clear to opaque quartz grains, trace green grey and black volcanogenic lithics, trace black coal detritus, trace coarse clear mica flakes, common pyrite, friable, good inferred porosity, no oil fluorescence.	
	30	CLAYSTONE: off white to medium brown grey, moderately to very silty, slightly to moderately carbonaceous, trace black coal flecks and detritus, trace micromica, trace pyrite, soft, non fissile.	
1353-1356	30	SANDSTONE: as for 1350-1353m.	
	70	CLAYSTONE: medium brown to medium brown grey, very silty, trace very fine kaolinitic sandstone laminae, common black to brown carbonaceous flecks and fine detritus, trace micromica, soft, very dispersive, non fissile.	
1356-1359	10	SANDSTONE: as for 1350-1353m.	
	90	CLAYSTONE: as for 1353-1356m.	
1359-1362	20	SANDSTONE: as for 1350-1353m.	
	80	CLAYSTONE: medium brown to medium grey, very silty, trace very fine kaolinitic sandstone laminae, common black to brown carbonaceous flecks and fine detritus, trace micromica, soft, very dispersive, non fissile.	
1362-1363	10	SANDSTONE: as for 1350-1353m.	

Interval (m)	%	Description	PAGE: 16
	90	CLAYSTONE: as for 1359-1362m.	
1363-1365	100	CLAYSTONE: light green grey to light grey to medium brown, very silty, common brown to black carbonaceous flecks and fine detritus, trace micromica, soft, non fissile.	
1365-1368	100	CLAYSTONE: light green grey to light grey to medium brown, very silty, trace very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and fine detritus, trace micromica, trace pyrite, soft, non fissile.	
1368-1371	100	CLAYSTONE: as for 1365-1368m.	
	Trace	SANDSTONE: light grey, silty to very fine, subangular to subrounded, moderately sorted, weak silica cement, abundant off white to light grey argillaceous and silt matrix, quartzose with abundant altered feldspar grains, common grey brown and green lithics, common very fine black carbonaceous detritus, friable, no visual porosity, no oil fluorescence.	
1371-1374	90	CLAYSTONE: as for 1365-1368m.	
	10	SANDSTONE: as for 1368-1371m.	
1374-1377	80	SANDSTONE: light to medium grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, common to dominantly abundant white argillaceous matrix, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, rare pyrite, friable, poor visual porosity, very poor inferred porosity, no oil fluorescence.	
	20	CLAYSTONE: as for 1365-1368m.	
1377-1380	80	SANDSTONE: light to medium grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, common to abundant white argillaceous matrix, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, rare pyrite, friable, poor to fair visual porosity, poor inferred porosity, no oil fluorescence.	
	20	CLAYSTONE: as for 1365-1368m.	
1380-1383	100	SANDSTONE: as for 1377-13980m.	
1383-1386	100	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine to medium, subangular to subrounded, moderately sorted, weak silica cement, common to abundant white argillaceous matrix, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, rare pyrite, friable, poor to fair visual porosity, poor inferred porosity, no oil fluorescence.	
1386-1389	100	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, rare pyrite, friable, very poor to poor visual porosity, very poor inferred porosity, no oil fluorescence.	
1389-1391	70	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix - matrix supported, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, rare pyrite, friable, very poor visual porosity, very poor inferred porosity, no oil fluorescence.	
	30	CLAYSTONE: light green grey to light grey to medium brown, very silty, trace very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and fine detritus, trace micromica, trace pyrite, soft, non fissile.	
1391-1392	60	SANDSTONE: as for 1389-1391m.	

Interval (m)	%	Description	PAGE: 17
	40	CLAYSTONE: light to medium green grey to medium grey, very silty, trace very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and fine detritus, trace micromica, soft, non fissile.	
1392-1395	80	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix - matrix supported, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, very poor to poor visual porosity, no oil fluorescence.	
	20	CLAYSTONE: as for 1391-1392m.	
1395-1398	100	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix - matrix supported, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, poor visual porosity, no oil fluorescence.	
1398-1401	100	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix - matrix supported, quartzose with abundant white and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, very poor visual porosity, no oil fluorescence.	
1401-1404	100	SANDSTONE: medium green grey, very fine to medium, occasional coarse grains, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, poor to fair visual porosity, no oil fluorescence.	
1404-1407	100	SANDSTONE: medium green grey, very fine to medium, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, poor visual porosity, no oil fluorescence.	
1407-1410	30	SANDSTONE: as for 1404-1407m.	
	70	CLAYSTONE: light to medium grey to light to medium green grey to light to medium brown grey, very silty, trace very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace micromica, soft to firm, non fissile.	
1410-1413	10	SANDSTONE: light to medium green grey, very fine to rarely medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, no visual porosity, no oil fluorescence.	
	90	CLAYSTONE: as for 1407-1410m.	
1413-1416	40	SANDSTONE: medium green grey, very fine to medium, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, poor visual porosity, no oil fluorescence.	
	60	CLAYSTONE: as for 1407-1410m.	
1416-1419	20	SANDSTONE: light green grey, very fine to fine, dominantly very fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, trace pyrite, friable, no visual porosity, no oil fluorescence.	
	80	CLAYSTONE: as for 1407-1410m.	

