

E. Pilchard-1 Lithology / Show Descriptions

Interval (m) From To	%	Lithology / Show Description
		Returns from 885m. All depths are MDRT unless otherwise specified. Hole Diameter 12 1/4", Smith MA89 Bit, 6% KCL / EZ-Mud / Polymer / Glycol
885 895	100	CALCILUTITE: very light grey, very light olive grey, very argillaceous, trace carbonaceous specks, rare trace micro-fossils (forams), very soft, sticky, sub blocky to amorphous.
895 925	100	CALCILUTITE: very light grey, very light olive grey, trace very light brown, very argillaceous, trace carbonaceous specks, rare trace micro-fossils (forams), very soft, sticky, sub blocky to amorphous.
925 955	100	CALCILUTITE: very light grey, very light olive grey, off white / very light grey, very argillaceous, trace carbonaceous specks, very soft, sticky, sub blocky to amorphous.
955 985	100	CALCILUTITE: light olive grey, soft, sticky, amorphous, occasionally firm, sub blocky, very argillaceous, grading to MARL , common calcarenite grains, trace Forams, trace carbonaceous flecks, rare pyrite, rare glauconite.
985 1015	100	CALCILUTITE: as above, trace pyrite, decreasing calcarenite grains, grading to MARL .
1015 1045	80	CALCILUTITE: olive grey, light olive grey, firm, sub blocky, very argillaceous, grading to MARL , trace pyrite, trace calcarenite grains, trace carbonaceous flecks, rare glauconite.
	20	MARL: olive grey, light olive grey, firm, sub blocky, calcareous, trace pyrite, rare glauconite.
1045 1075	70	CALCILUTITE: mostly olive grey, as above.
	30	MARL: as above.
1075 1105	80	CALCILUTITE: as above, common calcarenite grains.
	20	MARL: as above.
1105 1135	60	CALCILUTITE: as above, mostly light olive grey, increasing carbonaceous matter, trace pyrite nodules, trace loose quartz grains, very fine to fine, rounded, sub spherical, well sorted, trace Fe stained grains.
	40	MARL: as above, light olive grey and olive grey.
1135 1165	70	MARL: as above, argillaceous.
	30	CALCILUTITE: as above, moderately hard in part, trace fossils.
1165 1195	100	MARL: olive grey, very light grey, very light brownish grey, rarely gradational to calcarenite, trace disseminated pyrite, soft to sub firm, sub blocky.
1195 1225	100	MARL: very light grey, very light olive grey, rarely gradational to calcarenite, trace disseminated pyrite, rare carbonaceous specks, soft to sub firm, sub blocky.
1225 1255	100	MARL: light grey, light olive grey, occasionally medium grey, trace disseminated pyrite, rare carbonaceous specks, trace loose calcite, soft to sub firm, sub blocky.
1255 1285	100	MARL: light grey - medium grey, light olive grey, trace disseminated pyrite, rare carbonaceous specks, trace forams, soft to sub firm, sub blocky.
1285 1315	100	MARL: light grey - occasionally medium grey, light olive grey, trace disseminated pyrite, rare carbonaceous specks, trace forams, gradational to CALCAREOUS CLAYSTONE in part, soft to sub firm, sub blocky.
1315 1345	100	MARL: light grey - occasionally medium grey, light olive grey, trace disseminated pyrite, trace forams, gradational to CALCAREOUS CLAYSTONE in part, soft to sub firm, sub blocky.
1345 1375	100	MARL: light grey - occasionally medium grey, light olive grey, trace disseminated pyrite, trace microfossils forams / echinoid spines, soft to sub firm, sub blocky.
1375 1405	100	MARL: light grey - occasionally medium grey, light olive grey, trace disseminated pyrite, forams, soft to sub firm, sub blocky.
1405 1435	100	CALCAREOUS CLAYSTONE: dark greenish grey, olive grey, firm, sub blocky, waxy lustre in part, trace glauconite, trace pyrite, trace Foraminifera, trace white crystalline calcite, grades to MARL: as above.

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1435	1465	100	CALCAREOUS CLAYSTONE: as above, mostly light olive grey and olive grey, decreasing glauconite, grades to MARL as above.
1465	1495	100	CALCAREOUS CLAYSTONE: as above.
1495	1525	100	CALCAREOUS CLAYSTONE: as above, some dark greenish grey, trace fossil fragments.
1525	1530	100	CALCAREOUS CLAYSTONE: olive grey, light olive grey, and dark greenish grey, firm, sub blocky, locally common glauconite, trace pyrite nodules and disseminated pyrite, slightly silty in part, rare carbonaceous matter.
1530	1535	100	CALCAREOUS CLAYSTONE: as above, becoming siltier.
		Tr	DOLOMITE: dusky yellow brown, moderately hard, microcrystalline, no visual porosity.
1535	1540	100	CALCAREOUS CLAYSTONE: as above.
1540	1545		Sample washed away
1545	1550	100	CALCAREOUS CLAYSTONE: as above, less silty, trace fossil fragments.
1550	1555	100	CALCAREOUS CLAYSTONE: as above.
1555	1560	100	CALCAREOUS CLAYSTONE: as above, decreasing dark greenish grey.
1560	1565	100	CALCAREOUS CLAYSTONE: as above, locally common glauconite.
1565	1570	100	CALCAREOUS CLAYSTONE: as above, decreasing calcareous content.
1570	1575	100	CALCAREOUS CLAYSTONE: as above, trace white calcite, grades to CLAYSTONE .
1575	1580	100	CALCAREOUS CLAYSTONE: as above.
1580	1585	100	CALCAREOUS CLAYSTONE: as above, mostly light olive grey.
1585	1590	100	CLAYSTONE: mostly light olive grey and olive grey, some dark greenish grey, firm, sub blocky, calcareous, grades to CALCAREOUS CLAYSTONE , trace glauconite, trace disseminated pyrite with some pyrite nodules, rarely silty.
1590	1595	100	CLAYSTONE: as above. Calcareous.
1595	1600	100	CLAYSTONE: as above, slightly silty, calcareous.
1600	1605	100	CLAYSTONE: as above.
1605	1610	100	CLAYSTONE: as above, moderately hard in part.
1610	1615	100	CLAYSTONE: as above.
			Start adding Baracarb LCM
		Tr	DOLOMITE: grainstone, dusky yellow brown, moderately hard, fine grain dolomite in an argillaceous matrix, common glauconite, no visual porosity.
1615	1620	95	CLAYSTONE: as above, very silty in part grading to CALCAREOUS SILTSTONE .
		5	DOLOMITE: as above, hard.
1620	1625	90	CLAYSTONE: as above.
		10	DOLOMITE: as above, abundant glauconite, common white rock flour.
1625	1630	100	CLAYSTONE: as above, (trace Fe stained calcite grains, suspect LCM)
1630	1635	100	CLAYSTONE: as above, common glauconite, mostly in a white (kaolinitic?) matrix.
1635	1640	100	CLAYSTONE: as above, silty, abundant LCM.
1640	1645	70	CLAYSTONE: as above.
		25	SILTSTONE: dark yellowish brown, soft, dispersive, abundant Fe stained fine quartz grains, abundant glauconite,
		5	SANDSTONE: colourless translucent quartz grains, very fine to fine, sub angular, sub spherical, well sorted, loose in samples. Abundant LCM, no fluorescence.
1645	1650	100	SILTSTONE: mostly dark yellowish brown and dark yellowish orange, moderate orange pink, dark greenish grey, soft, dispersive, common Fe stained quartz granules, abundant glauconite.
1650	1655	90	SILTSTONE: as above, finely arenaceous.
		10	SANDSTONE: dusky yellow brown, fine, sub rounded, sub spherical, well sorted, hard, dolomitic cement, silty, abundant glauconite, trace pyrite, poor visual porosity, no fluorescence.
1655	1660	100	SILTSTONE: mostly olive grey and pale yellowish brown, soft, common mica, trace carbonaceous matter, rare glauconite, also SILTSTONE as above, finely arenaceous.

Interval (m)		%	Lithology / Show Description
From	To		
1660	1665	100	SILTSTONE: mostly pale yellowish brown, olive grey, common mica, trace carbonaceous matter, very finely arenaceous, trace dark yellowish brown SILTSTONE as above.
1665	1670	100	SILTSTONE: as above, trace loose fine quartz grains.
1670	1675	100	SILTSTONE: as above, very finely arenaceous.
1675	1680	100	SILTSTONE: as above.
1680	1685	80	SILTSTONE: as above, common glauconite.
		20	SANDSTONE: colourless translucent quartz grains, very fine to coarse, sub angular to sub rounded, sub spherical, poorly sorted, loose in samples, good inferred porosity, common Baracarb LCM, no fluorescence.
1685	1690	80	SILTSTONE: as above.
		10	COAL: bituminous, black, hard, conchoidal fracture, vitreous lustre.
		10	SANDSTONE: colourless translucent, medium to very coarse, sub angular, occasionally angular, poorly sorted, loose in samples, good inferred porosity, no fluorescence.
1690	1695	80	SANDSTONE: colourless translucent, light brown stained, fine to very coarse, sub angular, occasionally angular, poorly sorted, trace weak to rarely strong siliceous cement, loose in samples, good inferred porosity, no fluorescence.
		20	SILTSTONE: medium yellowish brown to dark brown, argillaceous, carbonaceous in part, trace micro mica, soft, sub blocky.
1695	1700	40	SANDSTONE: colourless translucent, fine to very coarse, sub angular, occasionally angular, occasionally rounded, poorly sorted, trace weak to rarely strong siliceous cement, loose in samples, good inferred porosity, no fluorescence.
		60	SILTSTONE: medium - dark brown, argillaceous to very argillaceous, carbonaceous in part, trace micro mica, soft, sub blocky to occasionally amorphous.
1700	1705	80	SANDSTONE: colourless translucent, medium - coarse, sub angular to occasionally rounded, moderately sorted, trace weak to rarely strong siliceous cement, trace pyrite cement, loose in samples, good inferred porosity, no fluorescence.
		20	SILTSTONE: medium to dark brown, medium grey, argillaceous to very argillaceous, carbonaceous in part, trace micro mica, soft, sub blocky to occasionally amorphous.
1705	1710	100	SANDSTONE: colourless translucent, occasionally light grey, medium - coarse, sub angular to sub rounded, moderately sorted, trace weak to rarely strong siliceous cement, trace pyrite cement, rare pyrite nodules, loose in samples, good inferred porosity, no fluorescence. As / Above
		tr	
1710	1715	70	SANDSTONE: white, colourless translucent, occasionally light grey, medium - coarse, sub angular to sub rounded, moderately sorted, trace weak siliceous cement, trace pyrite cement, abundant off white argillaceous matrix, loose in samples, poor inferred porosity, no fluorescence.
		30	SILTSTONE: off white, light - medium grey, very argillaceous, very soft, dispersive, amorphous.
1715	1720	90	SANDSTONE: white, colourless translucent, occasionally light grey, medium - coarse, sub angular to sub rounded, moderately sorted, trace weak siliceous cement, trace pyrite cement, abundant off white argillaceous matrix washing out, loose grains, poor inferred porosity, no fluorescence.
		10	SILTSTONE: medium to dark brown, arenaceous to argillaceous, carbonaceous specks, micro mica, slightly pyritic in part, micro laminated in part, soft - firm, sub blocky.

Interval (m)		%	Lithology / Show Description
From	To		
1720	1725	10	SANDSTONE: white, colourless translucent, occasionally light grey, medium - coarse, sub angular to sub rounded, moderately sorted, trace weak siliceous cement, trace pyrite cement, abundant off white argillaceous matrix washing out, loose grains, poor inferred porosity, no fluorescence.
		90	SILTSTONE: off white to medium yellowish brown, occasionally dark brown, arenaceous, common carbonaceous specks, occasional carbonaceous laminae, micro laminated in part, Micro micaceous, soft occasionally sub firm, sub blocky - sub fissile.
1725	1730	80	SANDSTONE: translucent, white, dominantly medium to occasionally coarse grained, sub angular to sub rounded, moderately sorted, trace weak siliceous cement, trace pyrite cement, loose grains, good inferred porosity, no fluorescence.
		20	SILTSTONE: off white to medium yellowish brown, occasionally dark brown, arenaceous, common carbonaceous specks, occasional carbonaceous laminae, micro laminated in part, Micro micaceous, soft occasionally sub firm, sub blocky - sub fissile.
1730	1735	100	SANDSTONE: clear to translucent, medium - very coarse, dominantly coarse - very coarse, sub angular - sub rounded, moderately sorted, weak siliceous cement, occasionally strong pyritic cement, loose, clean, good inferred porosity, no fluorescence.
1735	1740	100	SANDSTONE: white clear to translucent, medium - very coarse, sub angular - sub rounded, moderately sorted, weak siliceous cement, trace pyrite cement, loose, common white kaolinite matrix, fair inferred porosity, no fluorescence.
1740	1745	80	SANDSTONE: white clear to translucent, rare pink grains, medium - very coarse, sub angular - sub rounded, moderately sorted, weak siliceous cement, trace pyrite cement, pyrite nodules, loose, common white kaolinite matrix, fair inferred porosity, no fluorescence.
		20	SILTSTONE: medium to dark grey, very argillaceous, trace carbonaceous specks, very soft and amorphous to hard pyritic and sub blocky.
1745	1750	20	SANDSTONE: white clear to translucent, rare pink grains, medium - very coarse, sub angular - sub rounded, moderately sorted, weak siliceous cement, trace pyrite cement, pyrite nodules, loose, common white kaolinite matrix, fair inferred porosity, no fluorescence.
		80	SILTSTONE: light to medium brown, argillaceous, rare carbonaceous specks, micro mica in part, occasional glauconite, very soft, sub blocky to amorphous.
1750	1755	40	SANDSTONE: clear to translucent, medium - coarse, occasionally very coarse, sub angular - sub rounded, poorly sorted, weak - firm siliceous cement, trace pyrite cement, generally loose, good inferred porosity, no fluorescence.
		60	SILTSTONE: (1) light to medium brown, argillaceous, rare carbonaceous specks, micro mica in part, occasional glauconite, very soft, sub blocky to amorphous. (2) dark grey, argillaceous, hard and pyritic to very soft and amorphous. TRACE DOLOMITE: light brown to tan, cryptocrystalline, hard, blocky, with dull yellow fluorescence.
1755	1760	70	SANDSTONE: clear to translucent, occasionally yellow stained, medium - very coarse, sub angular - sub rounded, occasionally rounded, poorly sorted, weak - firm siliceous cement, occasionally hard pyrite cement, generally loose, good inferred porosity, no fluorescence.
		30	SILTSTONE: (1) light to medium brown, argillaceous, rare carbonaceous specks, micro mica in part, occasional glauconite, very soft, sub blocky to amorphous. (2) dark grey, argillaceous, hard, very pyritic, blocky.
1760	1765	Tr	SANDSTONE: clear to translucent, occasionally yellow stained, medium - very coarse, sub angular - sub rounded, occasionally rounded, poorly sorted, weak - firm siliceous cement, occasionally hard pyrite cement, generally loose, good inferred porosity, no fluorescence.
		100	SILTSTONE: light to dominantly medium brown, argillaceous, rare carbonaceous specks, micro mica in part, very soft to dispersive, rarely firm, sub blocky to amorphous.

Interval (m)		%	Lithology / Show Description
From	To		
1765	1770	10	SANDSTONE: clear to translucent, fine - medium grained, sub angular - sub rounded, occasionally rounded, moderately sorted, weak siliceous cement, common white argillaceous matrix, generally loose, fair inferred porosity, no fluorescence.
		80	SILTSTONE: light to medium brown, argillaceous, rare carbonaceous specks, micro mica in part, very soft to dispersive, sub blocky to amorphous.
		10	COAL: black, dark brown / black, dull, rarely vitreous, uneven fracture, silty, firm, brittle, blocky.
1770	1775	100	SILTSTONE: light yellowish brown to medium brown, medium grey, argillaceous, carbonaceous specks and laminae in part, micro mica, very soft to dispersive, sub blocky to amorphous.
		Tr	COAL: black, dark brown / black, dull, rarely vitreous, uneven fracture, silty, firm, brittle, blocky.
1775	1780	100	SILTSTONE: light brownish grey, dusky yellowish brown, argillaceous, carbonaceous specks and laminae in part, very soft to dispersive, sub blocky to amorphous.
1780	1785	90	SILTSTONE: light brownish grey, dusky yellowish brown, argillaceous, carbonaceous specks and laminae in part, very soft to dispersive, sub blocky to amorphous.
		10	COAL: black, dark brown / black, dull, rarely vitreous, uneven fracture, silty, gradational to CARBONACEOUS SILTSTONE , firm, brittle, blocky.
1785	1790	100	SILTSTONE: light brownish grey, dusky yellowish brown, argillaceous, carbonaceous specks and laminae in part, very soft to dispersive, sub blocky to amorphous.
1790	1795	100	SILTSTONE: light brownish grey, dusky yellowish brown, argillaceous, carbonaceous specks and laminae in part, disseminated pyrite, micro micaceous, very soft to dispersive, sub blocky to amorphous.
		Tr	CARBONACEOUS SILTSTONE: black, dark brown / black, dull to rarely sub vitreous, firm, brittle, blocky.
1795	1800	70	SANDSTONE: clear - translucent, occasionally milky white, medium to coarse, sub angular to sub rounded, trace weak siliceous cement, trace pyrite, loose, good inferred porosity, no fluorescence.
		30	SILTSTONE: light brownish grey, dusky yellowish brown, argillaceous, carbonaceous specks in part, micro micaceous, disseminated pyrite, very soft to dispersive, sub blocky to amorphous.
1800	1805	50	SANDSTONE: clear - translucent, occasionally milky white, medium to coarse, sub angular to sub rounded, trace weak siliceous cement, trace pyrite cement, common white argillaceous matrix washing out, loose, fair - good inferred porosity, no fluorescence.
		50	SILTSTONE: light brownish grey, dusky yellowish brown, argillaceous, carbonaceous specks in part, micro micaceous, disseminated pyrite, very soft to dispersive, sub blocky to amorphous, gradational in part to CARBONACEOUS SILTSTONE: black, dark brown / black, firm, rare sub conchoidal fracture, brittle, blocky.
1805	1810	60	SANDSTONE: clear - translucent, medium to very coarse, sub angular to sub rounded, trace pyrite cement, loose, white argillaceous matrix, fair - good inferred porosity, no fluorescence.
		40	SILTSTONE: light brown, light brownish grey, dusky yellowish brown, occasionally dark brown and carbonaceous, argillaceous, carbonaceous specks in part, micro micaceous, disseminated pyrite, very soft to dispersive, sub blocky to amorphous,
1810	1815	60	SILTSTONE: olive grey, occasionally light olive grey and dusky yellow brown, soft, dispersive, argillaceous, trace mica, trace pyrite, locally carbonaceous.
		25	SANDSTONE: colourless translucent quartz grains, fine to very coarse, predominantly medium to very coarse, sub angular, occasionally sub rounded, sub spherical, poorly sorted, loose in samples, trace quartz overgrowths, good inferred porosity.
		10	COAL: bituminous, black, hard, conchoidal fracture, vitreous lustre.

