Sidewall Core Description
Well: Dunk 1

General Data			
Date:	**31/12/14 to 01/01/15**	**Rig:**	**EWE 106**
Geologist:	**Jim Mitchell**	**Company:**	QGC
Tool type:	**MSCT**	**Run no:**	**Suite 2, Runs 5 and 6**

Core no.	Depth MDRT (m)	Formation	Run No.:	Recovery (cm)	Lithology Description/Comments
MSCT1	3133.75	Combarngo Volcanics	5	5	Volcanics/Metamorphics: mottled red brown fine to medium quartz groundmass, some large green grey deformed phenocrysts/inclusions, trace dark mafic inclusions.
MSCT2	3126.00	Lorelle Sandstone	5	5	Meta-SILTSTONE: light grey to light green grey, red brown, silty groundmass with light green grey granule to pebble TUFF fragments and lithics, with diffuse boundaries.
MSCT3	3120.00	Lorelle Sandstone	5	5 (Broken)	SANDSTONE: light grey, very fine to fine, occasional medium, re-crystallised in part, hard, very poor visible porosity, no fluorescence.
MSCT4	3116.00	Lorelle Sandstone	5	4	SANDSTONE, light grey mottled with dark grey, very fine to fine, some re-crystallised with diffuse grain boundaries, moderately hard, very poor to tight visible porosity, no fluorescence.
MSCT5	3112.78	Lorelle Sandstone	5	4 1/2	SANDSTONE: light grey, very fine to fine,
MSCT6	3093.00	Lorelle Sandstone	5	4 1/2	SANDSTONE: medium dark grey to dark grey, very fine to fine, trace medium grains, occasional light grey LIMESTONE micro laminations and inclusions, silty matrix, very poor visible porosity, trace patchy orange mineral fluorescence.
MSCT7	3085.33	Lorelle Sandstone	5	4	CONGLOMERATE: medium to dark grey, fine to coarse, common granule to pebble white to light grey and green grey siliceous inclusions, occasional silty inclusions, hard, very poor visible porosity, trace patchy orange mineral fluorescence.
MSCT8	3083.00	Lorelle Sandstone	5	4	SANDSTONE: brown grey, very fine to medium, occasional coarse grains, sub angular to sub round, trace lithics, occasional quartz overgrowths, hard, very poor visible porosity, trace patchy dull orange mineral fluorescence.

Core no.	Depth MDRT (m)	Formation	Run No.:	Recovery (cm)	Lithology Description/Comments
MSCT9	3081.43	Lorelle Sandstone	5	2 (Rubble)	SANDSTONE: very light grey, very fine to very coarse clear to translucent quartz grains, sub angular to sub round, poorly sorted, abundant white to light grey matrix, moderately hard, very poor visible porosity,
MSCT10	3076.47	Lorelle Sandstone	5	4	SANDSTONE: light to medium grey, very fine to medium, common coarse to pebble sized inclusions, moderately sorted, trace dark grey lithics, moderately hard, poor to very poor visible porosity, trace dull orange patchy mineral fluorescence.
MSCT11	3075.00	Lorelle Sandstone	5	5	SANDSTONE: light to medium grey, very fine to medium, common coarse to pebble sized inclusions, silty matrix, moderately hard, very poor visible porosity, trace patchy dull orange mineral fluorescence.
MSCT12	3061.00	Overston Sandstone	5	4 1/2	SANDSTONE: medium dark grey, very fine to medium, trace coarse grains, sub angular to sub round, moderately sorted, silty matrix, occasional light grey to white lithics, silty matrix, moderately hard to hard, very poor visible porosity, patchy dull orange mineral fluorescence.
MSCT13	3046.48	Overston Sandstone	5	5	SANDSTONE: medium dark grey, very fine to fine, occasional medium to coarse grains, occasional lithics, silty matrix, moderately hard to hard, very poor visible porosity, trace patchy dull orange mineral fluorescence.
MSCT14	3043.10	Overston Sandstone	5	5	SILTSTONE: dark grey, dark brown grey, argillaceous, occasional LIMESTONE micro laminations, moderately hard to hard.
MSCT15	3037.50	Overston Sandstone	5	0	No sample recovered
MSCT16	3025.00	Overston Sandstone	5	5	SILTSTONE: dark grey, dark brown grey, argillaceous, occasionally arenaceous in part, trace lithics, trace micro-mica, moderately hard to hard.
MSCT17	3021.58	Overston Sandstone	5	5	SILTSTONE: very dark grey, dark brown grey, argillaceous, trace micro-mica, hard.
MSCT18	3008.72	Overston Sandstone	5	0	No sample recovered.
MSCT19	3007.76	Overston Sandstone	5	0	No sample recovered.
MSCT20	3006.58	Overston Sandstone	5	0	No sample recovered.
MSCT21	3005.00	Overston Sandstone	5	3 1/2	Sample recovered (broken) from damaged core head of Run 5. SANDSTONE: light grey, fine to coarse, occasional granular grains, very poorly sorted, trace lithics, quartz overgrowths, moderately hard to hard, poor visible porosity, trace patchy dull orange mineral fluorescence.