Interval (m)	%	Description	PAGE: 18
1419-1425	60	SANDSTONE: light to medium green grey, very fine to rarely medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, very poor visual porosity, no oil fluorescence.	
	40	CLAYSTONE: light to medium grey to light to medium brown to light to medium green grey, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace pyrite, trace micromica, soft to firm, non fissile.	
1425-1428	60	SANDSTONE: light to medium green grey, very fine to occasionally medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, friable, no visual porosity, no oil fluorescence.	
	40	CLAYSTONE: as for 1419-1425m.	
1428-1431	20	SANDSTONE: light to medium green grey, very fine to fine, dominantly very fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, trace pyrite, friable, no visual porosity, no oil fluorescence.	
	80	CLAYSTONE: light to medium grey to brown grey to green grey, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace pyrite, trace micromica, soft to firm, non fissile.	
1431-1434	50	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, trace pyrite, friable, very poor visual porosity, no oil fluorescence.	
	50	CLAYSTONE: light to medium grey to medium brown grey to medium green grey, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace pyrite, trace micromica, soft to firm, non fissile.	
1434-1437	80	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, trace pyrite, common crystalline calcite from fractures, friable, poor visual porosity, no oil fluorescence.	
	20	CLAYSTONE: as for 1431-1434m.	
1437-1440	70	SANDSTONE: light to medium green grey, very fine to dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, trace pyrite, friable, very poor visual porosity, no oil fluorescence.	
	30	CLAYSTONE: as for 1431-1434m.	
1440-1443	40	SANDSTONE: light to medium green grey, very fine to dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, trace pyrite, friable, no visual porosity, no oil fluorescence.	

Interval (m)	%	Description	PAGE: 19
	60	CLAYSTONE: light to medium grey, occasionally medium brown grey to medium green grey, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace pyrite, trace micromica, soft to firm, non fissile.	
1443-1446	20	SANDSTONE: light to medium green grey, very fine to occasionally fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace brown and clear mica flakes, trace pyrite, friable, no visual porosity, no oil fluorescence.	
	80	CLAYSTONE: as for 1440-1443m.	
1446-1449	10	SANDSTONE: as for 1443-1446m.	
	90	CLAYSTONE: as for 1440-1443m.	
1449-1452	Trace	SANDSTONE: as for 1443-1446m.	
	100	CLAYSTONE: light to medium grey, occasionally medium brown grey to medium green grey, common medium brown, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace pyrite, trace crystalline calcite, trace micromica, soft to firm, non fissile.	
1452-1455	60	SANDSTONE: light to medium green grey, very fine to fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace pyrite, friable, no visual porosity, no oil fluorescence.	
	40	CLAYSTONE: light to medium grey, occasionally medium brown grey to medium green grey, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace pyrite, trace micromica, soft to firm, non fissile.	
1455-1458	100	SANDSTONE: as for 1452-1455m.	
1458-1461	70	SANDSTONE: light to medium green grey, very fine to dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace pyrite, friable, no visual porosity, no oil fluorescence.	
	30	CLAYSTONE: light to medium grey, occasionally medium brown grey to medium green grey, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, abundant black coaly detritus, trace pyrite, trace micromica, soft to firm, non fissile.	
1461-1464	60	SANDSTONE: light to medium green grey, very fine, subangular to subrounded, moderately sorted, weak silica and moderate calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace pyrite, moderately hard, no visual porosity, no oil fluorescence.	
	40	CLAYSTONE: as for 1458-1461m.	
1464-1467	100	SANDSTONE: light to medium green grey, very fine to dominantly fine, subangular to subrounded, moderately sorted, weak silica and strong calcareous cements, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace pyrite, trace calcite vein infill, very hard, very poor visual porosity, no oil fluorescence.	