Interval (m)		%	Lithology / Show Description
From	To		
		5	CARBONACEOUS SHALE: dusky yellowish brown, firm, fissile, micromicaceous, trace pyrite.
1815	1820	80	SILTSTONE: as above.
		20	SANDSTONE: colourless translucent quartz grains, predominantly coarse to very coarse, up to 4mm granules, sub rounded, occasionally rounded, some spherical, moderately well sorted, loose in samples, common quartz overgrowths.
		Tr	CARBONACEOUS SHALE: as above.
1820	1825	90	SILTSTONE: as above.
		10	SANDSTONE: as above.
1825	1830	90	SANDSTONE: as above.
		10	SILTSTONE: as above.
1830	1835	80	SILTSTONE: olive grey and dusky yellow brown, occasionally light olive grey, soft, dispersive, argillaceous, trace mica, trace pyrite, locally carbonaceous, trace carbonaceous microlaminae.
		10	SANDSTONE: as above, trace pyrite, good inferred porosity.
		10	CARBONACEOUS SHALE: as above.
		Tr	COAL: as above.
1835	1840	90	SILTSTONE: as above, common carbonaceous matter.
		10	SANDSTONE: as above.
1840	1845	50	SILTSTONE: as above.
		50	SANDSTONE: colourless translucent quartz grains, fine to very coarse, occasional granules, sub rounded, sub spherical, poorly sorted, loose in samples, trace quartz overgrowths, good inferred porosity.
		Tr	COAL: as above.
1845	1850	60	SILTSTONE: as above, mostly dusky yellowish brown, carbonaceous.
		40	SANDSTONE: as above, predominantly medium to very coarse, good inferred porosity.
1850	1855	90	SILTSTONE: as above, very finely arenaceous.
		10	SANDSTONE: as above,
1855	1860	95	SILTSTONE: as above.
		5	SANDSTONE: as above.
		Tr	COAL: as above.
1860	1865	80	SILTSTONE: as above.
		10	SANDSTONE: as above, medium to very coarse, sub angular, moderately sorted.
		10	COAL: mostly as above, some sub-bituminous, fissile, grading to CARBONACEOUS SHALE.
1865	1870	90	SILTSTONE: as above, carbonaceous in part.
		10	SANDSTONE: as above, medium to coarse, moderately sorted, good inferred porosity.
1870	1875	60	SILTSTONE: as above, less carbonaceous matter.
		40	SANDSTONE: colourless translucent quartz grains, fine to coarse, predominantly medium to coarse, sub angular, sub spherical, well sorted, loose in samples, good inferred porosity.
1875	1880	60	SILTSTONE: olive grey, dusky yellowish brown, moderate yellowish brown, soft, dispersive, occasionally firm and sub blocky, argillaceous, carbonaceous in part, trace carbonaceous microlaminae, trace pyrite, trace micromica, very finely arenaceous in part.
		40	SANDSTONE: colourless translucent, occasionally colourless opaque, medium to very coarse, occasional granules to 3mm, sub rounded, sub spherical, moderately sorted, loose in samples, trace pyrite nodules, trace quartz overgrowths, good inferred porosity.
1880	1885	80	SILTSTONE: as above.
		20	SANDSTONE: as above.
1885	1890	70	SILTSTONE: as above.
		30	SANDSTONE: as above, fine to coarse, moderately well sorted, good inferred porosity.
1890	1895	60	SILTSTONE: as above.

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From	To		
1895	1900	40	SANDSTONE: as above.
		80	SILTSTONE: as above, trace medium dark grey.
		20	SANDSTONE: as above.
1900	1905	Tr	CARBONACEOUS SHALE: as above.
		80	SILTSTONE: as above.
		10	SANDSTONE: as above, medium to very coarse, increasing loose pyrite nodules.
		10	CARBONACEOUS SHALE: as above.
1905	1910	Tr	COAL: as above.
		70	SILTSTONE: as above, carbonaceous in part.
		30	SANDSTONE: as above, medium to very coarse, common granules, poorly sorted.
1910	1915	Tr	CARBONACEOUS SHALE: as above.
		70	SILTSTONE: as above.
		20	CARBONACEOUS SHALE: as above, some sub blocky.
1915	1920	10	SANDSTONE: as above.
		90	SANDSTONE: colourless translucent quartz grains, medium to granules, sub rounded, sub spherical, moderately sorted, loose in samples, trace pyrite nodules, trace quartz overgrowths, good inferred porosity.
		10	SILTSTONE: as above.
1920	1925	95	SANDSTONE: as above, rare pyritized Foraminifera.
		5	SILTSTONE: as above.
1925	1930	50	SANDSTONE: as above.
		30	SILTSTONE: as above, carbonaceous.
		15	CARBONACEOUS SHALE: as above
		5	COAL: as above.
1930	1935	70	SANDSTONE: as above, medium to coarse, moderately well sorted, loose in samples, trace pyrite cement, good inferred porosity.
		30	SILTSTONE: as above, common carbonaceous microlaminae.
		60	SANDSTONE: as above, medium to very coarse, moderately sorted.
1935	1940	40	SILTSTONE: as above.
		60	SILTSTONE: as above, decreasing carbonaceous matter.
1940	1945	40	SANDSTONE: as above, predominantly coarse to granule, moderately sorted, loose in samples, trace quartz overgrowths and pyritic cement, fair inferred porosity.
		40	SILTSTONE: as above, carbonaceous.
		30	COAL: mostly sub bituminous, some bituminous, dusky yellowish brown and brownish black, hard, sub blocky, some sub fissile, sub vitreous lustre, trace mica, grades to CARBONACEOUS SHALE in part.
1945	1950	30	SANDSTONE: as above, medium to coarse, moderately well sorted.
		40	SILTSTONE: as above, carbonaceous.
		40	COAL: as above.
1950	1955	20	SANDSTONE: as above.
		80	SILTSTONE: as above.
		10	COAL: as above.
1955	1960	10	SANDSTONE: as above.
		70	SILTSTONE: as above.
		30	SANDSTONE: as above, medium to coarse, moderately well sorted, good inferred porosity.
1960	1965	60	SANDSTONE: as above.
		30	SILTSTONE: as above.
		10	COAL: as above
1965	1970	90	SANDSTONE: colourless translucent quartz grains, fine to granule, sub rounded, sub spherical, poorly sorted, loose in samples, trace quartz overgrowths, trace pyrite nodules, rare carbonaceous matter, good inferred porosity. Common Rock Flour

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From	To		
1975	1980	10	SILTSTONE: as above.
		80	SILTSTONE: mostly light olive grey, soft, dispersive, rare carbonaceous flecks, rare pyrite.
1980	1985	20	SANDSTONE: as above.
		90	SILTSTONE: as above.
1985	1990	10	SANDSTONE: as above.
		60	SANDSTONE: as above, fine to coarse, moderately well sorted, good inferred porosity.
1990	1995	40	SILTSTONE: as above.
		70	SANDSTONE: colourless translucent quartz grains, fine to very coarse, sub rounded, sub spherical, poorly sorted, loose in samples, trace quartz overgrowths, trace pyrite nodules, minor white argillaceous matrix in part, good inferred porosity, no fluorescence.
1995	2000	30	SILTSTONE: olive grey, dusky yellowish brown, moderate yellowish brown, soft, dispersive, occasionally firm and sub blocky, argillaceous, carbonaceous in part, trace carbonaceous microlaminae, trace pyrite, trace micromica, very finely arenaceous in part.
		10	COAL: black, dark brown / black, dull to occasionally sub vitreous, uneven to occasionally hackly fracture, silty, firm, blocky.
2000	2005	80	SANDSTONE: colourless translucent quartz grains, medium to very coarse, sub rounded, sub spherical, poorly sorted, loose in samples, trace pyrite nodules, common white argillaceous matrix in part, good inferred porosity, no fluorescence.
		20	SILTSTONE: olive grey, dusky yellowish brown, moderate yellowish brown, soft, dispersive, occasionally firm and sub blocky, argillaceous, carbonaceous in part, trace carbonaceous microlaminae, trace pyrite, trace micromica, very finely arenaceous in part.
2005	2010	50	SANDSTONE: colourless translucent quartz grains, medium to very coarse, sub rounded, sub spherical, poorly sorted, loose in samples, trace pyrite nodules, abundant white argillaceous matrix washing out, good inferred porosity, no fluorescence.
		50	SILTSTONE: off white / light brown, olive grey, dusky yellowish brown, moderate yellowish brown, soft, dispersive, occasionally firm and sub blocky, argillaceous, carbonaceous in part, trace carbonaceous microlaminae, trace pyrite, trace micromica, very finely arenaceous in part.
2010	2015	30	SANDSTONE: colourless translucent quartz grains, medium to coarse, sub rounded, sub spherical, moderately sorted, loose in samples, trace pyrite nodules, trace siliceous cement, common white argillaceous matrix, good inferred porosity, no fluorescence.
		60	SILTSTONE: off white / light brown, olive grey, dusky yellowish brown, soft, dispersive, occasionally firm and sub blocky, argillaceous, trace pyrite, trace micromica
2015	2020	10	COAL: black, dark brown / black, dull to occasionally sub vitreous, uneven to occasionally hackly fracture, silty, firm, blocky.
		50	SANDSTONE: colourless translucent quartz grains, fine - medium grained, sub angular - sub rounded, sub spherical, moderately sorted, loose in samples, trace siliceous cement, good inferred porosity, no fluorescence.
2015	2020	50	SILTSTONE: light brown, olive grey, dusky yellowish brown, moderate yellowish brown, soft, dispersive to sub firm, argillaceous, carbonaceous in part, trace carbonaceous microlaminae, trace pyrite, trace micromica, very finely arenaceous in part, sub blocky - occasionally sub fissile.
		30	SANDSTONE: colourless translucent quartz grains, fine - medium grained, sub angular - sub rounded, sub spherical, moderately sorted, loose in samples, trace siliceous cement, good inferred porosity, no fluorescence.
2015	2020	70	SILTSTONE: dark brown, dusky yellowish brown, moderate yellowish brown, soft, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, trace micromica, sub blocky - occasionally sub fissile.

Interval (m)		%	Lithology / Show Description
From	To		
2020	2025	10	SANDSTONE: colourless translucent quartz grains, fine - medium grained, sub angular - sub rounded, sub spherical, moderately sorted, loose in samples, trace siliceous cement, good inferred porosity, no fluorescence.
		90	SILTSTONE: off white / light brown, dark brown, dusky yellowish brown, moderate yellowish brown, soft, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, trace micromica, sub blocky - occasionally sub fissile.
2025	2030	100	SILTSTONE: predominantly medium to dark brown, occasionally dusky yellowish brown, moderate yellowish brown, soft, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, occasionally very carbonaceous and gradational to CARBONACEOUS SILTSTONE trace micromica, sub blocky - occasionally sub fissile.
2030	2035	80	SANDSTONE: colourless translucent quartz grains, medium grained to granules, dominantly very coarse, sub angular - angular, common fractured grains, poorly sorted, loose in samples, trace siliceous cement, good inferred porosity, no fluorescence.
		20	SILTSTONE: predominantly medium to dark brown, occasionally dusky yellowish brown, moderate yellowish brown, soft, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, trace micromica, sub blocky.
2035	2040	80	SANDSTONE: colourless translucent quartz grains, medium grained to granules, dominantly very coarse, sub angular - rounded, common high sphericity, poorly sorted, loose in samples, trace siliceous cement, good inferred porosity, no fluorescence.
		20	SILTSTONE: predominantly medium to dark brown, occasionally dusky yellowish brown, moderate yellowish brown, soft, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, trace micromica, sub blocky.
2040	2045	80	SANDSTONE: colourless translucent occasionally brown stained quartz grains, medium grained to granules, sub angular - rounded, common high sphericity, poorly sorted, loose in samples, trace hard siliceous cement, trace pyrite cement, good inferred porosity, no fluorescence.
		20	SILTSTONE: medium to dark brown, occasionally dusky yellowish brown, moderate yellowish brown, soft, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, trace micromica, sub blocky.
2045	2050	90	SANDSTONE: colourless translucent quartz grains, medium grained to granules, sub angular - rounded, common high sphericity, poorly sorted, loose in samples, trace hard siliceous cement, strong pyrite cement in part, good inferred porosity, no fluorescence.
		10	SILTSTONE: medium to dark brown, occasionally dusky yellowish brown, soft, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, trace micromica, sub blocky.
2050	2054	100	SANDSTONE: colourless translucent to grey quartz grains and aggregates, medium grained to pebbles (up to 5mm in diameter), sub angular - rounded, common high sphericity, poorly sorted, loose to very hard aggregates, trace hard siliceous cement, very strong pyrite cement, nil visual porosity, no fluorescence. Bit trip at 2054m. Security XL20D
2054	2060	90	SANDSTONE: mostly loose colourless to translucent quartz grains, some light grey aggregates, fine to medium, occasionally coarse, angular, to occasionally sub angular, sub spherical, well sorted, generally loose, very hard aggregates, siliceous and pyritic cement, locally common pyrite, poor visual porosity.
		10	SILTSTONE: medium to dark brown, occasionally dusky yellowish brown, soft, sub blocky, argillaceous, carbonaceous specks in part, trace carbonaceous microlaminae, trace micromica.
2060	2065	100	SANDSTONE: colourless to translucent quartz grains, some light grey aggregates, medium to coarse, angular, to occasionally sub angular, sub spherical, well sorted, generally loose, very hard aggregates, siliceous and pyritic cement, locally common pyrite, poor visual porosity in aggregates, fair inferred porosity, no fluorescence.

Interval (m)		%	Lithology / Show Description
From	To		
2065	2070	100	SANDSTONE: colourless to translucent quartz grains, some light grey aggregates, medium to coarse, angular, to occasionally sub angular, sub spherical, well sorted, generally loose to occasionally hard aggregates, siliceous and pyritic cement, locally common pyrite, poor visual porosity in aggregates, fair inferred porosity, no fluorescence.
		Tr	SILTSTONE: medium to dark brown, occasionally dusky yellowish brown, soft, sub blocky, argillaceous, carbonaceous specks in part, trace micromica.
2070	2075	100	SANDSTONE: colourless to translucent quartz grains, fine to coarse, dominantly medium grained, angular, to sub angular, sub spherical, moderately well sorted, loose to rare grey aggregates, siliceous and pyritic cement, poor visual porosity in aggregates, good inferred porosity in loose fraction, no fluorescence.
2075	2080	100	SANDSTONE: as / above
2080	2085	100	SANDSTONE: colourless to translucent quartz grains, fine to coarse, dominantly medium grained, occasionally very coarse grains and shards, angular, to sub angular, moderately well sorted, loose to rare grey aggregates, siliceous and pyritic cement, poor visual porosity in aggregates, good inferred porosity in loose fraction, no fluorescence.
2085	2090	100	SANDSTONE: colourless to translucent quartz grains, fine to coarse, dominantly medium grained, occasionally very coarse grains, angular, to sub angular, moderately well sorted, loose to rare grey aggregates, siliceous and pyritic cement, poor visual porosity in aggregates, good inferred porosity in loose fraction, no fluorescence.
2090	2095	100	SANDSTONE: colourless to translucent quartz grains, fine to coarse, dominantly medium grained, occasionally very coarse grains, angular, to sub angular, moderately well sorted, loose, white argillaceous matrix washing out in part, siliceous and pyritic cement in part, good inferred porosity, no fluorescence.
2095	2100	100	SANDSTONE: colourless to translucent quartz grains, fine to medium occasionally coarse grained, rounded to sub angular, moderately well sorted, loose, white to light grey silty and argillaceous matrix washing out in part, siliceous and pyritic cement in part, good inferred porosity, no fluorescence.
2100	2105	10	SANDSTONE: colourless to translucent quartz grains, fine to medium occasionally coarse grained, rounded to sub angular, moderately well sorted, loose, white to light grey silty and argillaceous matrix washing out in part, siliceous and pyritic cement in part, good inferred porosity, no fluorescence.
		90	SILTSTONE: light olive grey, light - medium grey, very argillaceous to finely arenaceous in part, disseminated pyrite, trace fine sand grains, glauconitic in part, very soft, amorphous to occasionally sub blocky.
2105	2107	100	SILTSTONE: light olive grey, light - medium grey, greenish / grey, very argillaceous, gradational to CLAYSTONE , disseminated pyrite, trace fine sand grains, glauconitic in part, micro mica, very soft and dispersive, amorphous. Bit trip at 2107m. Smith ARCS-2
2107	2110	100	SILTSTONE: olive grey, dark greenish grey, generally soft, dispersive, some moderately hard, sub blocky, locally glauconitic, trace disseminated micro pyrite, micromicaceous in part, trace carbonaceous matter, argillaceous.
2110	2114	100	Sample heavily contaminated with cavings SILTSTONE: (1) olive grey, dark greenish grey, soft, sub blocky to amorphous, locally glauconitic to occasionally very glauconitic, trace disseminated micro pyrite, argillaceous. (2) occasionally, olive grey, dark greenish grey, hard to very hard and pyritic, sub blocky to blocky, glauconitic to occasionally very glauconitic. PYRITIC SANDSTONE: green-gold, fine to medium, sub-rounded, sub-spherical, well sorted, extremely hard, pyritic cement, glauconitic, no visual porosity. Bit trip at 2114m. Security XL20-D

Interval (m)		%	Lithology / Show Description
From	To		
2114	2115	100	Sample contaminated with cavings
			SILTSTONE: olive grey, light - medium grey, generally soft to moderately hard, sub-blocky, locally glauconitic, trace carbonaceous matter, argillaceous.
		Tr	COAL: bituminous, brownish-black, moderately hard, sub-blocky, occasionally sub-fissile, vitreous lustre, silty in part.
2115	2120	80	SILTSTONE: light olive grey to dark greenish grey, generally soft to moderately hard, sub-blocky, glauconitic, trace carbonaceous matter, argillaceous.
		20	SANDSTONE: colourless to white, translucent, fine to medium grained, occasionally coarse, sub-angular, moderately sorted, loose, good inferred porosity.
2120	2125	80	SANDSTONE: colourless to white, translucent, dominantly medium grained, occasionally coarse, sub-angular, moderately well sorted, moderately hard, weak siliceous/dolomitic cement, generally loose in samples, fair visual porosity.
		20	SILTSTONE: olive grey to brownish grey, generally soft to moderately hard, sub-blocky, trace carbonaceous matter, argillaceous.
2125	2130	95	SANDSTONE: colourless to white, translucent, fine to dominantly medium grained, occasionally coarse, sub-angular to sub-rounded, moderately sorted, loose, minor pyrite cement, fair inferred porosity.
		5	SILTSTONE: olive grey to brownish grey, generally soft to moderately hard, sub-blocky, locally glauconitic, minor carbonaceous matter, minor pyrite, argillaceous.
2130	2135	70	SANDSTONE: colourless to white, translucent, fine to dominantly medium grained, occasionally coarse, sub-angular, moderately sorted, loose, minor pyrite cement, fair inferred porosity.
		30	SILTSTONE: olive grey to brownish grey, generally soft to moderately hard, sub-blocky, pyritic, locally glauconitic, minor carbonaceous matter, argillaceous.
2135	2140	70	SANDSTONE: colourless to white, translucent, fine to dominantly medium grained, occasionally coarse, sub-angular, moderately sorted, loose, minor pyrite, good inferred porosity.
		30	SILTSTONE: olive grey to brownish grey, generally soft to moderately hard, sub-blocky, locally glauconitic, minor carbonaceous laminae, argillaceous, occasionally gradational to
		Tr	CARBONACEOUS SILTSTONE: brownish-black, moderately hard, uneven fracture, sub-blocky, occasionally sub-fissile, dull to sub-vitreous lustre.
2140	2145	40	SANDSTONE: colourless to white, translucent, dominantly medium to coarse grained, angular to sub-angular, moderately sorted, loose, minor pyrite, good inferred porosity.
		60	SILTSTONE: light grey to light olive grey, soft to very soft, occasionally dispersive, sub-blocky to amorphous, carbonaceous specks and minor carbonaceous laminae, trace pyrite, argillaceous.
2145	2150	95	SANDSTONE: colourless to white, translucent, dominantly medium grained, occasionally coarse, sub-angular, moderately well sorted, loose, minor pyrite, good inferred porosity.
		5	SILTSTONE: olive grey to brownish grey, generally soft to firm, sub-blocky, minor carbonaceous laminae, trace pyrite, argillaceous.
2150	2155	80	SANDSTONE: colourless to white, translucent, coarse to very coarse grained, sub-rounded, moderately well sorted, loose, minor disseminated pyrite, good inferred porosity.
		20	SILTSTONE: olive grey to brownish grey, generally soft to firm, sub-blocky, coal fragments and common carbonaceous laminae, trace pyrite, argillaceous.
2155	2160	70	SANDSTONE: colourless to white, translucent, medium to coarse grained, sub-angular, moderately well sorted, loose, minor disseminated pyrite, good inferred porosity.
		30	SILTSTONE: olive grey to brownish grey, generally soft to firm, sub-blocky, common coal fragments and carbonaceous laminae, trace pyrite, argillaceous.

