

Project: YORK

Title:

Hole Name : YP004LC

Date Start: 16-FEB-11 End date : 17-FEB-11

Data Source :

## LOCATION

State	:	Tasmania		
County	:			
Parish	:			
Portion	:			
Geological Province	:	Tasmania Basin		
Lease	:	EL49/2007 - York Plains		
Map Zone	:	AMG84 - Zone 55H		
		Easting	Northing	Elevation
Drill Hole Location	:	539585.24	5321026.43	400.85

## DRILLING

Contractor	:	Spaulding Drillers
Drill Type	:	Large Diameter Core Hole
Drill Rig	:	Spaulding Drillers
Drilled To	Hole Size	Core Size
29.75	300mm	Large Diameter (6-inch +) Core

## GEOPHYSICAL

Contractor	:	GDS
Probe Depth		Probe Type
29.51		Gamma Caliper Dual Density

## LITHOLOGICAL

Logger's Initials	:	Andrew Basson,DANIQUE BAX
Date logged	:	16-FEB-11,17-FEB-11,17-FEB-11
Interval logged	:	0 to 29.75

## SEAM DETAILS

Seam Name	From	To
BHWE	9.00	9.00
UU1	16.88	18.43
UU2	21.08	23.99

Project: YORK

Title:

Hole Name : YP004LC

\*\*\*\*\*  
 TOP                  BASE                                  LITHOLOGY                                  SAMPLE  
 \*\*\*\*\*

**Hammer**

0.000 - 1.000	SOIL light brown sandy soft
( 1.000 )	extremely weathered
1.000 - 2.500	SANDSTONE medium brown fine grained
( 1.500 )	minor doleritic fragments moderately
	weak rock extremely weathered
2.500 - 3.400	CLAYSTONE brownish white weak rock
( 0.900 )	moderately weathered
3.400 - 5.000	SANDSTONE medium brown medium
( 1.600 )	grained lithic carbonaceous wisps
	moderately weak rock moderately
	weathered
5.000 - 6.000	SANDSTONE light brown medium grained
( 1.000 )	lithic moderately weak rock
	moderately weathered
6.000 - 8.000	SANDSTONE light brownish grey medium
( 2.000 )	grained lithic moderately weak rock
	sharp wavy base
8.000 - 9.000	SANDSTONE light grey medium grained
( 1.000 )	minor carbonaceous fragments
	moderately weak rock sharp wavy base

9.000	*** Base Horizon of Weathering
-------	--------------------------------

9.000 - 10.950	SANDSTONE light grey medium grained
( 1.950 )	lithic moderately strong rock fresh
10.950 - 11.050	COAL UNDIFF black fresh
( 0.100 )	
11.050 - 15.280	SANDSTONE light grey medium grained
( 4.230 )	lithic moderately strong rock fresh
	rare coal on fracture planes towards
	top of unit
	Run 1: 15.75-18.75. Rec 2.90m.

**Tungsten coring bit**

15.280 - 15.900	SANDSTONE light grey medium grained
( 0.620 )	carbonaceous wisps throughout solid
	core moderately strong rock fresh
15.900 - 16.130	SANDSTONE light grey medium grained
( 0.230 )	carbonaceous lenses broken core
	moderately strong rock fresh
	abundant carbonaceous wisps
16.130 - 16.580	SANDSTONE light greenish grey medium
( 0.450 )	grained carbonaceous lenses near
	base of unit broken core moderately
	strong rock fresh common

Project: YORK

Title:

Hole Name : YP004LC

\*\*\*\*\*  
 TOP                      BASE                      LITHOLOGY                      SAMPLE  
 \*\*\*\*\*

secondary/accessory pyrite nodules  
 towards base of unit  
 16.580 - 16.840 SANDSTONE light greenish grey medium  
 ( 0.260 ) and coarse grained siltstone and  
 coal broken core moderately strong  
 rock fresh rip up clasts calcite  
 infill common carbonaceous wisps  
 unit fines upwards  
 16.840 - 16.880 CARBONACEOUS MUDSTONE dark brownish YPS001  
 ( 0.040 ) black solid core moderately weak  
 rock fresh

16.880 *** TOP OF		
16.880 - 16.940	STONY COAL black solid core	YPS001
( 0.060 )	moderately weak rock fresh rare secondary/accessory calcite in cleat	
16.940 - 16.980	CARBONACEOUS MUDSTONE dark brownish	YPS001
( 0.040 )	black broken core weak rock fresh	
16.980 - 17.360	COAL, dull <1% bright black broken	YPS001
( 0.380 )	core moderately weak rock fresh rare secondary/accessory calcite in cleat	
17.360 - 17.730	CARBONACEOUS MUDSTONE dark brownish	YPS002
( 0.370 )	black solid core weak rock fresh	
17.730 - 17.910	COAL, dull <1% bright black solid	YPS002
( 0.180 )	core moderately weak rock fresh rare secondary/accessory calcite in cleat	
17.910 - 18.180	COAL, dull <1% bright black broken	YPS003
( 0.270 )	core moderately weak rock fresh rare secondary/accessory calcite in cleat	
18.180 - 18.280	COAL, dull <1% bright black	YPS004
( 0.100 )	fragmented core moderately weak rock fresh	
18.280 - 18.350	Run 2: 18.75-21.75. Rec 3.10m SILTSTONE dark grey fragmented core	YPS004
( 0.070 )	moderately weak rock fresh slickensides on fracture	
18.350 - 18.430	COAL, dull <1% bright black broken	YPS004
( 0.080 )	core moderately weak rock fresh	