Interval (m)	%	Description	PAGE: 20
1467-1470	100	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and moderate calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown mica flakes, trace pyrite, hard, very poor visual porosity, no oil fluorescence.	
1470-1473	100	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and moderate calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, hard, very poor visual porosity, no oil fluorescence.	
1473-1476	90	SANDSTONE: light to medium green grey, very fine to medium, dominantly fine to medium, subangular to subrounded, moderately sorted, weak silica and moderate calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, very poor visual porosity, no oil fluorescence.	
	10	CLAYSTONE: light to medium grey, occasionally medium brown grey to medium green grey, very silty, common very fine quartz and altered feldspar grains in part, common brown to black carbonaceous flecks and detritus, trace pyrite, trace micromica, soft to firm, non fissile.	
1476-1479	100	SANDSTONE: medium green grey, very fine to medium, dominantly fine to medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, poor visual porosity, no oil fluorescence.	
1479-1482	100	SANDSTONE: medium green grey, very fine to medium, dominantly fine to medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, poor to fair visual porosity, no oil fluorescence.	
1482-1491	100	SANDSTONE: medium green grey, very fine to medium, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, poor to fair visual porosity, no oil fluorescence.	
1491-1497	100	SANDSTONE: medium green grey, very fine to medium, trace coarse grains, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, poor to fair visual porosity, no oil fluorescence.	
1497-1501.84 Core No.1	100	<p>Sandstone (100%) with minor bands of Claystone clasts and minor Coal laminates.</p> <p>SANDSTONE: medium green grey, very fine to medium, occasional coarse grains in parts, dominantly medium, subangular to subrounded, moderately sorted, weak to moderate silica cement, rare patches of moderately strong calcite cement, common white argillaceous matrix, occasional bands with abundant medium grey claystone clasts to 150mm diameter, quartzose with abundant dark grey green volcanogenic lithics, trace red brown and black volcanogenic lithics, trace black coaly detritus and occasional black coaly laminates, trace to occasionally common coarse brown mica flakes, friable, poor to rarely good visual porosity, dominantly fair visual porosity, no oil fluorescence or cut.</p> <p>CLAYSTONE CLASTS: medium grey, moderately silty in part, calcareous in parts, trace micromica, firm, non fissile.</p> <p>COAL LAMINATES: black, vitreous, conchoidal fracture, non argillaceous, hard, brittle.</p>	

Interval (m)	%	Description	PAGE: 21
1501.84-1506	NR	Core No.1 (No recovery).	
1506-1512	80	SANDSTONE: medium green grey, very fine to medium, trace coarse grains, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, moderately hard, poor visual porosity, no oil fluorescence.	
	20	CLAYSTONE: medium grey, moderately silty, trace very fine quartz and altered feldspar sand grains in part, trace brown to black carbonaceous flecks and detritus, firm, non fissile.	
1512-1518	90	SANDSTONE: as for 1506-1512m.	
	10	CLAYSTONE: as for 1506-1512m.	
1518-1521	50	SANDSTONE: medium green grey, very fine to medium, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, poor visual porosity, no oil fluorescence.	
	50	CLAYSTONE: medium grey to medium brown grey, moderately silty, trace very fine quartz and altered feldspar sand grains in part, trace brown to black carbonaceous flecks and detritus, firm, non fissile.	
1521-1524	20	SANDSTONE: medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, very poor visual porosity, no oil fluorescence.	
	80	CLAYSTONE: as for 1518-1521m.	
1524-1527	Trace	SANDSTONE: as for 1521-1524m.	
	100	CLAYSTONE: light to medium grey to medium brown grey, moderately silty, trace very fine quartz and altered feldspar sand grains in part, trace brown to black carbonaceous flecks and detritus, firm, non fissile.	
1527-1530	30	SANDSTONE: as for 1521-1524m.	
	70	CLAYSTONE: as for 1524-1527m.	
1530-1536	20	SANDSTONE: as for 1521-1524m.	
	80	CLAYSTONE: as for 1524-1527m.	
1536-1539	80	SANDSTONE: medium green grey, very fine to medium, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, poor visual porosity, no oil fluorescence.	
	20	CLAYSTONE: as for 1524-1527m.	
1539-1542	70	SANDSTONE: medium green grey, very fine to dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, very poor visual porosity, no oil fluorescence.	

Interval (m)	%	Description	PAGE: 22
	30	CLAYSTONE: as for 1524-1527m.	
1542-1545	90	SANDSTONE: medium green grey, very fine to medium, dominantly medium, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, poor to fair visual porosity, no oil fluorescence.	
	10	CLAYSTONE: medium grey to medium brown grey, moderately silty, trace very fine quartz and altered feldspar sand grains in part, trace brown to black carbonaceous flecks and detritus, firm, non fissile.	
1545-1548	50	SANDSTONE: as for 1542-1545m.	
	50	CLAYSTONE: as for 1542-1545m.	
1548-1550 T.D.	40	SANDSTONE: medium green grey, very fine to dominantly fine, subangular to subrounded, moderately sorted, weak silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green volcanogenic lithics, trace red brown and black lithics, trace fine black coaly detritus, trace coarse brown and clear mica flakes, trace pyrite, moderately hard, very poor visual porosity, no oil fluorescence.	
	60	CLAYSTONE: medium grey to medium brown grey, medium brown in part, moderately silty, trace very fine quartz and altered feldspar sand grains in part, trace brown to black carbonaceous flecks and detritus, firm, non fissile.	