Interval (m)		%	Lithology / Show Description
From	To		
2160	2165	20	SANDSTONE: colourless to white, translucent, medium to very coarse grained, sub-angular, moderately sorted, loose, rare pyrite cement, good inferred porosity.
		80	SILTSTONE: very light grey to olive grey, occasionally brownish grey, very soft, amorphous to sub-blocky, carbonaceous specks, rare carbonaceous laminae, argillaceous.
2165	2170	10	SANDSTONE: colourless to white, translucent, medium to very coarse grained, sub-angular, moderately sorted, loose, good inferred porosity.
		90	SILTSTONE: very light grey to olive grey, very soft, amorphous, rare trace pyrite nodules, carbonaceous specks, very argillaceous.
2170	2175	Tr	SANDSTONE: colourless to white, translucent, fine to coarse grained, sub-angular, moderately to poorly sorted, trace disseminated pyrite, loose, good inferred porosity.
		100	SILTSTONE: very light grey to olive grey, occasional white, very soft, amorphous, rare trace pyrite nodules, carbonaceous specks, very argillaceous.
2175	2180	100	SILTSTONE: very light grey to olive grey, very soft, amorphous, rare trace pyrite nodules, carbonaceous specks, very argillaceous.
2180	2185	100	SILTSTONE: very light grey to olive grey, very soft to dispersive in part, amorphous, rare trace pyrite nodules, carbonaceous specks, very argillaceous.
2185	2190	10	SANDSTONE: colourless to white, translucent, fine to coarse grained, sub-angular, moderately to poorly sorted, trace pyrite cement, loose, good inferred porosity.
		90	SILTSTONE: very light grey to olive grey, very soft to dispersive, amorphous, rare trace pyrite nodules, occasional carbonaceous specks, very argillaceous.
2190	2195	Tr	SANDSTONE: colourless to white, translucent, medium, sub-angular, well sorted, loose, good inferred porosity.
		100	SILTSTONE: light grey to olive grey, very soft to dispersive in part, amorphous, rare coal fragments, very argillaceous.
2195	2200	Tr	SANDSTONE: colourless to white, translucent, medium grained, sub-angular, well sorted, loose, good inferred porosity.
		100	SILTSTONE: light grey to olive grey, very soft to dispersive in part, amorphous, rare coal fragments, very argillaceous.
2200	2205	90	SILTSTONE: light grey to olive grey, very soft, amorphous, rare coal fragments, very argillaceous.
		10	SANDSTONE: colourless to white, translucent, medium to coarse, sub-angular, well sorted, loose, good inferred porosity.
2205	2210	80	SILTSTONE: light grey to olive grey, very soft, trace disseminated pyrite, amorphous, very argillaceous.
		20	SANDSTONE: colourless to white, translucent, medium to coarse, sub-angular, well sorted, loose, good inferred porosity.
2210	2215	90	SILTSTONE: light grey, very soft, trace pyrite nodules, trace coal fragments, amorphous, very argillaceous.
		10	SANDSTONE: colourless to white, medium to coarse, sub-angular, well sorted, loose, good inferred porosity.
2215	2220	90	SILTSTONE: light olive grey, olive grey, occasionally olive black, very soft to dispersive, trace pyrite nodules, amorphous, trace carbonaceous specks, very argillaceous
		10	SANDSTONE: colourless to white, medium to very coarse, sub-angular, moderately sorted, loose, good inferred porosity.
2220	2225	90	SILTSTONE - as above, decreasing carbonaceous specks.
		10	SANDSTONE - as above
2225	2230	60	SILTSTONE: light olive grey to brownish grey, soft to very soft, amorphous, minor carbonaceous matter, trace pyrite, argillaceous.
		40	SANDSTONE: colourless to white, fine to very coarse, predominantly medium to coarse, sub-angular, moderately sorted, loose, good inferred porosity.

Interval (m)		%	Lithology / Show Description
From	To		
2230	2235	70	SILTSTONE: as above, very finely arenaceous in part
		30	SANDSTONE: as above, dominantly coarse, minor disseminated pyrite.
2235	2240	60	SILTSTONE: as above.
		40	SANDSTONE: as above.
2240	2245	70	SILTSTONE: as above.
		30	SANDSTONE: colourless to white, medium to dominantly coarse to very coarse, angular to sub-angular, moderately sorted, loose, minor disseminated pyrite, trace carbonaceous matter, good inferred porosity.
2245	2250	70	SILTSTONE: as above, increasingly carbonaceous.
		30	SANDSTONE: as above.
2250	2255	60	SILTSTONE: as above, increasingly carbonaceous.
		40	SANDSTONE: as above, medium to coarse.
2255	2260	Tr	COAL: bituminous, brownish black, moderately hard, conchoidal fracture, sub-vitreous to vitreous lustre
		50	SANDSTONE: colourless to white, fine to coarse, predominantly medium, sub-angular, moderately sorted, generally loose with minor pyrite cement, minor disseminated pyrite, trace carbonaceous material, moderate inferred porosity.
		50	SILTSTONE: light olive grey to brownish grey, soft to very soft, amorphous, minor carbonaceous matter, trace pyrite, argillaceous.
2260	2265	Tr	COAL: as above
		60	SANDSTONE: as above, occasionally very coarse.
		40	SILTSTONE: light olive grey to brownish grey, generally soft to moderately hard, amorphous, minor carbonaceous matter, trace pyrite, argillaceous.
2265	2270	60	SANDSTONE: colourless to white, fine to coarse, predominantly medium, occasionally very coarse, sub-angular, moderately sorted, generally loose with minor pyrite cement, minor disseminated pyrite, trace carbonaceous material, fair inferred porosity.
		40	SILTSTONE: light olive grey to brownish grey, very soft to soft occasionally moderately hard, amorphous, minor carbonaceous matter, trace pyrite, argillaceous.
2270	2275	40	SANDSTONE: colourless to white, medium to coarse, occasionally very coarse, sub-angular, moderately sorted, generally loose with minor pyrite cement, minor disseminated pyrite, trace carbonaceous material, white argillaceous matrix in part, fair inferred porosity.
		60	SILTSTONE: light olive grey to brownish grey, generally soft to moderately hard, amorphous, minor carbonaceous matter, trace pyrite, argillaceous.
2275	2280	30	SANDSTONE: colourless to white, medium to coarse, occasionally very coarse, sub-angular, moderately sorted, generally loose, white argillaceous matrix in part, minor disseminated pyrite, trace carbonaceous material, fair inferred porosity.
		70	SILTSTONE: light olive grey to brownish grey, generally soft, amorphous, minor carbonaceous matter, rare carbonaceous laminae, trace pyrite, argillaceous.
2280	2285	40	SANDSTONE: colourless to white, medium to coarse, occasionally very coarse, sub-angular, moderately sorted, generally loose, minor disseminated pyrite, trace carbonaceous material, fair inferred porosity.
		60	SILTSTONE: light olive grey to brownish grey, generally soft to hard, amorphous, minor carbonaceous matter, trace pyrite, argillaceous, arenaceous in part.
2285	2290	10	SANDSTONE: colourless to white, medium to coarse, sub-angular, moderately sorted, generally loose, trace disseminated pyrite, fair inferred porosity.
		90	SILTSTONE: light olive grey to brownish grey, soft to dispersive, amorphous, increasing carbonaceous matter, trace pyrite, argillaceous.

Interval (m)		%	Lithology / Show Description
From	To		
2290	2295	20	SANDSTONE: colourless to white, dominantly medium to very coarse, sub-angular, moderately sorted, generally loose, trace disseminated pyrite, fair inferred porosity.
		80	SILTSTONE: light olive grey to brownish grey, soft to moderately hard, amorphous, minor carbonaceous specks and laminae, trace pyrite, argillaceous, occasionally gradational to:
		Tr	CARBONACEOUS SILTSTONE: brownish-black, moderately hard, uneven fracture, sub-blocky, occasionally sub-fissile, dull to sub-vitreous lustre.
2295	2300	80	SANDSTONE: colourless to white, fine to coarse, dominantly medium, occasionally very coarse, angular to sub-rounded, moderately sorted, generally loose, white argillaceous matrix, trace disseminated pyrite, fair inferred porosity.
		20	SILTSTONE: light olive grey to brownish grey, soft to moderately hard, amorphous, minor carbonaceous specks and laminae, trace pyrite, argillaceous, arenaceous in part.
2300	2305	80	SANDSTONE: colourless to white, fine to coarse, dominantly medium, angular to sub-rounded, moderately sorted, generally loose occasional fine grained aggregates, white argillaceous matrix, trace disseminated pyrite, fair inferred porosity.
		20	SILTSTONE: light olive grey to brownish grey, generally soft, amorphous, minor carbonaceous specks and laminae, trace pyrite cement, argillaceous, arenaceous in part.
2305	2310	40	SANDSTONE: colourless to white, fine to coarse, white argillaceous matrix, occasional carbonaceous matrix, sub-angular to sub-rounded, trace disseminated pyrite, loose to rare fine friable aggregates, fair inferred porosity.
		60	SILTSTONE: light olive grey to brownish grey, generally soft, amorphous, occasional sub-blocky, minor carbonaceous specks and laminae, argillaceous.
2310	2315	10	SANDSTONE: colourless to white, fine to coarse, white argillaceous matrix, moderately sorted, trace carbonaceous matrix, trace pyritic matrix, sub-angular to sub-rounded, trace disseminated pyrite, loose to rare fine friable aggregates, fair inferred porosity.
		90	SILTSTONE: light olive grey to olive grey, minor light grey, generally soft, amorphous, rare sub-blocky, minor carbonaceous specks, argillaceous, arenaceous in part.
2315	2320	30	SANDSTONE: clear to translucent, fine to coarse, rarely very coarse, poorly sorted, sub-angular to sub-rounded, occasionally angular and fractured, loose, trace white argillaceous matrix, fair to good inferred porosity, no fluorescence.
		70	SILTSTONE: light olive grey to olive grey, occasionally light brown, soft to very soft, carbonaceous specks, rare carbonaceous laminae, argillaceous,
2320	2325	40	SANDSTONE: clear to translucent, fine to coarse, dominantly medium to coarse, rarely very coarse, poorly sorted, sub-angular to sub-rounded, trace white argillaceous matrix, loose to occasionally fine grained friable aggregates, fair to good inferred porosity, no fluorescence.
		60	SILTSTONE: light olive grey to olive grey, occasionally medium brown, soft to very soft, carbonaceous specks, rare carbonaceous laminae, argillaceous,
2325	2330	50	SANDSTONE: as / above
		50	SILTSTONE: light olive grey to olive grey, occasionally medium brown, occasionally dull black and carbonaceous, soft to very soft, carbonaceous specks, rare carbonaceous laminae, argillaceous,
2330	2335	30	SANDSTONE: clear to translucent, occasionally pale grey, fine to coarse, dominantly medium to coarse, rarely very coarse, poorly sorted, sub-angular to sub-rounded, trace white argillaceous matrix, loose, clean, fair inferred porosity, no fluorescence. Minor rock flour.
		50	SILTSTONE: brownish grey, olive grey, occasionally dusky yellowish brown, minor carbonaceous specks and flecks, soft to very soft, rare carbonaceous laminae, argillaceous.
		10	CARBONACEOUS SILTSTONE: brownish-black, firm, grades to Coal in part, sub-blocky, occasionally sub-fissile, dull lustre.
		10	COAL: bituminous, predominantly black, locally brownish black, brittle, conchoidal fracture, sub-vitreous to vitreous lustre.

Interval (m)		%	Lithology / Show Description
From	To		
2335	2340	35	SANDSTONE: clear to translucent, occasionally pale grey, trace pink quartz, fine to coarse, dominantly medium, rarely very coarse, moderately sorted, sub-angular to sub-rounded, trace argillaceous matrix, dominantly loose, trace fractured grains, trace very fine grained siliceous cemented aggregates, predominantly clean, fair inferred porosity, nil visual porosity, no fluorescence. Minor rock flour.
		60	SILTSTONE: pale yellowish brown, light olive grey - olive grey, very slightly calcareous in parts, trace carbonaceous specks, soft to very soft, argillaceous.
		5	CARBONACEOUS SILTSTONE: as / above
		Tr	COAL: as / above
2340	2345	35	SANDSTONE: as / above, no fluorescence.
		65	SILTSTONE: as / above
		Tr	CARBONACEOUS SILTSTONE: as / above
		Tr	COAL: as / above
2345	2350	30	SANDSTONE: as / above, clear, translucent, fine to coarse, predominantly fine to medium, trace very coarse, poorly sorted.
		70	SILTSTONE: as / above, trace pyrite nodules.
		Tr	CARBONACEOUS SILTSTONE: as / above
		Tr	COAL: as / above
2350	2355	15	SANDSTONE: , clear, translucent, occasionally milky in part, fine to coarse, poorly sorted, sub-angular to sub-rounded, trace fractured grains, loose, clean, poor inferred porosity, no fluorescence.
		80	SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, amorphous, very soft to soft, very argillaceous, trace pyrite nodules.
		5	CARBONACEOUS SILTSTONE: brownish black, dusky brown, argillaceous, grading in part to Coal, sub-blocky.
		30	SANDSTONE: clear, translucent, occasionally milky in part, trace very pale grey, fine to very coarse, predominantly medium to coarse, poorly sorted, sub-angular to sub-rounded, trace fractured grains, locally trace moderately hard pyrite cement, trace pyrite nodules, predominantly loose and clean, poor inferred porosity, nil visual porosity, no fluorescence.
2355	2360	50	SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, sub-blocky, soft, occasionally firm, argillaceous.
		10	CARBONACEOUS SILTSTONE: brownish black, dusky brown, argillaceous, grading in part to Coal, sub-blocky.
		10	COAL: bituminous, predominantly black, locally brownish black, brittle, conchoidal fracture, sub-vitreous to vitreous lustre.
		40	SANDSTONE: clear, translucent, occasionally milky in part, trace very pale grey, fine to very coarse, predominantly medium to coarse, poorly sorted, sub-angular, locally sub-rounded, trace fractured grains, locally trace moderately hard pyrite cement, trace pyrite nodules, predominantly loose and clean, poor inferred porosity, nil visual porosity, no fluorescence.
2360	2365	45	SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, sub-blocky, soft, occasionally firm, argillaceous.
		10	CARBONACEOUS SILTSTONE: brownish black, dusky brown, soft to firm, grading in part to Coal, sub-blocky, argillaceous,
		5	COAL: bituminous, predominantly black, locally brownish black, moderately hard, sub-conchoidal - conchoidal fracture, sub-vitreous to vitreous lustre.
		10	SANDSTONE: clear, translucent, occasionally milky in part, trace very pale grey, medium to very coarse, predominantly medium to coarse, poorly sorted, sub-angular to angular, locally sub-rounded, trace fractured grains, locally trace moderately hard pyrite cement, trace fine grained aggregate with argillaceous matrix, trace pyrite nodules, predominantly loose and clean, poor inferred porosity, nil visual porosity, no fluorescence.
2365	2368	10	

Interval (m)	%	Lithology / Show Description
From	To	
2368	2370	20 SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, sub-blocky, soft, occasionally firm, argillaceous.
		40 CARBONACEOUS SILTSTONE: brownish black, dusky brown, soft to firm, grading in part to Coal, sub-blocky, argillaceous,
		30 COAL: bituminous, predominantly black, locally brownish black, moderately hard, sub-conchoidal - conchoidal fracture, sub-vitreous to vitreous lustre.
		40 SANDSTONE: clear, translucent, occasionally milky in part, trace very pale grey, medium to very coarse, predominantly medium to coarse, poorly sorted, sub-angular, locally sub-rounded, trace fractured grains, locally trace moderately hard pyrite cement, trace pyrite nodules, predominantly loose and clean, poor inferred porosity, no fluorescence.
		55 SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, sub-blocky, soft, occasionally firm, argillaceous,
2370	2375	5 CARBONACEOUS SILTSTONE: brownish black, dusky brown, soft to firm, grading in part to Coal, sub-blocky, argillaceous,
		Tr COAL: bituminous, predominantly black, locally brownish black, moderately hard, sub-conchoidal - conchoidal fracture, sub-vitreous to vitreous lustre.
		65 SANDSTONE: clear, translucent, opaque, occasionally milky in part, trace very pale grey, fine to very coarse, predominantly medium to coarse, poorly sorted, sub-angular - sub-rounded, trace fractured grains, locally trace moderately hard pyrite cement, trace pyrite nodules, predominantly loose and clean, fair inferred porosity, no fluorescence.
		30 SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, sub-blocky, soft, occasionally firm, argillaceous, locally arenaceous, hard, grades to a very fine Sandstone.
		5 CARBONACEOUS SILTSTONE: brownish black, dusky brown, soft to firm, grading in part to Coal, sub-blocky, argillaceous,
2375	2377	Tr COAL: bituminous, predominantly black, locally brownish black, moderately hard, sub-conchoidal - conchoidal fracture, sub-vitreous to vitreous lustre.
		30 SANDSTONE: clear, translucent, opaque, trace milky, fine to coarse, predominantly medium, occasionally very coarse moderately sorted, sub-angular - sub-rounded, predominantly loose and clean, poor inferred porosity, no fluorescence.
		40 SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, sub-blocky, soft, occasionally firm, argillaceous, locally arenaceous, hard, grades to a very fine Sandstone.
		20 CARBONACEOUS SILTSTONE: brownish black, dusky brown, soft to firm, grading in part to Coal, sub-blocky, argillaceous,
		10 COAL: bituminous, predominantly black, locally brownish black, firm, sub-conchoidal - conchoidal fracture, sub-vitreous to vitreous lustre.
2377	2380	60 SANDSTONE: clear, translucent to opaque, trace milky, trace dark grey, fine to very coarse, predominantly medium to coarse, moderately sorted, angular to sub-rounded, predominantly loose and clean, trace pyrite nodules, poor inferred porosity, no fluorescence.
		35 SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks, amorphous - sub-blocky, soft, occasionally firm, argillaceous.
		5 CARBONACEOUS SILTSTONE: brownish black, dusky brown, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous.
		Tr COAL: bituminous, predominantly black, locally brownish black, firm, sub-conchoidal to conchoidal fracture, sub-vitreous to vitreous lustre.

Interval (m)		%	Lithology / Show Description
From	To		
2380	2385	75	SANDSTONE: clear, translucent to opaque, trace milky, trace dark grey, fine to very coarse, predominantly medium to coarse, moderately sorted, angular to sub-rounded, predominantly loose and clean, locally trace moderately hard pyrite cement, trace pyrite nodules, poor inferred porosity, poor visual porosity, no fluorescence.
		20	SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks and laminae, amorphous to sub-blocky, soft, occasionally firm, argillaceous, gradational to:
		5	CARBONACEOUS SILTSTONE: brownish black, dusky brown, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous.
2385	2390	80	SANDSTONE: clear, translucent to opaque, trace milky, trace grey, predominantly medium to coarse, occasionally very coarse, moderately sorted, predominantly sub-angular, loose and clean, locally trace moderately hard pyrite cement, trace pyrite nodules, moderate inferred porosity, no fluorescence.
		15	SILTSTONE: predominantly brownish grey, light olive grey, common carbonaceous specks and laminae, amorphous to sub-blocky, soft to firm, argillaceous, arenaceous in part, rarely silicified and hard.
		5	CARBONACEOUS SILTSTONE: brownish black, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous.
2390	2395	90	SANDSTONE: clear, translucent to opaque, trace milky, trace grey, predominantly medium to coarse grained, occasionally very coarse, moderately sorted, predominantly sub-angular, loose and clean, trace pyrite cement, trace pyrite nodules, fair inferred porosity, no visual porosity in aggregates, no fluorescence.
		10	SILTSTONE: predominantly brownish grey, light olive grey, rarely carbonaceous, amorphous to sub-blocky, soft to firm, arenaceous in part, rarely silicified and hard.
2395	2400	80	SANDSTONE: clear, translucent to opaque, trace milky, trace grey, predominantly medium to coarse grained, occasionally very coarse, moderately sorted, predominantly sub-angular, loose and clean, rare very pyritic and hard, rare white argillaceous matrix, trace pyrite nodules, fair inferred porosity, no visual porosity in aggregates, no fluorescence.
		20	SILTSTONE: predominantly brownish grey, light olive grey, minor carbonaceous laminae and specks, amorphous to sub-blocky, soft to firm, arenaceous in part, rarely silicified and hard.
2400	2405	70	SANDSTONE: clear, translucent to opaque, fine to very coarse, occasional angular quartz shards, generally loose and clean, rare very pyritic and hard, predominantly sub-angular, rare white argillaceous matrix, trace pyrite nodules, fair inferred porosity, poor visual porosity in aggregates, no fluorescence.
		30	SILTSTONE: predominantly brownish grey, light olive grey, occasional medium light grey, minor carbonaceous specks and laminae, soft, argillaceous, occasionally arenaceous and grading to very fine sand.
2405	2410	30	SANDSTONE: clear, translucent to opaque, fine to very coarse generally loose and clean, rare very pyritic and strong cement, predominantly sub-angular, rare white argillaceous matrix, trace pyrite nodules, fair inferred porosity, poor visual porosity in well cemented aggregates, no fluorescence.
		70	SILTSTONE: predominantly brownish grey, light olive grey, rare medium light grey rare dark brown, carbonaceous specks and laminae, soft, argillaceous, occasionally arenaceous.
2410	2415	30	SANDSTONE: clear, translucent to opaque, fine to very coarse generally loose and clean, occasional fractured quartz grains, poorly sorted, rare pyritic strong cement, predominantly sub-angular, rare white argillaceous matrix, trace pyrite nodules, fair inferred porosity, poor visual porosity in well cemented aggregates, no fluorescence.
		70	SILTSTONE: predominantly brownish grey, light olive grey, rare medium light grey rare dark brown, carbonaceous specks and laminae, soft, argillaceous, occasionally arenaceous.