Core no.	Depth MDRT (m)	Formation	Run No.:	Recovery (cm)	Lithology Description/Comments
MSCT22	3008.80	Overston Sandstone	6	4 1/2	SANDSTONE: light brown grey, fine to coarse, angular to sub round, poorly sorted, occasional argillaceous matrix, occasional broken grains, trace to occasional lithics, moderately hard, poor visible porosity, patchy dull orange mineral fluorescence.
MSCT23	3007.90	Overston Sandstone	6	4	SANDSTONE: fine to coarse as above.
MSCT24	3006.80	Overston Sandstone	6	4 1/2	SANDSTONE: light brown grey, fine to very coarse, occasional granular grains, very poorly sorted, angular to sub round, occasional lithics, occasional matrix, poor visible porosity, trace patchy dull orange mineral fluorescence.
MSCT25	3005.20	Overston Sandstone	6	1.5 (Rubble)	Poor quality sample – rubble. SANDSTONE: as above.
MSCT26	3002.30	Overston Sandstone	6	0	No sample recovered
MSCT27	2992.40	Lower Tinowon	6	4 1/2	SANDSTONE: medium dark grey brown grey, very fine to fine, trace medium grains, sub angular to sub round, silty matrix, very poor visible porosity, occasional patchy dull orange mineral fluorescence.
MSCT28	2975.90	Lower Tinowon	6	5	SANDSTONE with interbedded SILTSTONE. SANDSTONE: as described above. SILTSTONE: dark grey, argillaceous, slightly arenaceous, hard.
MSCT29	2970.90	Lower Tinowon	6	4 1/2	SANDSTONE: light to medium grey, very fine to fine, trace medium grains, sub angular to sub round, moderately sorted, trace matrix, trace lithics, moderately hard, very poor visible porosity, occasional patchy dull orange mineral fluorescence.
MSCT30	2967.80	Lower Tinowon	6	4	SANDSTONE: light to medium grey, very fine to coarse, angular to sub round, poorly sorted, trace argillaceous matrix, occasional lithics, very rare pyrite, quartz overgrowths, very poor visible porosity, rare patchy dull orange mineral fluorescence.
MSCT31	2934.95	Upper Tinowon Sandstone	6	4 1/2	SANDSTONE: medium to dark grey, fine to medium, occasional coarse, poorly sorted, angular to sub round, trace matrix, common altered feldspar, occasional quartz overgrowths, very poor visible porosity, no fluorescence.