Interval (m)		%	Lithology / Show Description
From	To		
2415	2420	30	SANDSTONE: clear, translucent, fine to very coarse, generally loose, poorly sorted, rare strong pyritic cement, rare weak siliceous cement, sub-angular to sub rounded, white argillaceous matrix in part, fair inferred porosity, no fluorescence.
		70	SILTSTONE: medium brownish grey, light olive grey, medium brown, carbonaceous specks and laminae, soft, argillaceous, occasionally arenaceous and gradational to very fine sandstone.
2420	2425	20	SANDSTONE: clear, translucent, fine to very coarse, dominantly medium, generally loose, moderately sorted, weak siliceous cement in part, sub-angular to sub rounded, white argillaceous matrix in part, fair inferred porosity, occasional pyrite nodules, no fluorescence.
		80	SILTSTONE: light brown, light olive grey, medium brown, carbonaceous specks, soft to dispersive, sub blocky to amorphous, very argillaceous, rarely arenaceous.
2425	2430	10	SANDSTONE: clear, translucent, fine to coarse, predominantly fine to medium, poor to moderately sorted, sub-angular to sub rounded, trace fine grained aggregates with white argillaceous matrix in part, generally loose, occasional pyrite nodules, fair inferred porosity, no fluorescence.
		90	SILTSTONE: light brown grey, light olive grey, medium brown, rare light grey, minor carbonaceous specks, locally trace carbonaceous laminae, very soft to soft, amorphous, very argillaceous, rarely arenaceous.
2430	2435	10	SANDSTONE: clear, translucent occasionally milky, fine to coarse, poorly sorted, predominantly fine to medium, poor to moderately sorted, sub-angular to sub rounded, trace fine grained aggregates with white argillaceous matrix in part, generally loose, occasional pyrite nodules, fair inferred porosity, no fluorescence.
		70	SILTSTONE: light brown grey, light olive grey, medium brown, rare light grey, minor carbonaceous specks, locally trace carbonaceous laminae, very soft to soft, amorphous, very argillaceous.
		20	ALTERED VOLCANICS: greyish-red, greyish-green, moderate red, rare greyish orange, rare mottled greyish-brown and dusky-green, very weathered, predominantly abundant weathered feldspars changing to clays, trace chlorite, predominantly very soft to soft, occasionally moderately hard.
2435	2440	5	SANDSTONE: clear, translucent occasionally milky, fine to coarse, poorly sorted, predominantly fine to medium, poor to moderately sorted, sub-angular to sub rounded, trace fine grained aggregates with white argillaceous matrix in part, generally loose, occasional pyrite nodules, fair inferred porosity, no fluorescence.
		35	SILTSTONE: light brown grey, light olive grey, medium brown, rare light grey, minor carbonaceous specks, locally trace carbonaceous laminae, very soft to soft, amorphous, very argillaceous.
		60	ALTERED VOLCANICS: greyish-red, greyish-green, moderate red, rare greyish orange, rare mottled greyish-brown and rare dusky-green altered olivine, very weathered, predominantly abundant weathered feldspars changing to clays, trace chlorite, trace olivine, predominantly very soft to soft, occasionally moderately hard.
2440	2445	Tr	SANDSTONE: clear, translucent occasionally milky, fine to coarse, poorly sorted, predominantly fine to medium, poor to moderately sorted, sub-angular to sub rounded, generally loose, occasional pyrite nodules, fair inferred porosity, no fluorescence.
		10	SILTSTONE: light brown grey, light olive grey, medium brown, rare light grey, minor carbonaceous specks, locally trace carbonaceous laminae, very soft to soft, amorphous, very argillaceous.
		90	ALTERED VOLCANICS: greyish-red, greyish-green, moderate red, greyish red-purple, rare greyish orange, rare mottled greyish-brown and rare dusky-green, very weathered, relict crystalline texture, predominantly abundant weathered feldspars changing to pale green and white clays (including chlorite), minor serpentine?, minor olivine, occasional quartz coarse angular grains, very soft to moderately hard.

Interval (m)		%	Lithology / Show Description
From	To		
2445	2450	10	SILTSTONE (Cavings): light brown grey, light olive grey, medium brown, rare light grey, minor carbonaceous specks, very soft to soft, amorphous, very argillaceous.
		90	ALTERED VOLCANICS: greyish-red, greyish-green, moderate red, greyish red-purple, rare greyish orange, rare mottled greyish-brown and rare dusky-green, relict crystalline texture, predominantly abundant weathered feldspars changing to pale green and white clays (including chlorite), minor serpentine?, minor olivine, occasional quartz coarse angular grains, very soft becoming moderately hard with depth.
2450	2455	5	SILTSTONE (Cavings): light brown grey, light olive grey, light grey, very soft to soft, amorphous, very argillaceous.
		100	VOLCANICS:
		20	Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy acicular groundmass, firm to hard, abundant allotriomorphic pyroxene, common olivine and biotite, visible feldspar (plagioclase), minor quartz, trace amygdales filled with quartz, minor quartz and calcite veining (secondary).
		Tr	Tuff: red/brown, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?)
2455	2460	80	Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, some relict fine acicular crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar altering to white and green clays (including kaolinite, chlorite and serpentine), relict crystals of serpentine. Occasional chalcedony.
		100	VOLCANICS:
		20	Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy acicular groundmass, firm to hard, abundant allotriomorphic pyroxene, common olivine and biotite, visible feldspar (plagioclase), minor quartz, trace amygdales filled with quartz, minor quartz and calcite veining (secondary).
		15	Tuff: red/brown, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?)
2460	2465	65	Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, some relict fine acicular crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar altering to white and green clays (including kaolinite, chlorite and serpentine), relict crystals of serpentine. Occasional chalcedony.
		100	VOLCANICS:
		30	Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy acicular groundmass, firm to hard, abundant allotriomorphic pyroxene, common olivine and biotite, visible feldspar (plagioclase), minor quartz, trace amygdales filled with quartz, minor quartz and calcite veining (secondary)
		20	Tuff: red/brown, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?)
		50	Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, some relict fine acicular crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar altering to white and green clays (including kaolinite, chlorite and serpentine), relict crystals of serpentine. Occasional chalcedony.

Interval (m)	%	Lithology / Show Description
From	To	
2465	2470	<p>VOLCANICS:</p> <p>40 Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy acicular groundmass, firm to hard, abundant allotriomorphic pyroxene, common olivine and biotite, visible feldspar (plagioclase), minor quartz, trace amygdales filled with quartz, minor quartz and calcite veining (secondary), minor pyrite.</p> <p>25 Tuff: red/brown, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?)</p> <p>35 Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, some relict fine acicular crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar altering to white and green clays (including kaolinite, chlorite and serpentine), relict crystals of serpentine. Occasional chalcedony.</p> <p>Bit trip at 2471m. Security XL20-D</p>
2470	2475	<p>100 VOLCANICS:</p> <p>Abundant cavings</p> <p>Predominantly Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, some relict fine acicular crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar altering to white and green clays (including kaolinite, chlorite and serpentine), relict crystals of serpentine. Occasional chalcedony.</p> <p>Minor Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy acicular groundmass, firm to hard, abundant anhedral pyroxene, common olivine and biotite, visible feldspar (plagioclase), minor quartz, trace amygdales filled with quartz, minor quartz and calcite veining (secondary), minor pyrite.</p> <p>Rare Tuff: red/brown, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?).</p>
2475	2480	<p>100 VOLCANICS:</p> <p>Predominantly Altered volcanics: dominantly greyish red, minor greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, in part crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar altering to predominantly grayish red clays (including kaolinite, chlorite and serpentine), relict crystals of serpentine. Occasional quartz, occasional chalcedony.</p> <p>Minor Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy acicular groundmass, firm to hard, abundant anhedral pyroxene, common olivine and biotite, visible feldspar (plagioclase), minor quartz, trace amygdales filled with quartz, minor quartz and calcite veining (secondary), minor pyrite.</p> <p>Rare Tuff: red/brown, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?).</p>
2480	2485	<p>100 VOLCANICS</p> <p>Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, in part crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar and ferromagnesian minerals altering to greyish red, white and green clays (including kaolinite, chlorite and serpentine), relict crystals of serpentine. Occasional quartz, occasional chalcedony, trace pyrite nodules (cavings?).</p> <p>Minor Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy acicular groundmass, firm to hard, common anhedral pyroxene, common olivine and minor biotite, trace visible feldspar (plagioclase), minor quartz, trace amygdales filled with carbonate minerals, minor quartz and calcite veining (secondary), minor pyrite.</p> <p>Minor Tuff: red/brown, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?). Common Baracarb in sample.</p>

Interval (m)		%	Lithology / Show Description
From	To		
2485	2490	100	<p>VOLCANICS</p> <p>Predominantly Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, in part crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar and ferromagnesian minerals altering to greyish red, white and green clays (including, chlorite and serpentine), relict crystals of serpentine. Occasional quartz, occasional chalcedony, trace pyrite nodules (cavings?).</p> <p>Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy groundmass in part, firm to hard, abundant anhedral pyroxene, common olivine and biotite, trace visible feldspar (plagioclase), minor quartz, minor amygdales filled with carbonate minerals, minor quartz and calcite veining (secondary), minor pyrite, locally trace flow pattern observed.</p> <p>Rare Tuff: pale red, greyish red, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?).</p>
2490	2495	100	<p>VOLCANICS</p> <p>Predominantly Altered volcanics: greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, in part crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar and ferromagnesian minerals altering to greyish red, white and green clays (including, chlorite and serpentine), relict crystals of serpentine. Occasional quartz, occasional chalcedony, trace pyrite nodules (cavings?).</p> <p>Common Basalt: mafic, black, dark brownish-black, greenish-black, mottled texture with glassy groundmass in part, firm to hard, abundant anhedral pyroxene, common olivine and biotite, trace visible feldspar (plagioclase), minor quartz, minor amygdales filled with carbonate minerals, minor quartz and calcite veining (secondary), minor pyrite, trace calcite pink mineral fluorescence. Locally trace flow pattern observed.</p> <p>Rare Tuff: pale red, greyish red, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?).</p>
2495	2500	100	<p>VOLCANICS</p> <p>Predominantly Altered volcanics: greyish green, greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, in part crystalline texture in groundmass, very soft to soft, dominantly weathered feldspar and ferromagnesian minerals altering to greyish red, white and green clays (including, chlorite and serpentine), relict crystals of serpentine. Occasional quartz, occasional chalcedony, occasional calcite.</p> <p>Common Basalt: mafic, black, dark brownish-black, greenish-black, mottled dark grey and light grey in part, firm to hard, abundant anhedral pyroxene, common biotite, trace visible feldspar (plagioclase), minor quartz and olivine, minor amygdales filled with carbonate minerals and/or quartz, minor calcite veining (secondary), trace calcite pink mineral fluorescence.</p> <p>Rare Tuff: pale red, greyish red, soft to firm, argillaceous, microlaminated, remnant pyroxenes in a microcrystalline glassy/ash groundmass, occasional emerald green phenocrysts (serpentine?).</p>

Interval (m)		%	Lithology / Show Description
From	To		
2500	2505	100	<p>VOLCANICS</p> <p>Predominantly Altered volcanics: greyish green, greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, in part crystalline texture in groundmass, soft to dispersive, dominantly weathered feldspar and ferromagnesian minerals altering to greyish red, white and green clays (including, chlorite and serpentine), relict crystals of serpentine. Occasional quartz, occasional chalcedony, occasional calcite, trace pyrite nodules.</p> <p>Common Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, firm to hard, abundant anhedral pyroxene, common biotite, minor quartz and olivine, trace visible feldspar (plagioclase), minor amygdales filled with carbonate minerals and/or quartz, minor calcite and quartz veining (secondary), trace calcite pink/pale yellow mineral fluorescence.</p>
2505	2510	100	<p>VOLCANICS</p> <p>Altered volcanics: greyish green, greenish-red, greyish-brown, greenish-brown, light grey, pale reddish-brown, mottled, in part crystalline texture in groundmass, soft to dispersive, dominantly weathered feldspar and ferromagnesian minerals altering to greyish red, white and green clays (including, chlorite and serpentine), relict crystals of serpentine. Occasional quartz, occasional chalcedony, occasional calcite, trace pyrite nodules.</p> <p>Common Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, firm to predominantly hard, abundant anhedral pyroxene, common red-black biotite, minor quartz and olivine, trace visible feldspar (plagioclase), minor amygdales filled with carbonate minerals and/or quartz, common calcite and quartz veining (secondary), silicified in part. Minor calcite pink/pale yellow mineral fluorescence.</p>
2510	2515	100	<p>VOLCANICS</p> <p>Altered volcanics: light grey, medium grey, light greenish grey, mottled, soft to firm, rare crystalline texture in groundmass, dominantly weathered feldspar altering to predominantly white and minor green clays (chlorite). Minor quartz, occasional calcite, trace chalcedony, trace pyrite nodules.</p> <p>Common Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, rare red brown, firm to predominantly hard, abundant anhedral pyroxene, common red-black biotite, minor quartz, trace olivine, trace visible feldspar (plagioclase), minor amygdales filled with carbonate minerals and/or quartz, common calcite and quartz veining (secondary). Minor calcite pink/pale yellow mineral fluorescence.</p>
2515	2520	80	<p>VOLCANICS</p> <p>Altered volcanics: light grey, medium grey, light greenish grey, mottled, soft to firm, rare crystalline texture in groundmass, dominantly weathered feldspar altering to predominantly white and minor green clays (chlorite). Minor quartz, occasional calcite, trace chalcedony, trace pyrite nodules.</p> <p>Minor Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, rare red brown, firm to predominantly hard, abundant anhedral pyroxene, common red-black biotite, minor quartz, trace olivine, trace visible feldspar (plagioclase), minor amygdales filled with carbonate minerals and/or quartz, common calcite and quartz veining (secondary). Minor calcite pink/pale yellow mineral fluorescence.</p>
		20	<p>SILTSTONE: dusky yellowish brown, pale yellowish brown, locally trace carbonaceous laminae, common biotite flecks, very soft to soft, amorphous, very argillaceous.</p>
		Tr	<p>SANDSTONE: clear, translucent, fine grained, sub-angular, well sorted, loose, clean, very poor inferred porosity, no fluorescence.</p>

Interval (m)	%	Lithology / Show Description
From	To	
2520	2525	40 VOLCANICS Altered volcanics: light grey, medium grey, light greenish grey, mottled, soft to firm, rare crystalline texture in groundmass, dominantly weathered feldspar altering to predominantly white and minor green clays (chlorite). Minor quartz, occasional calcite, trace chalcedony, trace pyrite nodules. Minor Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, rare red brown, firm to predominantly hard, abundant anhedral pyroxene, common red-black biotite, minor quartz, trace olivine, trace visible feldspar (plagioclase), minor amygdales filled with carbonate minerals and/or quartz, common calcite and quartz veining (secondary). Minor calcite pink/pale yellow mineral fluorescence.
		60 SILTSTONE: dusky yellowish brown, pale yellowish brown, locally carbonaceous laminae, common biotite flecks, dispersive to firm, amorphous, very argillaceous, locally greyish brown to dusky brown Carbonaceous Siltstone.
2525	2526	20 VOLCANICS Predominantly Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, rare red brown, firm to predominantly hard, abundant anhedral pyroxene, common red-black biotite, minor quartz, trace olivine, trace visible feldspar (plagioclase), minor amygdales filled with carbonate minerals and/or quartz, common calcite and quartz veining (secondary). Minor calcite pink/pale yellow mineral fluorescence. Altered volcanics: light grey, medium grey, light greenish grey, mottled, soft to firm, rare crystalline texture in groundmass, dominantly weathered feldspar altering to predominantly white and minor green clays (chlorite). Minor quartz, occasional calcite, trace chalcedony, trace pyrite nodules.
		70 SILTSTONE: dusky yellowish brown, pale yellowish brown, minor carbonaceous specks, flecks and laminae, soft to occasionally firm, sub-blocky, argillaceous, trace arenaceous, locally trace greyish brown to dusky brown Carbonaceous Siltstone.
		10 SANDSTONE: clear, translucent, fine to medium, trace coarse, sub-angular, moderately sorted, predominantly loose and clean, minor fine grained, sub-rounded friable aggregates with weak trace argillaceous cement, poor inferred porosity, very poor visual porosity, fluorescence. FLUORESCENCE: trace, dull yellowish green spotted fluorescence in fine grained aggregates, slow weak direct cut, weak slow cream diffuse crush cut, thin dull yellow film residue.
2526	2530	20 SILTSTONE: dusky yellowish brown, pale yellowish brown, minor carbonaceous specks, flecks and laminae, soft to occasionally firm, sub-blocky, argillaceous, locally trace greyish brown to dusky brown Carbonaceous Siltstone.
		80 SANDSTONE: clear, translucent, fine to predominantly medium, sub-angular to sub-rounded, well-sorted, loose and clean, fair inferred porosity, trace fluorescence. FLUORESCENCE: trace, dull yellowish green spotted fluorescence, no direct cut, trace very weak slow cream diffuse crush cut, thin dim ring residue.
2530	2535	100 Sample heavily contaminated with barracarb SANDSTONE: clear, translucent, fine to medium, predominantly sub-angular, well-sorted, loose and clean, abundant white argillaceous matrix washing out in part, poor to fair inferred porosity, no fluorescence.
		Tr SILTSTONE (cavings?): dusky yellowish brown, pale yellowish brown, minor carbonaceous specks, flecks and laminae, soft to occasionally firm, sub-blocky, argillaceous.
2535	2540	90 Sample heavily contaminated with barracarb SANDSTONE: clear, translucent, fine to medium, occasionally coarse, sub-angular, well-sorted, loose and clean, abundant white argillaceous matrix washing out in part, poor to fair inferred porosity, no fluorescence.

Interval (m)		%	Lithology / Show Description
From	To		
2540	2545	10	SILTSTONE: dusky yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks, occasional laminae, very soft to occasionally sub-firm, sub-blocky, argillaceous.
		70	SANDSTONE: clear, translucent, medium to coarse, occasional very coarse and fractured grains, sub-angular, moderately sorted, loose and clean, trace aggregates; fine to medium, friable to firm with weak to rarely moderately strong siliceous cement, good inferred porosity, fair visual porosity, no fluorescence.
		30	SILTSTONE: dusky yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks, rare carbonaceous laminae in part, very soft to soft, amorphous to sub-blocky, argillaceous.
2545	2550	50	SANDSTONE: clear, translucent, medium to coarse, occasional very coarse and fractured grains, angular to sub-angular, poorly sorted, loose and clean, minor aggregates; fine to medium, friable to hard, lithics, white argillaceous matrix in part with weak to moderately strong siliceous cement and quartz overgrowths in part, rare hard pyrite cement, dolomite cement in part, poor visual porosity, 15% dull yellow dolomite mineral fluorescence
		50	SILTSTONE: dusky yellowish brown, pale yellowish brown, brownish grey, common carbonaceous specks, minor carbonaceous laminae, very soft to firm, amorphous to sub-blocky, argillaceous.
2550	2555		Sample highly contaminated with barracarb
		70	SANDSTONE: clear, translucent, fine to dominantly medium, occasional coarse fractured grains, sub-angular to sub-rounded, moderately well sorted, loose and clean, trace very fine grained aggregates, trace white argillaceous matrix, rare hard pyritic cement, poor to fair inferred porosity, light yellow dolomite mineral fluorescence.
		30	SILTSTONE: dusky yellowish brown, pale yellowish brown, minor carbonaceous specks, flecks and laminae, soft to occasionally firm, sub-blocky, argillaceous.
2555	2560	20	Sample highly contaminated with barracarb SANDSTONE: clear, translucent, fine to medium, occasional coarse and fractured grains, angular to sub-angular, moderately sorted, loose, common white argillaceous matrix, minor aggregates; fine to medium, friable to hard, lithics, weak to moderately strong siliceous cement and quartz overgrowths in part, trace hard pyrite cement, dolomite cement in part, poor visual porosity in aggregates, good inferred porosity in loose fraction, trace dull yellow dolomite mineral fluorescence.
		80	SILTSTONE: dusky yellowish brown, pale yellowish brown, minor carbonaceous specks, flecks and laminae, very soft - soft, sub-blocky to occasionally amorphous, argillaceous.
		30	SANDSTONE: clear translucent to white, very fine to fine, sub-angular to rounded, moderately well sorted, friable, common white argillaceous matrix, matrix supported in part, predominantly argillaceous to rarely siliceous cement, poor visual porosity, no fluorescence.
2560	2565	70	SILTSTONE: orange / brown, light brown to grey brown, soft and argillaceous to very siliceous and hard, sub-blocky to rounded.
		10	Sample contaminated with barracarb
2565	2570		SANDSTONE: translucent, white, light brown, dominantly fine grained, sub-angular to rounded, well sorted, friable, common white argillaceous matrix, matrix supported in part, predominantly argillaceous to rarely siliceous cement, poor visual porosity, no fluorescence.
		90	ALTERED VOLCANICS: white, off white, light orange brown, green / white, occasional light brown / grey, very soft to firm, occasional remnant crystal structure, occasional siliceous orange / brown, hard rounded to sub-spherical nodules, sub blocky.
		100	ALTERED VOLCANICS: white, off white, light orange brown, green / white, occasional light brown / grey, very soft to firm, occasional remnant crystal structure, occasional siliceous orange / brown, hard rounded to sub-spherical nodules, sub blocky.
2570	2575	100	ALTERED VOLCANICS: white, off white, light orange brown, green / white, occasional light brown / grey, very soft to firm, occasional remnant crystal structure, occasional siliceous orange / brown, hard rounded to sub-spherical nodules, sub blocky.

Interval (m)		%	Lithology / Show Description
From	To		
2575	2580	100	<p>VOLCANICS: Altered Volcanics: pale green, reddish brown, yellowish grey, minor white, trace pinkish grey, very soft to firm, occasional remnant crystal structure, dominantly weathered feldspar altering to predominantly white and minor green clays (chlorite). Minor quartz, occasional calcite, trace chalcedony. Trace Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, rare red brown, firm to predominantly hard, pyroxene, common biotite, minor quartz, rare olivine, trace visible feldspar (plagioclase), minor calcite and quartz veining (secondary).</p>
2580	2585	100	<p>Sample contaminated with barracarb VOLCANICS: Altered Volcanics: yellowish grey, pale green, reddish brown, white, trace pinkish grey, very soft to firm, occasional remnant crystal structure, dominantly weathered feldspar altering to predominantly white and minor green clays (chlorite). Minor quartz, occasional calcite, trace chalcedony, trace pyrite nodules. Trace Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, rare red brown, firm to predominantly hard, pyroxene, common biotite, minor quartz, rare olivine, trace visible feldspar (plagioclase), minor calcite and quartz veining (secondary).</p>
2585	2590	80	<p>Sample contaminated with barracarb VOLCANICS: Altered Volcanics: yellowish grey, pale green, reddish brown, white, trace pinkish grey, very soft to firm, occasional remnant crystal structure, dominantly weathered feldspar altering to predominantly white and minor green clays (chlorite). Minor quartz, occasional calcite, trace chalcedony, trace pyrite nodules. Trace Basalt: mafic, black, dark brownish-black, greenish-black, brownish grey, firm to predominantly hard, pyroxene, common biotite, minor quartz, rare olivine, trace visible feldspar (plagioclase), minor calcite and quartz veining (secondary), strongly silicified in part.</p>
		20	<p>SILTSTONE: predominantly dark yellowish brown, minor dusky yellowish brown, minor carbonaceous specks, flecks and laminae, locally trace Carbonaceous Siltstone, in part grading to Coal, soft to occasionally firm, sub-blocky, argillaceous.</p>
2590	2593	40	<p>SANDSTONE: clear translucent opaque, fine to predominantly medium, predominantly sub-angular to sub-rounded, moderately sorted, trace fine to medium friable aggregates with weak minor white argillaceous matrix, predominantly loose and clean, trace mica, fair inferred porosity, poor visual porosity, trace fluorescence. FLUORESCENCE: Trace dim pinkish yellow spotted fluorescence, very weak direct cut, slow weak cream diffuse crush cut, thick greenish yellow ring residue</p>
		60	<p>SILTSTONE: predominantly dark yellowish brown, minor dusky yellowish brown, minor carbonaceous specks, flecks and laminae, locally trace Carbonaceous Siltstone, soft to occasionally firm, sub-blocky, argillaceous.</p>
2593	2595	20	<p>SANDSTONE: clear translucent opaque, fine to very coarse, predominantly medium, sub-angular to sub-rounded, poorly sorted, trace fine to medium friable aggregates with weak minor white argillaceous matrix, predominantly loose and clean, trace pyrite nodules, fair inferred porosity, poor visual porosity, trace fluorescence. FLUORESCENCE: Trace dim pinkish yellow spotted fluorescence, very weak direct cut, slow weak cream diffuse crush cut, thick greenish yellow ring residue.</p>
		80	<p>SILTSTONE: predominantly dark yellowish brown, minor dusky yellowish brown, minor carbonaceous specks, flecks and laminae, locally trace Carbonaceous Siltstone, soft to occasionally firm, sub-blocky, argillaceous.</p>

Interval (m)		%	Lithology / Show Description
From	To		
2595	2597	70	SANDSTONE: clear translucent opaque, fine to coarse, predominantly medium, predominantly sub-angular, moderately sorted, predominantly loose and clean, trace pyrite cement, trace pyrite nodules, fair inferred porosity, 10% fluorescence. FLUORESCENCE: 10% dim pale blue spotted fluorescence, weak direct cut, slow weak bluish yellow diffuse crush cut, thick pale greenish yellow ring residue.
		30	SILTSTONE: predominantly dark yellowish brown, minor dusky yellowish brown, minor carbonaceous specks, flecks and laminae, minor Carbonaceous Siltstone grading to coal, soft to occasionally firm, sub-blocky, argillaceous.
2597	2600	85	SANDSTONE: clear translucent opaque, fine to coarse, predominantly medium, predominantly sub-angular, moderately sorted, predominantly loose and clean, trace pyrite cement, trace pyrite nodules, fair inferred porosity, trace fluorescence. FLUORESCENCE: trace dim pale blue spotted fluorescence, weak direct cut, slow weak bluish yellow diffuse crush cut, thick pale greenish yellow ring residue.
		10	SILTSTONE: predominantly dark yellowish brown, minor dusky yellowish brown, minor carbonaceous specks, flecks and laminae, minor Carbonaceous Siltstone grading to coal, soft to firm, sub-blocky, argillaceous.
		5	COAL: bituminous, black, moderately hard, sub-conchoidal to locally uneven fracture, sub-blocky, sub-vitreous to vitreous lustre.
2600	2605	70	SANDSTONE: clear translucent opaque, fine to very coarse, predominantly medium to coarse, sub-angular, trace fractured grains, poorly sorted, loose and clean, trace mica, locally trace pyrite cement, trace pyrite nodules, poor inferred porosity, trace fluorescence. FLUORESCENCE: trace dim pale blue spotted fluorescence, weak direct cut, slow weak bluish yellow diffuse crush cut, thick pale greenish yellow ring residue.
		30	SILTSTONE: predominantly dark yellowish brown, minor dusky yellowish brown, minor carbonaceous specks, flecks and laminae, minor Carbonaceous Siltstone grading to coal, soft to firm, sub-blocky, argillaceous.
2605	2610	75	SANDSTONE: clear, trace grey, translucent opaque, fine to very coarse, predominantly medium to coarse, sub-angular, trace fractured grains, moderately sorted, predominantly loose and clean, minor argillaceous matrix, locally trace pyrite cement, trace pyrite nodules, fair inferred porosity, no fluorescence.
		25	SILTSTONE: predominantly dark yellowish brown, minor dusky yellowish brown, minor carbonaceous specks, flecks and laminae, trace Carbonaceous Siltstone grading to coal, soft to firm, sub-blocky, argillaceous.
2610	2615	40	SANDSTONE: clear, trace light grey, translucent opaque, predominantly medium to very coarse, predominantly sub-angular to sub-rounded, trace fractured grains, moderately sorted, predominantly loose and clean, trace pyrite nodules, fair inferred porosity, trace fluorescence. FLUORESCENCE: Trace dim pinkish yellow spotted fluorescence, trace weak direct cut, trace very slow weak dim pale blue crush cut, trace residue.
		50	SILTSTONE: predominantly light brownish grey, minor dusky yellowish brown, trace carbonaceous specks and flecks, very soft to firm, amorphous to sub-blocky, argillaceous, trace Carbonaceous Siltstone, silicified in part.
		10	ALTERED VOLCANICS: white, off white, light orange brown, light green, occasional light brownish grey, very soft to firm, trace remnant crystal structure in groundmass, trace very light grey coarse chalcedony, sub blocky. Trace Basalt: mafic, black, greenish-black, firm to predominantly hard, emerald green pyroxene, common biotite, minor quartz, trace visible feldspar (plagioclase), strongly silicified in part.

Interval (m)		%	Lithology / Show Description
From	To		
2615	2620	20	SANDSTONE: clear, trace light grey, translucent opaque, predominantly medium to very coarse, sub-angular to sub-rounded, trace fractured grains, moderately sorted, predominantly loose and clean, trace pyrite nodules, fair inferred porosity, trace fluorescence. FLUORESCENCE: Trace dim pinkish yellow spotted fluorescence, trace weak direct cut, trace very slow weak dim pale blue crush cut, trace residue.
		65	SILTSTONE: predominantly light brownish grey, brownish grey, minor dusky yellowish brown, minor medium grey, trace carbonaceous specks, flecks and laminae, predominantly very soft to firm, amorphous, argillaceous, trace Carbonaceous Siltstone.
		10	ALTERED VOLCANICS: white, off white, light orange brown, light green, occasional light brownish grey, very soft to firm, trace remnant crystal structure in groundmass, trace very light grey coarse chalcedony, sub blocky. Trace Basalt: mafic, black, greenish-black, firm to predominantly hard, emerald green pyroxene, common biotite, minor quartz, trace visible feldspar (plagioclase), strongly silicified in part.
		5	COAL: bituminous, black, brownish black, moderately hard, sub-conchoidal to locally uneven fracture, sub-blocky, sub-vitreous to vitreous lustre.
2620	2625	50	SANDSTONE: clear to white, translucent opaque, trace milky, predominantly medium to very coarse, sub-angular, trace fractured grains, moderately sorted, predominantly loose and clean, trace pyrite cement, trace pyrite nodules, fair inferred porosity, 5% fluorescence. FLUORESCENCE: 5% dull pale green, no direct cut, slow dim pale greenish blue/cream crush cut, weak thin residue ring.
		45	SILTSTONE: light brownish grey, brownish grey, minor dusky yellowish brown, minor medium grey, minor carbonaceous specks, flecks and laminae, very soft to moderately hard, amorphous to sub-blocky, argillaceous, grading to Carbonaceous Siltstone.
		5	ALTERED VOLCANICS: white, off white, light green, occasional light brownish grey, soft to hard, trace remnant crystal structure in groundmass, trace very light grey coarse chalcedony, sub blocky. Trace Basalt: mafic, black, greenish-black, firm to predominantly hard, emerald green pyroxene, common biotite, minor quartz, trace visible feldspar (plagioclase), strongly silicified in part.
2625	2630		Note: Pale green fluorescence observed in drill mud at 2627m.
		50	SANDSTONE: clear to white, translucent opaque, trace milky, fine to predominantly medium to very coarse, sub-angular, trace fractured grains, poorly sorted, predominantly loose and clean, trace weak siliceous cement, trace pyrite nodules, fair inferred porosity, 5% fluorescence. FLUORESCENCE: 5% dull pale green, no direct cut, trace very slow pale yellow/cream crush cut, thin moderately solid greenish yellow residue ring.
		40	SILTSTONE: light brownish grey, brownish grey, minor dusky yellowish brown, common carbonaceous specks, flecks and laminae, very soft to moderately hard, amorphous to sub-blocky, argillaceous, minor grading to dark yellowish brown, moderately hard Carbonaceous Siltstone.
		5	COAL: bituminous, black, brownish black, moderately hard, sub-conchoidal to locally uneven fracture, sub-blocky, sub-vitreous to vitreous lustre.
		5	ALTERED VOLCANICS: white, off white, light green, occasional light brownish grey, soft to hard, trace remnant crystal structure in groundmass, trace very light grey coarse chalcedony, sub blocky. Trace Basalt: mafic, black, greenish-black, firm to predominantly hard, emerald green pyroxene, common biotite, minor quartz, trace visible feldspar (plagioclase), strongly silicified in part.

Interval (m)		%	Lithology / Show Description
From	To		
2630	2635	20	SANDSTONE: clear to white, translucent opaque, trace milky, fine to predominantly medium to very coarse, sub-angular, trace fractured grains, poorly sorted, predominantly loose and clean, trace weak siliceous cement, trace pyrite nodules, fair inferred porosity, no fluorescence.
		80	SILTSTONE: light brownish grey to occasionally dark brown, common carbonaceous specks and laminae, predominantly very soft to occasionally firm when carbonaceous, amorphous to sub-blocky, very argillaceous.
		Tr	COAL: bituminous, black, brownish black, moderately hard, sub-conchoidal to locally uneven fracture, sub-blocky, sub-vitreous to vitreous lustre.
2635	2640	40	SANDSTONE: (1) clear to white, translucent opaque, trace milky, fine to predominantly medium to very coarse, sub-angular, trace fractured grains, poorly sorted, trace weak siliceous cement, trace pyrite nodules, fair to good inferred porosity, poor visual porosity. (2) white to light brown, fine to medium, well sorted, sub rounded, friable aggregates, lithics, common argillaceous matrix, trace weak siliceous, fair visual porosity. 10% fluorescence. FLUORESCENCE: Dull patchy light green, no direct cut, trace very slow pale blue/cream crush cut, thin broken light blue green residue ring.
		60	SILTSTONE: light brownish grey to occasionally dark brown, common carbonaceous specks and laminae, predominantly very soft to occasionally firm when carbonaceous, amorphous to sub-blocky, argillaceous to occasionally arenaceous.
		Tr	COAL: bituminous, black, brownish black, moderately hard, sub-conchoidal to locally uneven fracture, sub-blocky, sub-vitreous to vitreous lustre.
2640	2645	Tr	SANDSTONE: clear to white, translucent opaque, trace milky, fine to predominantly medium, sub-angular, trace fractured grains, poorly sorted, trace weak siliceous cement, good inferred porosity. No fluorescence.
		100	SILTSTONE: light olive grey to olive grey, rarely dark brown, common carbonaceous specks and laminae, predominantly very soft to occasionally firm when carbonaceous, amorphous to sub-blocky, argillaceous to occasionally arenaceous.
2645	2650	Tr	SANDSTONE: clear to white, translucent opaque, trace milky, fine to predominantly medium, sub-angular, trace fractured grains, poorly sorted, trace weak siliceous cement, fine to medium friable aggregates, fair to good visual porosity. No fluorescence.
		100	SILTSTONE: light olive grey to olive grey, rarely dark brown, common carbonaceous specks and laminae, predominantly very soft to occasionally firm when carbonaceous, amorphous to sub-blocky, argillaceous to occasionally arenaceous.
2650	2655	Tr	SANDSTONE: clear to white, translucent opaque, trace milky, fine to predominantly medium, sub-angular, trace fractured grains, poorly sorted, trace weak siliceous cement, fine to medium friable aggregates, poor inferred porosity. No fluorescence.
		100	SILTSTONE: light olive grey to olive grey, rarely dark brown, common carbonaceous specks and laminae, predominantly very soft to occasionally firm when carbonaceous, amorphous to sub-blocky, argillaceous to occasionally arenaceous.
2655	2660	Tr	SANDSTONE: clear to white, translucent opaque, fine to predominantly medium, sub-angular, trace fractured grains, poorly sorted, trace pyrite cement, fine to medium friable aggregates, poor inferred porosity. No fluorescence.
		95	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to soft occasionally firm, predominantly argillaceous grading to arenaceous in part, amorphous, trace pyrite.
		5	CARBONACEOUS SILTSTONE: brownish black, firm to moderately hard, sub-blocky, argillaceous.
2660	2665	Tr	SANDSTONE: clear to white, translucent opaque, fine to predominantly medium, sub-angular, trace fractured grains, poorly sorted, fine to medium friable aggregates, poor to fair inferred porosity. No fluorescence.

Interval (m)		%	Lithology / Show Description
From	To		
2665	2667	95	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to soft occasionally firm, predominantly argillaceous grading to arenaceous in part, amorphous, trace pyrite.
		5	CARBONACEOUS SILTSTONE: brownish black, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous.
		20	SANDSTONE: clear to white, translucent opaque, fine to predominantly medium, occasionally coarse, sub-angular, trace fractured grains, poorly sorted, trace fine hard aggregates with moderate off-white calcareous cement, fair inferred porosity, tight visual porosity, trace fluorescence. FLUORESCENCE: Trace dim yellowish green spotted fluorescence, slow bleeding cream direct cut, instant dark cream crush cut, thin pale yellow film residue.
		75	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to soft occasionally firm, predominantly argillaceous grading to arenaceous in part, amorphous, trace pyrite.
2667	2670	5	CARBONACEOUS SILTSTONE: brownish black, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous.
		15	SANDSTONE: clear, translucent, opaque, pale grey, fine to predominantly medium, occasionally coarse, sub-angular, trace fractured grains, poorly sorted, common white argillaceous matrix, loose, fair inferred porosity, trace fluorescence. FLUORESCENCE: Trace dim yellowish green spotted fluorescence, slow bleeding cream direct cut, instant dark cream crush cut, thin pale yellow film residue.
		75	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to soft occasionally firm, predominantly argillaceous grading to arenaceous in part, amorphous, trace pyrite,
		5	CARBONACEOUS SILTSTONE: brownish black, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous.
2670	2675	5	SANDSTONE: clear, translucent, opaque, pale grey, fine to coarse, sub-angular, trace fractured grains, poorly sorted, loose, rare pyrite nodules, very poor inferred porosity.
		90	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to soft occasionally firm, predominantly argillaceous grading to arenaceous in part, amorphous, trace pyrite,
		5	CARBONACEOUS SILTSTONE: brownish black, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous.
2675	2680	10	SANDSTONE: clear, translucent, white, pale grey, medium to predominantly very coarse, trace granules, sub-angular to sub-rounded, poorly sorted, trace fractured grains, locally strong pyrite cement, rare pyrite nodules, trace grey chert, predominantly loose, locally trace argillaceous matrix, poor inferred porosity, no fluorescence.
		85	SILTSTONE: dark yellowish brown, pale yellowish brown, trace carbonaceous specks and laminae, very soft to soft, occasionally firm, predominantly argillaceous, sub-blocky.
		5	DOLOMITE: dark yellowish brown, dusky yellowish brown cryptocrystalline, very hard, blocky, occasionally flinty.
2680	2683		Minor moderately bright yellowish green fluorescence in mud at 2683m.
		10	SANDSTONE: clear, translucent, white, pale grey, medium to predominantly very coarse, trace granules, sub-angular to sub-rounded, poorly sorted, minor fractured grains, locally strong pyrite cement, rare pyrite nodules, trace grey chert, predominantly loose, locally trace argillaceous matrix, poor inferred porosity, no fluorescence.
		85	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to firm when carbonaceous, predominantly argillaceous, sub-blocky.
		5	COAL: bituminous, brownish black, black, firm to occasionally moderately hard, brittle, sub-conchoidal fracture, sub-vitreous to vitreous.

Interval (m)		%	Lithology / Show Description
From	To		
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown cryptocrystalline, very hard, blocky, occasionally flinty.
2683	2685	10	SANDSTONE: clear, translucent, white, pale grey, medium to predominantly very coarse, trace granules, sub-angular to sub-rounded, poorly sorted, minor fractured grains, locally strong pyrite cement, rare pyrite nodules, trace grey chert, predominantly loose, locally minor fine and medium grained aggregates with trace argillaceous matrix and minor moderately hard siliceous cement, poor inferred porosity, tight to very poor visual porosity, no fluorescence.
		65	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to firm when carbonaceous, predominantly argillaceous, sub-blocky.
		10	CARBONACEOUS SILTSTONE: brownish black, brownish grey, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous in part.
		10	COAL: bituminous, brownish black, black, firm to moderately hard, brittle, sub-conchoidal fracture, sub-vitreous to vitreous.
		5	DOLOMITE: dark yellowish brown, dusky yellowish brown cryptocrystalline, very hard, blocky, occasionally flinty.
2685	2690		Minor moderately bright yellowish green fluorescence in mud at 2687.5m.
		15	SANDSTONE: clear, translucent, white, pale grey, predominantly medium to very coarse, trace granules, sub-angular to sub-rounded, poorly sorted, minor fractured grains, locally strong pyrite cement, rare pyrite nodules, trace grey chert, predominantly loose, locally trace fine and medium grained aggregates with trace argillaceous matrix and minor moderately hard siliceous cement, poor inferred porosity, very poor visual porosity, no fluorescence.
		70	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to firm when carbonaceous, predominantly argillaceous, sub-blocky.
		10	CARBONACEOUS SILTSTONE: brownish black, brownish grey, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous in part.
		5	COAL: bituminous, brownish black, black, firm to moderately hard, brittle, sub-conchoidal to conchoidal fracture, sub-vitreous to vitreous.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown cryptocrystalline, very hard, blocky, occasionally flinty.
2690	2695	15	SANDSTONE: clear, translucent, white, pale grey, predominantly medium to very coarse, trace granules, sub-angular to sub-rounded, poorly sorted, minor fractured grains, locally strong pyrite cement, rare pyrite nodules, trace grey chert, predominantly loose, locally trace fine and medium grained aggregates with trace argillaceous matrix and minor moderately hard siliceous cement, poor inferred porosity, very poor visual porosity, trace fluorescence. FLUORESCENCE: trace dim yellowish green spotted fluorescence, slow bleeding bluish green direct cut, moderate bluish green crush cut, solid bright blue green residue ring.
		80	SILTSTONE: dark yellowish brown, pale yellowish brown, common carbonaceous specks and laminae, very soft to firm when carbonaceous, predominantly argillaceous, sub-blocky.
		5	CARBONACEOUS SILTSTONE: brownish black, brownish grey, firm to moderately hard, grading in part to Coal, sub-blocky, argillaceous in part.
2695	2700	20	SANDSTONE: clear, translucent, white, predominantly medium to very coarse, trace milky granules, sub-angular to sub-rounded, poorly sorted, minor fractured grains, predominantly loose, locally trace fine and medium grained aggregates with trace argillaceous matrix and trace moderately hard siliceous cement, fair inferred porosity, poor visual porosity, trace fluorescence. FLUORESCENCE: trace very dim fluorescence, weak greenish yellow crush cut, weak broken bright yellow green residue ring.
		80	SILTSTONE: dark yellowish brown, pale yellowish brown, minor carbonaceous specks and laminae grading to CARBONACEOUS SILTSTONE , very soft to firm, sub-blocky, predominantly argillaceous, trace arenaceous.