Core no.	Depth MDRT (m)	Formation	Run No.:	Recovery (cm)	Lithology Description/Comments
MSCT32	2931.50	Upper Tinowon Sandstone	6	4 1/2	SANDSTONE: medium dark grey, fine to medium, occasional coarse, angular to sub round, common to abundant altered feldspar (cream to light brown), trace matrix, occasional quartz overgrowths, very poor visible porosity, no fluorescence.
MSCT33	2920.70	Upper Tinowon Sandstone	6	5	SANDSTONE: generally as described above – common to abundant altered feldspar, trace to occasional matrix, trace lithics, moderately hard to hard, very poor visible porosity, no fluorescence.
MSCT34	2912.30	Upper Tinowon Sandstone	6	4 1/2	SANDSTONE: medium grey, light brown grey, fine to coarse, trace very coarse grains, trace argillaceous matrix, common lithics, common altered feldspar, occasional quartz overgrowths, moderately hard to hard, very poor visible porosity, no fluorescence.
MSCT35	2882.50	Upper Tinowon Sandstone	6	5	SANDSTONE: medium grey, fine to medium, occasional coarse, sub angular to sub round, moderately sorted, common lithics, occasional altered feldspar (cream, pale brown), moderately hard, very poor visible porosity, no fluorescence.
MSCT36	2882.00	Upper Tinowon Sandstone	6	5	SANDSTONE" medium grey, fine to medium, trace coarse grains, occasional lithics, trace to occasional altered feldspar, moderately hard to hard, very poor visible porosity, no fluorescence.
MSCT37	2868.00	Tinowon Formation	6	0	No sample recovered
MSCT38	2864.30	Tinowon Formation	6	5	SILTSTONE: medium dark grey, abundant LIMESTONE fragments, fossil fragments.
MSCT39	2858.00	Tinowon Formation	6	0	No sample recovered.
MSCT40	2848.00	Scotia Coal Cycle	6	5	SANDSTONE with interbedded SILTSTONE separated by Tuffaceous laminae. SANDSTONE: medium dark grey, very fine to fine, grades to SILTSTONE, occasional lithics, rare carbonaceous specks, moderately hard, very poor visible porosity, no fluorescence. SILTSTONE: light grey, very finely arenaceous and grades to SANDSTONE. TUFF / CLAYSTONE?: pale brown firm.
MSCT41	2818.49	Black Alley Shale	6	4 1/2	SILTSTONE: light to medium grey, very finely arenaceous and grades to very fine SANDSTONE in part, occasional carbonaceous specks, micro-mica, moderately hard to hard.
MSCT42	2816.57	Black Alley Shale	6	0	No sample recovered.

Core no.	Depth MDRT (m)	Formation	Run No.:	Recovery (cm)	Lithology Description/Comments
MSCT43	2813.00	Black Alley Shale	6	4	SANDSTONE: light grey, very fine, grades to SILTSTONE, sub angular to sub round, occasional cark micro-specks, moderately hard, very poor visible porosity, no fluorescence.
MSCT44	2810.00	Black Alley Shale	6	0	No sample recovered.
MSCT45	2796.11	Black Alley Shale	6	0	No sample recovered.
MSCT46	2779.00	Black Alley Shale	6	0	No sample recovered.
MSCT47	2790.07	Kianga Formation	6	0	No sample recovered.
MSCT48	2731.91	Kianga Formation	6	0	No sample recovered.
MSCT49	2719.45	Kianga Formation	6	0	No sample recovered.
MSCT50	2691.00	Kianga Formation	6	0	No sample recovered.
MSCT51	2669.12	Lower Rewan	6	5	SANDSTONE: light to medium grey, green grey, very fine to medium, trace coarse grains, sub angular to sub round, trace carbonaceous specks, common to abundant lithics (green grey, grey, pale orange), trace altered feldspar, moderately hard, very poor visible porosity, no fluorescence.
MSCT52	2650.50	Lower Rewan	6	0	No sample recovered.
MSCT53	2582.99	Lower Rewan	6	0	No sample recovered.
MSCT54	2520.97	Upper Rewan	6	0	No sample recovered.