Interval (m)		%	Lithology / Show Description
From	To		
2700	2705	Tr	COAL: bituminous, brownish black, black, firm to moderately hard, brittle, sub-conchoidal to conchoidal fracture, silty in part, sub-vitreous to vitreous.
		10	SANDSTONE: clear, translucent, white, trace light grey, predominantly medium to coarse, trace very coarse, sub-angular to sub-rounded, moderately sorted, predominantly loose, locally trace fine and medium grained aggregates with trace argillaceous matrix and trace moderately hard siliceous cement, trace pyrite, fair inferred porosity, poor visual porosity, trace fluorescence. FLUORESCENCE: trace very dim fluorescence, very slow diffuse bluish yellow direct cut, slow bleeding bluish yellow crush cut, thin pale bluish yellow film residue.
2705	2710	90	SILTSTONE: dark yellowish brown, pale yellowish brown, minor carbonaceous specks and laminae grading to CARBONACEOUS SILTSTONE , very soft to firm, amorphous to sub-blocky, predominantly argillaceous.
		10	SANDSTONE: clear, translucent, white, trace light grey, predominantly medium to coarse, trace milky very coarse, sub-angular to sub-rounded, moderately sorted, predominantly loose, locally trace pyrite cement and nodules, locally trace fine and medium grained aggregates with trace argillaceous matrix and trace moderate siliceous cement, fair inferred porosity, poor visual porosity, trace fluorescence. FLUORESCENCE: trace pinpoint fluorescence, very slow diffuse bluish yellow direct cut, slow bleeding greenish blue crush cut,
		90	SILTSTONE: dark yellowish brown, pale yellowish brown, minor carbonaceous specks and laminae, dispersive to soft, grading to firm CARBONACEOUS SILTSTONE , amorphous to sub-blocky, predominantly argillaceous.
2710	2715	Tr	COAL: bituminous, brownish black, black, firm to moderately hard, brittle, sub-conchoidal to conchoidal fracture, sub-vitreous to vitreous.
2710	2715	100	SILTSTONE: dark yellowish brown, pale yellowish brown, minor carbonaceous specks and laminae, dispersive to soft, firm when carbonaceous, amorphous to sub-blocky, predominantly argillaceous.
2715	2720	5	SANDSTONE: clear, translucent, white, trace light grey, predominantly medium to coarse, sub-angular to sub-rounded, moderately sorted, predominantly loose, locally trace pyrite cement and nodules, locally trace fine and medium grained aggregates with trace argillaceous matrix and trace moderate siliceous cement, fair inferred porosity, poor visual porosity, no fluorescence.
2720	2725	95	SILTSTONE: dark yellowish brown, pale yellowish brown, minor carbonaceous specks and laminae, dispersive to soft, firm when carbonaceous, amorphous to sub-blocky, predominantly argillaceous.
		15	SANDSTONE: clear, translucent, white, trace light grey, predominantly medium to coarse, sub-angular to sub-rounded, moderately sorted, predominantly loose, locally trace pyrite cement, occasional fine and medium grained aggregates with trace argillaceous matrix lithics moderate to poorly sorted with trace moderate siliceous cement, fair inferred porosity, fair visual porosity, no fluorescence.
2725	2730	85	SILTSTONE: dark yellowish brown, pale yellowish brown, minor carbonaceous specks and laminae, dispersive to soft, firm when carbonaceous, amorphous to sub-blocky, predominantly argillaceous.
		100	SILTSTONE: dark yellowish brown, pale yellowish brown, minor carbonaceous specks and laminae, dispersive to soft, firm when carbonaceous, amorphous to sub-blocky, predominantly argillaceous.
		Tr	SANDSTONE: off white to light brown, fine and medium grained aggregates with trace argillaceous moderate to well sorted, trace moderate siliceous cement, fair visual porosity, no fluorescence.

Interval (m)		%	Lithology / Show Description
From	To		
2730	2735	100	SILTSTONE: dark yellowish brown, pale yellowish brown, light brownish grey, minor carbonaceous specks and laminae, dispersive to soft, occasionally firm when carbonaceous, predominantly amorphous to sub-blocky, predominantly argillaceous, rarely arenaceous, grading to very fine Sandstone
		Tr	SANDSTONE: off white to light brown, very fine to fine grained, sub-rounded, well sorted, trace very fine aggregates, with minor argillaceous matrix, predominantly loose, very poor visual porosity and very poor inferred porosity, no fluorescence.
2735	2740	95	SILTSTONE: dark yellowish brown, pale yellowish brown, light brownish grey, common carbonaceous specks and laminae, dispersive to soft, occasionally firm when carbonaceous, locally grading to Coal in part, amorphous to sub-blocky, predominantly argillaceous, rarely arenaceous, grading to very fine Sandstone.
		5	SANDSTONE: clear translucent, off white, fine to coarse, dominantly medium, sub-angular to sub-rounded, moderately sorted, trace very fine to fine grained aggregates with trace argillaceous matrix, minor pyrite cement, trace fractured grains, tight to very poor visual porosity, very poor inferred porosity, no fluorescence.
2740	2745	95	SILTSTONE: dark yellowish brown, pale yellowish brown, light brownish grey, common carbonaceous specks and laminae, dispersive to soft, occasionally firm when carbonaceous, locally grading to Coal in part, amorphous to sub-blocky, predominantly argillaceous, rarely arenaceous, grading to very fine Sandstone.
		5	SANDSTONE: clear translucent, off white, very fine to medium, predominantly fine, sub-angular to sub-rounded, moderately sorted, minor loose, common very fine to fine grained aggregates with trace argillaceous matrix, trace pyrite cement, trace mica, trace fractured grains, tight to very poor visual porosity, very poor inferred porosity, no fluorescence.
		Tr	DOLOMITE: dark yellowish brown, cryptocrystalline, very hard, blocky, occasionally flinty.
2745	2747	75	SILTSTONE: dark yellowish brown, pale yellowish brown, light brownish grey, common carbonaceous specks and laminae, dispersive to soft, amorphous to sub-blocky, predominantly argillaceous, rarely arenaceous, grading to very fine Sandstone.
		15	SANDSTONE: clear translucent, off white, very fine to coarse, predominantly sub-angular to sub-rounded, poorly sorted, common loose, common fine grained aggregates with trace argillaceous matrix, minor calcareous cement in part, rare pyrite cement, rare fractured grains, poor visual porosity, poor inferred porosity, no fluorescence.
		10	CARBONACEOUS SILTSTONE: brownish grey, olive black, soft to firm, occasionally hard, when carbonaceous, sub-blocky, predominantly argillaceous.
		Tr	COAL: bituminous, black, brownish black, brittle, sub-conchoidal, sub-vitreous.
		Tr	DOLOMITE: dark yellowish brown, cryptocrystalline, very hard, blocky, occasionally flinty.
2747	2750	90	SILTSTONE: dark yellowish brown, pale yellowish brown, light brownish grey, common carbonaceous specks and laminae, dispersive to soft, amorphous to sub-blocky, predominantly argillaceous, rarely arenaceous, grading to very fine Sandstone.
		10	SANDSTONE: clear translucent, off white, very fine to coarse, predominantly very fine to fine, moderately sorted, predominantly sub-angular to sub-rounded, predominantly loose, minor fine grained aggregates with trace argillaceous matrix, rare pyrite cement, trace pyrite nodules, trace mica, tight visual porosity, very poor inferred porosity, no fluorescence.
		Tr	CARBONACEOUS SILTSTONE: brownish grey, olive black, soft to firm, occasionally hard, when carbonaceous, sub-blocky, predominantly argillaceous.
2750	2755	85	SILTSTONE: dark yellowish brown, pale yellowish brown, light brownish grey, common carbonaceous specks and laminae, dispersive to soft, amorphous to sub-blocky, predominantly argillaceous.

Interval (m) From	To	%	Lithology / Show Description
		15	SANDSTONE: clear translucent, off white, fine to very coarse, trace granules, predominantly medium to coarse, poorly sorted, sub-angular to sub-rounded, predominantly loose, minor fine to predominantly medium grained aggregates with minor white argillaceous matrix, rare pyrite cement, trace pyrite nodules, poor visual porosity, poor inferred porosity, no fluorescence.
		Tr	CARBONACEOUS SILTSTONE: brownish grey, olive black, soft to firm, occasionally hard, when carbonaceous, sub-blocky, predominantly argillaceous.
2755	2760	30	SANDSTONE: clear translucent, off white, predominantly medium to coarse, trace very coarse, moderately sorted, sub-angular to sub-rounded, predominantly loose, minor fine to medium aggregates with minor white argillaceous matrix, rare pyrite cement, trace moderately hard siliceous cement, trace pyrite nodules, poor visual porosity, moderate inferred porosity, trace fluorescence. FLUORESCENCE: Trace dim pale bluish yellow spotted fluorescence, no direct cut, very weak slow diffuse bluish green crush cut, trace thick pale yellowish green residue.
		70	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, common carbonaceous specks and laminae, soft to firm, amorphous to sub-blocky, predominantly argillaceous.
2760	2765		Sample heavily contaminated with barracarb.
		60	SANDSTONE: clear translucent, white, trace milky, fine to coarse, predominantly medium, trace very coarse, moderately sorted, predominantly sub-angular to sub-rounded, predominantly loose, minor fine to medium aggregates with minor white, pale pinkish grey argillaceous matrix, trace pyrite cement, trace pyrite nodules, poor visual porosity, moderate inferred porosity, trace fluorescence. FLUORESCENCE: Trace dim pale bluish yellow spotted fluorescence, no direct cut, very weak slow diffuse bluish green crush cut, trace thick pale yellowish green residue.
		40	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and flecks, dispersive to soft, amorphous, argillaceous.
		Tr	DOLOMITE: dark yellowish brown, cryptocrystalline, very hard, blocky, occasionally flinty.
2765	2770		Sample heavily contaminated with barracarb.
		30	SANDSTONE: clear translucent, white, trace milky, fine to coarse, predominantly medium, moderately sorted, predominantly sub-angular to sub-rounded, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace pyrite cement, trace pyrite nodules, poor visual porosity, moderate inferred porosity, no fluorescence.
		65	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, soft to hard when carbonaceous, amorphous to sub-blocky, argillaceous.
		5	COAL: bituminous, black, brownish black, brittle, sub-conchoidal, sub-vitreous.
2770	2775		Sample heavily contaminated with barracarb.
		50	SANDSTONE: clear translucent, white, trace milky, fine to coarse, predominantly medium, moderately sorted, predominantly sub-angular to sub-rounded, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement, trace pyrite nodules, poor visual porosity, moderate inferred porosity, no fluorescence.
		50	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, soft to hard when carbonaceous, amorphous to sub-blocky, argillaceous, trace pyrite.
		Tr	COAL: bituminous, black, brownish black, brittle, uneven to sub-conchoidal fracture, sub-vitreous.

Interval (m)		%	Lithology / Show Description
From	To		
2775	2780		Sample heavily contaminated with barracarb.
		60	SANDSTONE: clear translucent, white, trace milky, fine to very coarse, predominantly medium to coarse, poorly sorted, sub-angular, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement, minor pyrite nodules, poor visual porosity, good inferred porosity, no fluorescence.
		40	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, soft to firm when carbonaceous, amorphous to sub-blocky, argillaceous, trace pyrite.
		Tr	COAL: bituminous, black, brownish black, brittle, uneven to sub-conchoidal fracture, sub-vitreous.
2880	2783	70	SANDSTONE: clear translucent, white, fine to very coarse, predominantly medium to coarse, poorly sorted, sub-angular, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement, poor visual porosity, good inferred porosity, no fluorescence.
		30	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, soft to firm, occasionally hard and siliceous, amorphous to sub-blocky, argillaceous, trace pyrite.
2783	2785		Bit trip at 2783m. Reed CT6095
			Sample contaminated with cavings
		50	SANDSTONE: clear translucent, white, fine to very coarse, predominantly medium to coarse, poorly sorted, sub-angular, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement, poor visual porosity, good inferred porosity, no fluorescence.
		50	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, soft to firm, occasionally hard and siliceous, amorphous to sub-blocky, argillaceous, trace pyrite.
		Tr	COAL: bituminous, black, brownish black, brittle, uneven to sub-conchoidal fracture, sub-vitreous.
2785	2790	85	SANDSTONE: clear translucent, white, predominantly medium to coarse, minor very coarse, moderately sorted, sub-angular, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement and pyrite nodules, poor visual porosity, good inferred porosity, no fluorescence.
		15	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, soft to occasionally firm, rarely hard and siliceous, amorphous to sub-blocky, argillaceous to occasionally arenaceous, trace pyrite.
		Tr	VOLCANICS (cavings?): black, greenish black, greenish grey, finely crystalline, abundant emerald green pyroxenes, firm to moderately hard, trace quartz veins.
2790	2795	40	SANDSTONE: clear translucent, white, minor milky, minor opaque pale grey, predominantly medium to very coarse, trace granules, poorly sorted, angular to sub-rounded, trace fractured grains, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement, pyrite nodules, poor visual porosity, poor to fair inferred porosity, trace fluorescence. FLUORESCENCE: trace dim pale greenish yellow spotted fluorescence, no direct cut, very weak very slow pale cream diffuse crush cut, trace residue.
		60	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, very soft to occasionally firm when carbonaceous, rarely hard and siliceous, amorphous to sub-blocky, argillaceous, arenaceous in part, grades to fine Sandstone, trace very fine disseminated pyrite.

Interval (m)		%	Lithology / Show Description
From	To		
		Tr	DOLOMITE: dark yellowish brown, cryptocrystalline, very hard, blocky, occasionally flinty.
		Tr	VOLCANICS (cavings?): black, greenish black, greenish grey, finely crystalline, abundant emerald green pyroxenes, abundant biotite, firm to hard, trace quartz veins.
2795	2800	40	SANDSTONE: clear translucent, white, minor milky, minor opaque pale grey, medium to predominantly coarse and very coarse, trace granules, poorly sorted, angular to sub-rounded, predominantly loose, trace fine to medium aggregates with common white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement, trace pyrite nodules, trace medium grey chert, poor visual porosity, poor to fair inferred porosity, no fluorescence.
		60	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and laminae, very soft to soft, amorphous to sub-blocky, argillaceous, arenaceous in part.
		Tr	VOLCANICS (cavings?): black, greenish black, greenish grey, finely crystalline, abundant emerald green pyroxenes, abundant biotite, firm to hard, trace quartz veins.
2800	2805	30	SANDSTONE: clear translucent, white, minor milky, trace light grey, predominantly medium to very coarse, trace granules, trace fractured grains, poorly sorted, angular to sub-rounded, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous cement, trace pyrite cement, trace pyrite nodules, poor visual porosity, poor to fair inferred porosity, no fluorescence.
		65	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and laminae, very soft to firm, amorphous to sub-blocky, argillaceous, arenaceous in part.
		5	DOLOMITE: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, occasionally flinty, trace pyrite.
		Tr	VOLCANICS (cavings?): black, greenish black, greenish grey, finely crystalline, abundant emerald green pyroxenes, abundant biotite, firm to hard.
2805	2810	15	SANDSTONE: clear translucent, white, minor milky, trace light grey, predominantly medium to very coarse, trace granules, poorly sorted, angular to sub-rounded, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous and dolomitic cement, trace pyrite cement, poor visual porosity, poor to fair inferred porosity, no fluorescence.
		85	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and laminae, dispersive to firm, amorphous to sub-blocky, argillaceous, arenaceous in part.
2810	2815	15	SANDSTONE: clear translucent, white, minor milky, trace light grey, predominantly medium to very coarse, trace granules, poorly sorted, angular to sub-rounded, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous and dolomitic cement, trace pyrite cement, trace grey chert, poor visual porosity, poor to fair inferred porosity, no fluorescence.
		80	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and laminae, dispersive to firm when carbonaceous, amorphous to sub-blocky, argillaceous, arenaceous in part.
		5	COAL: bituminous, black, brownish black, brittle, uneven to sub-conchoidal fracture, dull to rarely sub-vitreous, silty.
2815	2820	10	SANDSTONE: clear translucent, white, minor milky, predominantly medium to very coarse, poorly sorted, angular to sub-rounded, predominantly loose, trace fine to medium aggregates with minor white argillaceous matrix, trace moderately hard siliceous and dolomitic cement, trace pyrite cement, trace grey chert, poor visual porosity, fair inferred porosity, no fluorescence.

Interval (m)		%	Lithology / Show Description
From	To		
2820	2825	90	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and laminae, dispersive to firm when carbonaceous, amorphous to sub-blocky, argillaceous, arenaceous in part.
		80	SANDSTONE: clear translucent, minor milky, predominantly medium to occasionally coarse, moderately sorted, sub-angular to sub-rounded, trace siliceous and pyrite cement, trace slightly dolomitic grey chert, good inferred porosity, trace dull yellow dolomitic mineral fluorescence.
2825	2830	20	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and laminae, dispersive to firm when carbonaceous, amorphous to sub-blocky, argillaceous, arenaceous in part.
		70	SANDSTONE: (1) clear translucent, minor milky, predominantly medium to occasionally coarse, moderately sorted, sub-angular to sub-rounded, loose, trace siliceous and pyrite cement, good inferred porosity, no fluorescence. (2) aggregates, white to pale yellowish brown, fine grained, occasional carbonaceous specks and lithic, well sorted, weak - strong siliceous cement, poor to fair visible porosity,
2830	2835	30	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks and laminae, dispersive to firm when carbonaceous, amorphous to sub-blocky, argillaceous, arenaceous in part.
		Tr	CHERT: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, dolomitic in part.
		Tr	COAL: bituminous, brownish / black, soft - firm, uneven fracture, dull, silty.
		80	SANDSTONE: (1) clear translucent, minor milky, predominantly medium to occasionally very coarse, poorly sorted, sub-angular to sub-rounded, loose, trace siliceous and pyrite cement, rare fractured grains, good inferred porosity, no fluorescence. (2) aggregates, white to pale yellowish brown, fine grained, occasional carbonaceous specks and lithics, well sorted, weak - strong siliceous cement, poor to fair visual porosity.
		20	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace light grey, trace carbonaceous specks and laminae, dispersive to firm when carbonaceous, trace pyritic, amorphous to sub-blocky, argillaceous, arenaceous in part.
2835	2840	Tr	CHERT: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, dolomitic in part, trace pyritic.
		Tr	COAL: bituminous, brownish / black, soft - firm, uneven fracture, dull, silty.
		40	SANDSTONE: clear translucent, minor milky, predominantly medium to occasionally very coarse, poorly sorted, sub-angular to sub-rounded, loose to occasional small aggregates, trace siliceous and pyrite cement, rare fractured grains, good inferred porosity, no fluorescence.
2840	2845	60	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace light grey, trace carbonaceous specks and laminae, occasionally firm and carbonaceous, dispersive to firm, trace pyritic cement, amorphous to sub-blocky, argillaceous, arenaceous in part.
		10	SANDSTONE: clear translucent, minor milky, predominantly medium to occasionally coarse, poorly sorted, sub-angular to sub-rounded, loose to rare small aggregates, trace siliceous and pyrite cement, rare fractured grains, poor inferred porosity, no fluorescence
2845	2850	90	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace light grey, minor carbonaceous specks and laminae, occasionally firm and carbonaceous, dispersive to firm, trace pyritic cement, amorphous to sub-blocky, argillaceous, arenaceous in part.
		Tr	COAL: brownish / black, soft - firm, uneven fracture, dull, silty.
		100	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace light grey, minor carbonaceous specks and laminae, occasionally firm and carbonaceous, dispersive to firm, amorphous to sub-blocky, argillaceous, arenaceous in part, grading to very fine Sandstone.

Interval (m)		%	Lithology / Show Description
From	To		
2850	2855	Tr	SANDSTONE: clear translucent, minor milky, fine to medium, well sorted, sub-angular to sub-rounded, minor loose to occasional small aggregates, trace siliceous and pyrite cement, rare fractured grains, poor inferred porosity, no fluorescence
		100	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor olive black, minor carbonaceous specks and laminae, occasionally firm and carbonaceous, dispersive to firm, amorphous to sub-blocky, common argillaceous, common arenaceous, grading to very fine Sandstone.
2855	2860	Tr	SANDSTONE: clear translucent, minor milky, very fine to very coarse, poorly sorted, sub-angular to sub-rounded, minor loose to rare very fine to fine aggregates, trace siliceous and pyrite cement, rare fractured grains, poor inferred porosity, no fluorescence
		100	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor olive black, minor carbonaceous specks and laminae, occasionally firm and carbonaceous, dispersive to firm, amorphous to sub-blocky, common argillaceous, common arenaceous, grading to very fine Sandstone.
2860	2865	Tr	SANDSTONE: clear translucent, minor milky, very fine to medium, moderately sorted, sub-angular to sub-rounded, rare loose, rare very fine to fine aggregates, trace siliceous and pyrite cement, rare fractured grains, poor inferred porosity, no fluorescence
		10	SANDSTONE: clear translucent, minor milky, very fine to coarse, predominantly medium, trace very coarse, poorly sorted, sub-angular to sub-rounded, common loose, occasional very fine to fine aggregates, trace siliceous cement, pyritic nodules, rare fractured grains, poor inferred porosity, no fluorescence
2865	2870	85	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor olive black, minor carbonaceous specks and laminae, occasionally firm and carbonaceous, dispersive to firm, amorphous to sub-blocky, common argillaceous, common arenaceous, grading to very fine Sandstone.
		5	CARBONACEOUS SILTSTONE: brownish grey, olive black, soft to firm, occasionally hard, sub-blocky, predominantly argillaceous, grading to Coal.
		100	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor olive black, minor carbonaceous specks and laminae, predominantly dispersive to occasionally firm and carbonaceous, amorphous to sub-blocky, argillaceous.
2870	2875	Tr	SANDSTONE: clear translucent, minor milky, very fine to medium, predominantly fine, moderately sorted, sub-angular to sub-rounded, rare loose, occasional very fine to fine aggregates, trace siliceous cement, very poor inferred porosity, no fluorescence
		90	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor olive black, minor carbonaceous specks and laminae, predominantly dispersive to occasionally firm and carbonaceous, amorphous to sub-blocky, argillaceous.
2875	2880	10	SANDSTONE: clear translucent, opaque, minor milky, fine to medium, predominantly fine, moderately sorted, sub-angular to sub-rounded, predominantly loose, occasional fine aggregates with trace white argillaceous matrix, trace pyrite cement, poor inferred porosity, very poor visual, 5% fluorescence. FLUORESCENCE: 5% dim, orange yellow spotted fluorescence, no direct cut, very weak very slow trace crush cut, trace residue.
		75	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor olive black, minor carbonaceous specks and laminae, predominantly very soft to occasionally firm when carbonaceous, amorphous to sub-blocky, argillaceous.
		25	SANDSTONE: clear translucent, opaque, fine to coarse, predominantly fine to medium, moderately sorted, sub-angular to sub-rounded, predominantly loose, minor fine aggregates with white argillaceous matrix, trace pyrite cement, poor inferred porosity, very poor visual porosity, 5% fluorescence. FLUORESCENCE: 5% dim, orange yellow spotted fluorescence in fine sandstone with abundant kaolinitic matrix, no direct cut, very weak very slow trace crush cut, trace residue.

Interval (m)		%	Lithology / Show Description
From	To		
2880	2885	Tr	DOLOMITE: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, occasionally flinty.
		75	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae grading to moderately hard CARBONACEOUS SILTSTONE , predominantly very soft to occasionally firm, sub-blocky, argillaceous, arenaceous in part.
		25	SANDSTONE: clear, translucent, opaque, trace milky, predominantly medium to coarse, trace very coarse, moderately sorted, angular to sub-rounded, predominantly loose, minor fine aggregates with white argillaceous matrix, trace pyrite cement, poor to fair inferred porosity, poor visual porosity, trace fluorescence. FLUORESCENCE: trace dim, orange yellow spotted fluorescence in fine sandstone with abundant kaolinitic matrix, no direct cut, very weak very slow trace crush cut, trace residue.
2880	2885	Tr	DOLOMITE: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, flinty.
		85	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae grading to moderately hard CARBONACEOUS SILTSTONE , predominantly very soft to occasionally firm, sub-blocky, argillaceous, arenaceous in part.
		15	SANDSTONE: clear, translucent, opaque, trace milky, predominantly medium to coarse, trace very coarse, moderately sorted, angular to sub-rounded, predominantly loose, minor fine aggregates with white argillaceous matrix, trace siliceous and dolomitic cement, trace pyrite cement, poor to fair inferred porosity, poor visual porosity, no fluorescence.
2885	2890	Tr	DOLOMITE: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, flinty.
		90	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and laminae, predominantly very soft to occasionally firm, sub-blocky, argillaceous, arenaceous in part.
		10	SANDSTONE: clear, translucent, opaque, trace milky, predominantly medium to coarse, trace very coarse, moderately sorted, sub-angular to sub-rounded, predominantly loose, minor fine aggregates with white argillaceous matrix, trace siliceous and dolomitic cement, trace pyrite cement, poor to fair inferred porosity, poor visual porosity, no fluorescence.
2890	2895	Tr	DOLOMITE: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, flinty.
		80	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, minor carbonaceous specks and trace laminae, predominantly very soft to occasionally firm, sub-blocky, argillaceous, pyritised in part.
		15	SANDSTONE: clear, translucent, opaque, trace milky, trace grey, predominantly medium to coarse, trace very coarse, moderately sorted, sub-angular to sub-rounded, predominantly loose, trace medium aggregates with white argillaceous matrix, trace siliceous and dolomitic cement, trace pyrite cement, trace pyrite nodules, fair inferred porosity, poor visual porosity, no fluorescence.
2895	2900	5	CHERT: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, dolomitic.
		40	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, argillaceous.
		60	SANDSTONE: clear, translucent, opaque, trace milky, predominantly medium, trace coarse and very coarse, moderately sorted, sub-angular to sub-rounded, predominantly loose, good inferred porosity, no fluorescence.
2900	2905	Tr	CHERT: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, dolomitic.
		60	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, argillaceous.
		40	SANDSTONE: clear, translucent, opaque, trace milky, predominantly medium, trace coarse and very coarse, moderately sorted, sub-angular to sub-rounded, predominantly loose, good inferred porosity, no fluorescence.
		Tr	CHERT: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, dolomitic.

Interval (m)		%	Lithology / Show Description
From	To		
2905	2910	40	SANDSTONE: clear, translucent, opaque, trace milky, fine to coarse trace very coarse, poorly sorted, sub-angular to sub-rounded, predominantly loose trace fine aggregates, rare fractured grains, good inferred porosity, no fluorescence.
		60	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, argillaceous.
2910	2915	50	SANDSTONE: (1) clear, translucent, opaque, trace milky, fine to coarse, predominantly medium, poorly sorted, sub-angular to sub-rounded, predominantly loose trace fine aggregates, rare fractured grains, good inferred porosity. (2) Trace dark yellowish brown, pale yellowish brown, off-white, very fine to fine grained, lithics and carbonaceous specks, light brown argillaceous matrix, grading to Siltstone, weak siliceous to dolomitic cement. FLUORESCENCE: (in white argillaceous matrix of Sandstone) 10%, dull, light yellow, patchy, no direct cut, no crush cut, no residue ring.
		50	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, occasionally black and very carbonaceous, predominantly very soft to occasionally firm, sub-blocky, argillaceous.
		Tr	CHERT: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, dolomitic.
2915	2920	30	SANDSTONE: (1) clear, translucent, opaque, trace milky, fine to coarse, predominantly medium, poorly sorted, sub-angular to sub-rounded, predominantly loose trace fine aggregates, abundant white argillaceous matrix washing out, fair inferred porosity. (2) Aggregates off-white, very fine to fine grained, abundant white argillaceous matrix,, weak siliceous cement. FLUORESCENCE: 35%, dominantly dull yellow to rarely light green, patchy, no direct cut, very weak trace crush cut, weak broken light cream residue ring.
		60	SILTSTONE: dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, argillaceous.
		10	COAL: bituminous, brownish black, soft to firm, uneven fracture, dull, silty.
		50	SANDSTONE: clear, translucent, opaque, trace milky, fine to coarse, predominantly medium, poorly sorted, sub-angular to sub-rounded, predominantly loose trace fine aggregates, white argillaceous matrix, fair inferred porosity. Trace aggregates off-white to medium brown, very fine to fine grained, white argillaceous matrix,, weak siliceous cement. FLUORESCENCE: 10%, dull orange to occasionally light green, pin-point, no direct cut, very weak trace crush cut, very weak, broken, light yellow residue ring.
2920	2925	50	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, argillaceous.
		Tr	DOLOMITE: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, flinty.
		20	SANDSTONE: clear, translucent, opaque, trace milky, fine to coarse, trace very coarse, predominantly medium, poorly sorted, sub-angular to sub-rounded, predominantly loose trace fine aggregates, fair to good inferred porosity. Trace aggregates off-white to medium brown, very fine to fine grained, white to light brown argillaceous matrix, carbonaceous in part, weak siliceous cement, trace fluorescence.
2925	2930	80	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, argillaceous rarely arenaceous.
		Tr	DOLOMITE: pale to dark yellowish brown, cryptocrystalline, very hard, blocky, flinty.
2930	2935	30	SANDSTONE: clear translucent, opaque, trace milky, pale grey, fine to coarse, trace very coarse, predominantly medium, sub-rounded to predominantly sub-angular, moderately sorted, common kaolinite matrix, loose, clean, trace mica flakes, trace pyrite nodules, fair inferred porosity. FLUORESCENCE: 5% dull bluish white spotted fluorescence, pale yellow bleeding direct cut, moderate yellowish white diffuse crush cut, thick ring residue.

Interval (m)		%	Lithology / Show Description
From	To		
2935	2940	65	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, argillaceous rarely arenaceous.
		5	COAL: bituminous, black, friable to moderately hard, sub-conchoidal fracture, dull to sub-vitreous.
		10	SANDSTONE: clear, translucent, opaque, trace milky, pale grey, fine to medium, minor coarse, sub-rounded to predominantly sub-angular, moderately sorted, rare kaolin matrix, loose, clean, occasional fractures, poor inferred porosity. FLUORESCENCE: 5% dull bluish white spotted fluorescence, pale yellow bleeding direct cut, moderate yellowish white diffuse crush cut, thick ring residue.
		90	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace pale grey, trace carbonaceous specks, predominantly very soft to occasionally firm, sub-blocky, dispersive, argillaceous, rarely arenaceous, grading to very fine Sandstone.
		Tr	COAL: bituminous, black, friable to moderately hard, sub-conchoidal fracture, dull to sub-vitreous.
2940	2945	20	SANDSTONE: clear, translucent, opaque, trace milky, trace light grey, trace pale pink, medium to coarse, minor very coarse, sub-rounded to predominantly sub-angular, moderately sorted, loose, clean, trace fine to medium aggregates with kaolin matrix, trace pyrite nodules, poor inferred porosity, trace fluorescence. FLUORESCENCE: trace dull bluish yellow spotted fluorescence, no direct cut, very weak very slow yellowish white diffuse crush cut, trace ring residue.
		80	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace pale grey, trace carbonaceous specks and laminae, dispersive to occasionally firm when carbonaceous, sub-blocky, argillaceous, rarely arenaceous.
		Tr	COAL: bituminous, black, friable to moderately hard, sub-conchoidal fracture, dull to sub-vitreous. Pull out of the hole (23 July 2001) and run wire-line log suite one RUN #1 PEX-HALS-DSI-HNGS-LEHQT RUN #2 MDT-GR-LEHQT RUN #3 FMI-HRLA-GR-LEHQT RUN #4 MDT-GR-LEHQT RUN #4A MDT-GR-LEHQT RUN #5 MSCT-GR-LEHQT Drill ahead with Security XL 20D tricone bit.
		80	SANDSTONE: clear, translucent, opaque, trace light grey, trace frosted, fine to predominantly medium, sub-rounded to predominantly sub-angular, moderately sorted, loose, clean, trace argillaceous matrix, trace pyrite nodules, poor inferred porosity, no fluorescence. Abundant Baracarb in sample.
		20	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace pale grey, trace carbonaceous specks and laminae, micromicaceous, dispersive to occasionally firm when carbonaceous, sub-blocky, argillaceous.
2950	2955	Tr	VOLCANICS (cavings?): dark yellowish green, yellowish grey, trace greenish black, greenish grey, finely crystalline, abundant emerald green pyroxenes, firm to hard.
		70	SANDSTONE: clear, translucent, opaque, trace frosted, trace light grey, fine to coarse, predominantly medium, sub-rounded to predominantly sub-angular, moderately sorted, loose, clean, common white argillaceous (kaolin) matrix, trace pyrite nodules, locally trace pyrite cement, trace mica flakes, fair inferred porosity, 10% dim pinkish yellow spotted fluorescence in the kaolin matrix, no direct cut, no crush cut.

Interval (m)		%	Lithology / Show Description
From	To		
2955	2960	30	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace pale grey, trace carbonaceous specks and laminae, micromicaceous, dispersive to occasionally firm when carbonaceous, sub-blocky, argillaceous.
		70	SANDSTONE: clear, translucent, opaque, trace light grey, medium to coarse dominantly medium, sub-rounded to predominantly sub-angular, moderately sorted, loose, clean, minor white argillaceous (kaolin) matrix, good inferred porosity, trace dim pinkish yellow spotted fluorescence in the kaolin matrix, no direct cut, no crush cut.
2960	2965	30	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace pale grey, trace carbonaceous specks and laminae, micromicaceous, dispersive to occasionally firm when carbonaceous, sub-blocky, argillaceous.
		80	SANDSTONE: clear, translucent, milky white in part, fine to dominantly medium grained, sub-rounded to predominantly sub-angular, moderately sorted, loose, clean, minor white argillaceous (kaolin) matrix, good inferred porosity, trace dim pinkish yellow spotted fluorescence in the kaolin matrix, no direct cut, no crush cut.
2965	2970	20	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, brownish grey, trace pale grey, trace carbonaceous specks and laminae, micromicaceous, dispersive to occasionally firm when carbonaceous, sub-blocky, argillaceous.
		Tr	COAL: bituminous, black, friable to moderately hard, sub-conchoidal fracture, dull to sub-vitreous.
		50	SANDSTONE: (1) clear, translucent, milky white in part, medium to very coarse grained, sub-rounded to angular, common fractured grains, poorly sorted, loose, clean, minor white argillaceous (kaolin) matrix adhering to grains, fair inferred porosity, trace dull orange / yellow fluorescence in the kaolin matrix, no direct cut, no crush cut. (2) occasionally fine to medium grained aggregates, sub angular to rounded, weak to moderately strong siliceous cement and white argillaceous matrix, poor visual porosity.
2970	2975	50	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, trace carbonaceous specks and laminae, dispersive to occasionally firm when carbonaceous, sub-blocky, argillaceous.
		20	SANDSTONE: (1) clear, translucent, milky white in part, medium to coarse grained, sub-rounded to angular, common fractured grains, poorly sorted, loose, clean, minor white argillaceous (kaolin) matrix adhering to grains, fair inferred porosity. (2) white - off white, fine to occasionally medium grained aggregates, sub angular to rounded, weak to moderately strong siliceous cement, common white argillaceous matrix, matrix supported in part, poor visual porosity.
		80	SILTSTONE: dark brownish-grey, dark yellowish brown, pale yellowish brown, carbonaceous specks and laminae, soft, sub-blocky, argillaceous, occasionally arenaceous and finely interbedded with fine sandstone.
2975	2980	Tr	ALTERED VOLCANICS: black green, Remnant crystal structures of black and dark green pyroxene, set in a finer ground mass of plagioclase, biotite and quartz, alteration of all minerals is common.
		10	SANDSTONE: (1) clear, translucent, milky white in part, medium to coarse grained, sub-rounded to angular, common fractured grains, poorly sorted, loose, clean, minor white argillaceous (kaolin) matrix adhering to grains, fair inferred porosity. (2) white - off white, fine to occasionally medium grained aggregates, sub angular to rounded, weak to moderately strong siliceous cement, common white argillaceous matrix, matrix supported in part, carbonaceous grains in part, poor visual porosity.
		90	SILTSTONE: dark brownish-grey, dusky yellowish brown, brownish black, carbonaceous specks in part and occasional carbonaceous laminae, very soft and sticky to rarely firm and carbonaceous, argillaceous.
2980	2985	100	SILTSTONE: dark brownish-grey, dusky yellowish brown, brownish black, rare carbonaceous specks, very soft to soft, becoming firm when carbonaceous, argillaceous.

Interval (m)		%	Lithology / Show Description
From	To		
2985	2990	100	SILTSTONE: dark brownish-grey, dusky yellowish brown, brownish black, rare carbonaceous specks, very soft to soft, becoming firm when carbonaceous, argillaceous, rarely finely arenaceous and gradational to very fine matrix supported sandstone.
		Tr	SANDSTONE: clear, translucent, milky white in part, coarse to very coarse grained, sub-rounded to angular, common fractured grains, moderately sorted, loose, clean, quartz overgrowths in part, occasional hard siliceous cement, fair inferred porosity, poor visual porosity, no fluorescence.
2990	2995	100	SILTSTONE: brownish black, dark olive grey, dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, rarely arenaceous and gradational to very fine off white matrix supported sandstone, sub-blocky to occasionally sub fissile when carbonaceous.
		Tr	SANDSTONE: off white, light brown, very fine to fine grained, sub angular to rounded, well rounded, common off white argillaceous matrix, matrix supported in part, occasional carbonaceous grains, argillaceous and weak siliceous cement, poor visible porosity, no fluorescence.
2995	3000	100	SILTSTONE: brownish black, dark olive grey, dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous to arenaceous in part, rarely gradational to very fine off white / light brown matrix supported sandstone, sub-blocky to occasionally sub fissile when carbonaceous.
		Tr	SANDSTONE: off white, light brown, very fine to fine grained, sub angular to rounded, well rounded, common off white / light brown argillaceous matrix, matrix supported in part, occasional carbonaceous grains, argillaceous and weak siliceous cement, poor visible porosity, no fluorescence. Also clear to translucent, medium to coarse grains, sub rounded to angular, occasional string siliceous cement, poor visible porosity.
3000	3005	97	SILTSTONE: , 1) predominantly dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) brownish black, micromicaceous, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, argillaceous, occasionally arenaceous in part, rarely siliceous in part.
		3	SANDSTONE: translucent, opaque, medium to very coarse, trace sub-rounded granules, sub-angular to sub-rounded, locally angular in part, common white argillaceous matrix, trace pyrite cement, trace moderate argillaceous cement, trace pyrite cement, nil visual porosity, very poor inferred porosity, no fluorescence.
3005	3010	98	SILTSTONE: 1) predominantly dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) brownish black, micromicaceous, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, argillaceous, occasionally arenaceous in part, rarely siliceous in part.
		2	SANDSTONE: translucent, opaque, medium to very coarse, trace sub-rounded granules, sub-angular to sub-rounded, locally angular in part, common white argillaceous matrix, trace pyrite cement, trace moderate argillaceous cement, nil visual porosity, very poor inferred porosity, no fluorescence.
3010	3015	Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
		98	SILTSTONE: 1) predominantly dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) brownish black, micromicaceous, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, argillaceous, occasionally arenaceous in part, rarely siliceous in part.

Interval (m)		%	Lithology / Show Description
From	To		
3015	3020	2	SANDSTONE: translucent, opaque, occasionally white, medium to very coarse sub-angular to sub-rounded, common white argillaceous matrix, trace pyrite cement, trace moderate argillaceous cement, nil visual porosity, very poor inferred porosity, no fluorescence.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
		100	SILTSTONE: 1) predominantly dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) brownish black, micromicaceous, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, argillaceous, occasionally arenaceous in part, rarely siliceous in part.
3020	3025	Tr	SANDSTONE: translucent, opaque, occasionally white, medium to very coarse sub-angular to sub-rounded, poorly sorted, common white argillaceous matrix, trace pyrite cement, trace moderate argillaceous cement, nil visual porosity, very poor inferred porosity, no fluorescence.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
		60	SILTSTONE: 1) dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) common brownish black, micromicaceous, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, locally trace greyish green lithic fragments, argillaceous, occasionally arenaceous in part, rarely siliceous in part.
3025	3030	40	SANDSTONE: clear, translucent, opaque, fine to medium, predominantly sub-angular to sub-rounded, moderately sorted, abundant white argillaceous matrix, , trace moderate argillaceous cement, trace mica flakes, poor visual porosity, poor inferred porosity, trace moderately bright pink mineral fluorescence.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
		60	Siltstone: , 1) dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) common brownish black, micromicaceous, trace pyrite, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, locally minor greyish green lithic fragments, argillaceous, occasionally arenaceous in part, rarely siliceous in part.
3030	3035	40	SANDSTONE: clear, translucent, opaque, fine to very coarse, predominantly medium, sub-angular to sub-rounded, poorly sorted, abundant white argillaceous matrix, , trace moderate argillaceous cement, poor visual porosity, poor inferred porosity, trace moderately bright mineral fluorescence.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
		60	SILTSTONE: , 1) dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) common brownish black, micromicaceous, trace pyrite, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, locally minor greyish green lithic fragments, argillaceous, occasionally arenaceous in part, rarely siliceous in part.
		40	SANDSTONE: clear, translucent, opaque, fine to very coarse, predominantly medium, sub-angular to sub-rounded, poorly sorted, abundant white argillaceous matrix, , trace moderate argillaceous cement, poor visual porosity, poor inferred porosity, trace moderately bright mineral fluorescence.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.

Interval (m)		%	Lithology / Show Description
From	To		
3035	3040	70	SILTSTONE: 1) dusky yellowish brown, carbonaceous specks and carbonaceous laminae in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) common brownish black, micromicaceous, trace pyrite, carbonaceous in parts, predominantly firm to moderately hard, occasionally hard, locally minor greyish green lithic fragments, argillaceous, occasionally arenaceous in part, rarely siliceous in part.
		30	SANDSTONE: clear, translucent, opaque, fine to very coarse, predominantly medium, sub-angular, locally in part, poorly sorted, abundant white argillaceous matrix, trace moderate argillaceous cement, trace chert, poor visual porosity, poor inferred porosity, no fluorescence.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
3040	3045	40	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, predominantly medium, sub-angular, poorly sorted, abundant white argillaceous matrix, trace moderate argillaceous cement, trace chert, poor visual porosity, fair inferred porosity. (2) off white, very light brown, fine grained sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, matrix supported in part. FLUORESCENCE: trace, dim, patchy, dull yellow, very slow bleeding cut, moderately fast light yellow cut with moderate bright yellow / green residue ring.
		60	SILTSTONE: 1) dusky yellowish brown, carbonaceous specks in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) common brownish black, micromicaceous, trace pyrite, carbonaceous specks in parts, carbonaceous in part, predominantly firm to moderately hard, occasionally hard, argillaceous to arenaceous, rarely siliceous.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
3045	3050	30	SANDSTONE: (1) clear, translucent, opaque, fine to medium, sub-angular, moderately sorted, common white argillaceous matrix, trace moderate argillaceous cement, poor visual porosity, fair inferred porosity. (2) off white, very light brown, fine grained sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, matrix supported in part. FLUORESCENCE: 5% - trace, dim, patchy, dull yellow, trace bleeding cut, trace light yellow cut with weak broken yellow / green residue ring.
		70	SILTSTONE: dusky yellowish brown to brownish black, carbonaceous specks in part, occasionally carbonaceous, very soft and argillaceous to occasionally firm, rarely arenaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.
3050	3055	30	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, sub-rounded - angular, moderately sorted, common white argillaceous matrix, trace moderate argillaceous cement, poor visual porosity, fair inferred porosity. (2) off white, very light brown, fine grained sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, matrix supported in part. FLUORESCENCE: trace, dim, patchy, dull yellow, trace bleeding cut, trace light yellow cut with weak broken to indistinct yellow / green residue ring.
		70	SILTSTONE: dusky yellowish brown to brownish black, carbonaceous specks in part, occasionally carbonaceous, very soft and argillaceous to occasionally firm, rarely arenaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.

Interval (m) From	To	%	Lithology / Show Description
		Tr	VOLCANICS: (possibly locally sourced) black green, brown / off white mottled remnant crystal structures of black and dark green pyroxene, set in a finer ground mass of plagioclase and quartz, alteration of all minerals is common.
3055	3060	20	SANDSTONE: (1) clear, translucent, opaque, fine to very coarse, sub-rounded - angular, moderately sorted, common white argillaceous matrix washing out in part, poor visual porosity, fair inferred porosity. (2) off white, very light brown, fine grained sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, lithic fragments in part, matrix supported in part. FLUORESCENCE: trace, dim, patchy, dull yellow, trace bleeding cut, trace light yellow cut with weak broken to indistinct yellow / green residue ring.
		80	SILTSTONE: 1) dusky yellowish brown, carbonaceous specks in part, soft to firm when carbonaceous, argillaceous, amorphous - sub-blocky. 2) common dark brown, brownish black, micromicaceous, trace pyrite, carbonaceous specks in parts, carbonaceous in part, firm, occasionally hard, argillaceous to arenaceous, rarely siliceous.
3060	3065	20	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, sub-rounded - angular, moderately sorted, common white argillaceous matrix washing out in part, trace pyrite cement, poor visual porosity, fair inferred porosity. (2) off white, very light brown, fine to rarely medium grained, sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, lithic fragments in part, matrix supported in part.
		80	SILTSTONE: dusky yellowish brown to brownish black, carbonaceous specks in part, occasionally carbonaceous, very soft and argillaceous to occasionally firm, rarely arenaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous.
3065	3070	10	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, sub-rounded - angular, poorly sorted, loose, common white argillaceous matrix, locally trace disseminated pyrite, fair inferred porosity. (2) off white, very light brown, fine to rarely medium grained aggregates, sub angular to sub -rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, friable, poor visual porosity. FLUORESCENCE: trace dim orange / yellow spotted fluorescence, slow bleeding direct cut, diffuse light cream crush cut, thin light cream / blue moderately bright residue ring.
		90	SILTSTONE: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, gradational and interlaminated in part to very fine sandstone, blocky to sub fissile in part.
		Tr	COAL: bituminous, black, dull to vitreous, uneven to occasionally conchoidal fracture, silty in part, firm, blocky.
3070	3075	20	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, sub-rounded - angular, poorly sorted, loose, common white argillaceous matrix, locally trace disseminated pyrite, fair inferred porosity. (2) off white, very light brown, fine to rarely medium grained aggregates, sub angular to sub -rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, friable, poor visual porosity. FLUORESCENCE: trace dim orange / yellow spotted fluorescence, slow bleeding direct cut, diffuse light cream crush cut, thin light cream / blue moderately bright residue ring.
		80	Siltstone: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, gradational and interlaminated in part to very fine sandstone, blocky to sub fissile in part.
		Tr	COAL: bituminous, black, dull to vitreous, uneven to occasionally conchoidal fracture, silty in part, firm, blocky.

Interval (m) From	To	%	Lithology / Show Description
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.
3075	3080	25	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, sub-rounded - angular, moderately sorted, common white argillaceous matrix, trace mica flakes, trace pyrite cement, occasional pyrite nodules, fair inferred porosity. (2) off white, very light brown, fine to rarely medium grained, sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, lithic fragments in part, matrix supported in part, poor visual porosity. FLUORESCENCE: trace dim orange / yellow spotted fluorescence, slow bleeding direct cut, diffuse light cream crush cut, thin light cream / blue moderately bright residue ring.
		75	SILTSTONE: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, gradational and interlaminated in part to very fine sandstone, blocky to sub fissile in part.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.
		Tr	COAL: bituminous, black, dull to vitreous, uneven to occasionally conchoidal fracture, silty in part, firm, blocky.
3080	3085	15	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, sub-rounded - angular, moderately sorted, common white argillaceous matrix, trace mica flakes, trace pyrite cement, occasional pyrite nodules, loose, fair inferred porosity. (2) off white, very light brown, fine to rarely medium grained, sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, lithic fragments in part, matrix supported in part, poor visual porosity. FLUORESCENCE: trace dim orange / yellow spotted fluorescence, slow bleeding direct cut, diffuse light cream crush cut, thin light cream / blue moderately bright residue ring.
		85	SILTSTONE: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, gradational and interlaminated in part to very fine sandstone, blocky to sub fissile in part.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.
		Tr	COAL: bituminous, black, dull to vitreous, uneven to occasionally conchoidal fracture, silty in part, firm, blocky.
3085	3090	25	SANDSTONE: (1) clear, translucent, opaque, fine to coarse, sub-rounded - angular, moderately sorted, common white argillaceous matrix, trace mica flakes, trace pyrite cement, locally trace quartz overgrowths, trace fractured grains, loose, fair inferred porosity. (2) off white, very light brown, fine to rarely medium grained, sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, poor visual porosity. FLUORESCENCE: trace dim pale yellow spotted fluorescence, slow bleeding direct cut, diffuse light cream crush cut, thin light cream / blue moderately bright residue ring.
		75	SILTSTONE: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, gradational and interlaminated in part to very fine sandstone, blocky to sub fissile in part.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.

Interval (m)		%	Lithology / Show Description
From	To		
3090	3095	25	<p>SANDSTONE: (1) clear, translucent, opaque, trace frosted, fine to coarse, predominantly medium, sub-rounded - sub-angular, locally angular in part, moderately sorted, common white argillaceous matrix, trace mica flakes, trace pyrite cement, locally trace quartz overgrowths, trace fractured grains, loose, fair inferred porosity. (2) off white, very light brown, fine to rarely medium grained, sub angular to rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, , matrix supported in part, poor visual porosity.</p> <p>FLUORESCENCE: trace dim pale yellow spotted fluorescence, slow bleeding direct cut, diffuse light cream crush cut, thin light cream / blue moderately bright residue ring.</p>
		65	<p>SILTSTONE: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, amorphous to predominantly sub blocky, occasionally sub fissile when carbonaceous. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, gradational and interlaminated in part to very fine sandstone, blocky to sub fissile in part.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.</p>
		10	<p>COAL: bituminous, black, dull to earthy, occasionally sub-vitreous, uneven to occasionally conchoidal fracture, silty in part, firm to predominantly moderately hard, blocky.</p>
3095	3100	50	<p>SANDSTONE: (1) predominantly clear, translucent, opaque, trace frosted, fine to very coarse, predominantly medium, sub-rounded - sub-angular, locally angular in part, poorly sorted, common white argillaceous matrix, trace pyrite cement, trace dolomite cement, locally trace weak siliceous cement, locally trace quartz overgrowths, trace chert, trace fractured grains, predominantly loose, fair inferred porosity. (2) minor off white, very light brown, fine to rarely medium grained, sub angular to sub- rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, , matrix supported in part, poor visual porosity.</p> <p>FLUORESCENCE: trace dim pale yellow blue spotted fluorescence, slow bleeding direct cut, moderate diffuse light bluish cream crush cut, thin cream moderately bright residue ring.</p>
		50	<p>SILTSTONE: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, predominantly amorphous to sub blocky. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, sub-blocky - blocky.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.</p>
		Tr	<p>COAL: bituminous, black, dull to earthy, occasionally sub-vitreous, uneven to occasionally conchoidal fracture, silty in part, firm to predominantly moderately hard, blocky.</p>
3100	3105	70	<p>SANDSTONE: (1) predominantly clear, translucent, opaque, trace frosted, fine to very coarse, predominantly medium, sub-rounded - sub-angular, locally angular in part, moderately sorted, abundant white argillaceous matrix, trace pyrite cement, trace dolomite cement, trace fractured grains, predominantly loose, fair inferred porosity. (2) minor off white, very light brown, fine to rarely medium grained, sub angular to sub- rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, , matrix supported in part, poor visual porosity.</p> <p>FLUORESCENCE: trace moderately bright bluish yellow spotted fluorescence, slow bleeding direct cut, moderate diffuse light bluish cream crush cut, thin cream residue ring.</p>
		30	<p>SILTSTONE: (1) dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, predominantly amorphous to sub blocky. (2) brownish black, carbonaceous specks to occasionally very carbonaceous, firm, sub-blocky - blocky.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.</p>

Interval (m)		%	Lithology / Show Description
From	To		
3100	3105	80	<p>SANDSTONE: (1) predominantly clear, translucent, opaque, fine to very coarse, predominantly medium, sub-rounded - sub-angular, moderately sorted, common to abundant white argillaceous matrix, locally trace disseminated pyrite, trace fractured grains, predominantly loose, fair inferred porosity. (2) minor off white, very light brown, fine to rarely medium grained, sub angular to sub- rounded, argillaceous to rarely weak siliceous cement, abundant off white argillaceous matrix, , matrix supported in part, poor visual porosity.</p> <p>FLUORESCENCE: Trace moderately bright bluish yellow spotted fluorescence, slow bleeding direct cut, moderate diffuse light bluish cream crush cut, thin cream residue ring.</p>
		20	<p>SILTSTONE: (1)minor dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, predominantly amorphous to sub blocky. (2) predominantly brownish black, carbonaceous specks to occasionally very carbonaceous, firm, sub-blocky - blocky.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.</p>
3105	3110	90	<p>SANDSTONE: (1) predominantly clear, translucent, opaque, fine to very coarse, predominantly medium, sub-rounded - predominantly sub-angular, moderately sorted, common white argillaceous matrix, locally trace disseminated pyrite, trace fractured grains, predominantly loose, trace pyrite, fair inferred porosity. (2) minor off white, very light brown, fine to rarely medium grained, sub angular to sub- rounded, argillaceous cement, abundant off white argillaceous matrix, , matrix supported in part, poor visual porosity.</p> <p>FLUORESCENCE: 5% moderately bright bluish yellow spotted fluorescence, slow bleeding direct cut, moderate diffuse light bluish cream crush cut, thin cream residue ring.</p>
		10	<p>SILTSTONE: (1)minor dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, predominantly amorphous to sub blocky. (2) predominantly brownish black, carbonaceous specks to occasionally very carbonaceous, firm, sub-blocky - blocky.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.</p>
3110	3115	90	<p>SANDSTONE: (1) predominantly clear, translucent, opaque, fine to very coarse, predominantly medium, sub-rounded - predominantly sub-angular, moderately sorted, common white argillaceous matrix, locally trace disseminated pyrite, trace fractured grains, predominantly loose, trace pyrite, locally trace dolomite cement, fair inferred porosity. (2) minor off white, very light brown, fine to rarely medium grained, sub angular to sub- rounded, argillaceous cement, abundant off white argillaceous matrix, , matrix supported in part, poor visual porosity.</p> <p>FLUORESCENCE: 5% moderately bright bluish yellow spotted fluorescence, slow bleeding direct cut, moderate diffuse light bluish cream crush cut, thin cream residue ring.</p>
		10	<p>SILTSTONE: (1)minor dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, predominantly amorphous to sub blocky. (2) predominantly brownish black, carbonaceous specks to occasionally very carbonaceous, firm, sub-blocky - blocky.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.</p>

Interval (m)		%	Lithology / Show Description
From	To		
3115	3120	60	SANDSTONE: (1) predominantly clear, translucent, opaque, fine to very coarse, predominantly coarse, predominantly sub-rounded, minor sub-angular, moderately sorted, common white argillaceous matrix, locally trace disseminated pyrite, trace fractured grains, predominantly loose, locally trace dolomite cement, fair inferred porosity. (2) minor off white, very light brown, fine to rarely medium grained, sub angular to sub- rounded, argillaceous cement, abundant off white argillaceous matrix, , matrix supported in part, poor visual porosity. FLUORESCENCE: 10% moderately bright bluish yellow spotted fluorescence, slow bleeding direct cut, weak diffuse pale bluish white crush cut, thin cream residue ring.
		30	SILTSTONE: (1)minor dusky yellowish brown, light olive brown, carbonaceous specks in part, occasionally carbonaceous, very soft and dominantly argillaceous, predominantly amorphous to sub blocky. (2) predominantly brownish black, carbonaceous specks to occasionally very carbonaceous, firm, sub-blocky - blocky.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.
		10	COAL: bituminous, vitreous - sub-vitreous, sub-conchoidal, firm to moderately hard, blocky.
		60	SANDSTONE: (1) predominantly clear, translucent, opaque, fine to very coarse, predominantly coarse, predominantly sub-rounded, minor sub-angular, moderately sorted, common white argillaceous matrix, argillaceous matrix also adhering to the grains, locally trace disseminated pyrite, trace fractured grains, predominantly loose, locally trace dolomite cement, locally coarse to very coarse has black stain in part, fair inferred porosity. (2) minor off white, very light brown, very fine to fine, rarely medium grained aggregates, sub angular to rounded, argillaceous cement, abundant off white and light brown, rarely dark grey argillaceous matrix, matrix supported in part, friable poor visual porosity. FLUORESCENCE: 10% moderately bright bluish yellow spotted fluorescence, slow bleeding direct cut, weak diffuse pale bluish crush cut, thin cream residue ring.
3120	3125	40	SILTSTONE: greyish black, carbonaceous in part, argillaceous, very soft and sticky, amorphous, locally arenaceous and very hard, blocky.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, light tan, cryptocrystalline, very hard, flinty, blocky.
		90	SANDSTONE: (1) clear, translucent, white, medium to very coarse, sub angular to predominantly angular, moderately sorted, abundant white argillaceous matrix preserved in aggregates and adhering to grains and washed out in part, trace disseminated pyrite, trace dolomite cement, grains occasionally black stained, fair inferred porosity. (2) white, off white, occasionally white / black speckled, dominantly fine rarely medium grained aggregates, friable, weak argillaceous cement, carbonaceous grains in part, poor visual porosity. FLUORESCENCE: 5% moderately bright cream / light bluish spotted fluorescence, slow bleeding direct cut, trace diffuse pale bluish crush cut, thin cream residue ring.
3125	3130	10	SILTSTONE: grey black, very dark grey, grey / black, carbonaceous to rarely very carbonaceous, very soft, amorphous.
		Tr	DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.

Interval (m)		%	Lithology / Show Description
From	To		
3130	3135	80	<p>SANDSTONE: (1) clear, translucent, white, medium to very coarse, sub angular to angular, moderately sorted, abundant white argillaceous matrix preserved in aggregates and washing out in part, trace disseminated pyrite, trace dolomite cement, occasional carbonaceous grains, occasionally black stained, fair inferred porosity. (2) white, off white, occasionally white / black speckled, dominantly fine rarely medium grained aggregates, friable, weak argillaceous cement, carbonaceous grains in part, poor visual porosity.</p> <p>FLUORESCENCE: Trace dull cream / light bluish spotted fluorescence, no direct cut, trace diffuse pale bluish crush cut, trace cream indistinct residue ring.</p>
		20	<p>SILTSTONE: grey black, very dark grey, grey / black, carbonaceous, gradational to carbonaceous siltstone in part, very soft to occasionally firm when carbonaceous, amorphous.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, dusky yellowish brown, cryptocrystalline, very hard, flinty, blocky.</p>
3135	3138	70	<p>SANDSTONE: (1) clear, translucent, white, trace smokey, black stained grains, rarely light green chlorite stained, medium to very coarse, predominantly angular, common fractured coarse grains, poorly sorted, abundant white argillaceous matrix preserved in aggregates and washing out, trace dark grey angular chert, trace disseminated pyrite, weak to occasionally strong siliceous cement, occasional quartz overgrowths, trace to minor chlorite in matrix and coating grains in part, occasional carbonaceous grains, fair inferred porosity. (2) white, off white, light brown, grey / black speckled aggregates, fine to medium grained, argillaceous, friable, silty matrix, weak argillaceous cement, occasional moderate to strong siliceous cement, occasional carbonaceous grains, poor visual porosity.</p> <p>FLUORESCENCE: Trace dull cream / light bluish spotted fluorescence, no direct cut, trace pale bluish crush cut, trace cream indistinct residue ring.</p>
		25	<p>Volcanics: (altered Diorite) off white, mottled green / white, light green / white / black speckled, fine grained, dominantly quartz up to 60%, with off white finer grained feldspar and prominent black to brownish black mafic pyroxenes and possibly amphiboles, illmenite ?, mineral identification is difficult due to common alteration, calcareous component in ground mass, chlorite present and more altered specimens tend to be devoid of there mafic minerals and consist of mainly quartz.</p>
		5	<p>SILTSTONE: grey black, very dark grey, carbonaceous in part, occasional ver carbonaceous and gradational to carbonaceous siltstone, very soft to occasionally firm when carbonaceous, amorphous.</p>
		Tr	<p>DOLOMITE: dark yellowish brown, very hard, cryptocrystalline, blocky</p>
			<p>Reached TD 3138m MDRT on the 1st August, 2001 at 09:00 hrs.</p>