18.430 *** BASE OF		
*** GEOLOGICAL THICKNESS: 1.550 Metres ***		
18.430 - 19.230	SANDSTONE light grey very fine	
( 0.800 )	grained carbonaceous wisps throughout solid core moderately strong rock fresh rare coaly fragments near base of unit	

Project: YORK

Title:

Hole Name : YP004LC

\*\*\*\*\*  
 TOP                      BASE                      LITHOLOGY                      SAMPLE  
 \*\*\*\*\*

19.230 - 19.330	SILTSTONE brownish grey solid core
( 0.100 )	moderately weak rock fresh
19.330 - 19.400	SILTSTONE dark grey minor
( 0.070 )	carbonaceous wisps solid core
	moderately weak rock fresh
19.400 - 19.440	COAL, dull <1% bright black
( 0.040 )	siltstone lenses near middle of unit
	solid core moderately strong rock
	fresh
19.440 - 19.740	SILTSTONE medium grey broken core
( 0.300 )	moderately weak rock fresh with
	faults @45degree slickensides on
	fracture towards base of unit
19.740 - 19.880	SILTSTONE dark grey carbonaceous
( 0.140 )	wisps throughout solid core
	moderately weak rock fresh
19.880 - 19.960	CARBONACEOUS SILTSTONE dark blackish
( 0.080 )	grey solid core moderately weak rock
	fresh
19.960 - 20.010	COAL, dull <1% bright black solid
( 0.050 )	core moderately strong rock fresh
	rare secondary/accessory calcite in
	cleat
20.010 - 20.150	SILTSTONE dark grey coaly bands near
( 0.140 )	top of unit solid core moderately
	weak rock fresh
20.150 - 20.210	CARBONACEOUS SILTSTONE dark greyish
( 0.060 )	black solid core moderately strong
	rock fresh
20.210 - 21.080	SILTSTONE medium grey carbonaceous
( 0.870 )	near base of unit solid core
	moderately strong rock fresh

21.080	*** TOP OF
--------	------------

21.080 - 21.230	COAL, dull <1% bright black broken	YPS005
( 0.150 )	core moderately strong rock fresh	
	with faults slickensides on fracture	
21.230 - 21.280	STONY COAL dark brownish black	YPS005
( 0.050 )	siltstone lenses near top of unit	
	broken core moderately strong rock	
	fresh	
	EOR 2	
21.280 - 21.420	SILTSTONE dark grey carbonaceous	YPS006
( 0.140 )	throughout broken core weak rock	
	fresh	
	Run 3: 21.75-24.75. Rec 3.00m	
21.420 - 21.440	CARBONACEOUS SILTSTONE dark brownish	YPS006
( 0.020 )	black solid core moderately weak	

Project: YORK

Title:

Hole Name : YP004LC

*****		*****	
TOP	BASE	LITHOLOGY	SAMPLE
*****		*****	
		rock fresh	
21.440 - 21.570		STONY COAL black broken core	YPS006
( 0.130 )		moderately strong rock fresh	
21.570 - 21.930		COAL, dull <1% bright black broken	YPS006
( 0.360 )		core moderately strong rock fresh	
		rare secondary/accessory calcite in cleat	
21.930 - 22.000		COAL, dull <1% bright black broken	YPS007
( 0.070 )		core moderately strong rock fresh	
22.000 - 22.015		CARBONACEOUS SILTSTONE dark brownish	YPS007
( 0.015 )		black solid core moderately weak	
		rock fresh	
22.015 - 22.130		SILTSTONE medium grey solid core	YPS007
( 0.115 )		moderately weak rock fresh	
22.130 - 22.420		COAL, dull <1% bright solid core	YPS007
( 0.290 )		moderately strong rock fresh common	
		secondary/accessory calcite in cleat	
22.420 - 22.470		CARBONACEOUS SILTSTONE dark brownish	YPS008
( 0.050 )		black broken core moderately weak	
		rock fresh with faults @45degree	
		slickensides on fracture towards	
		base of unit	
22.470 - 22.770		COAL, dull <1% bright black sporadic	YPS008
( 0.300 )		siltstone clasts solid core	
		moderately strong rock fresh rare	
		secondary/accessory calcite in cleat	
22.770 - 22.810		CARBONACEOUS SILTSTONE dark brownish	YPS008
( 0.040 )		grey solid core moderately weak rock	
		fresh	
22.810 - 22.950		COAL, dull <1% bright black solid	YPS009
( 0.140 )		core moderately strong rock fresh	
		rare secondary/accessory calcite in	
		cleat towards base of unit	
		1	
22.950 - 22.980		COAL, <10% bright black solid core	YPS009
( 0.030 )		moderately strong rock fresh rare	
		secondary/accessory calcite in cleat	
22.980 - 23.090		COAL, dull <1% bright black solid	YPS009
( 0.110 )		core moderately strong rock fresh	
23.090 - 23.150		CARBONACEOUS SILTSTONE dark greyish	YPS009
( 0.060 )		black solid core moderately weak	
		rock fresh	
23.150 - 23.210		SILTSTONE medium grey solid core	YPS010
( 0.060 )		moderately weak rock fresh	
23.210 - 23.290		STONY COAL brownish black solid core	YPS010
( 0.080 )		moderately weak rock fresh	

Project: YORK

Title:

Hole Name : YP004LC

TOP	BASE	LITHOLOGY	SAMPLE
23.290 - 23.310	( 0.020 )	COAL, dull <1% bright black solid core moderately strong rock fresh	YPS010
23.310 - 23.460	( 0.150 )	COAL, <10% bright black solid core moderately strong rock fresh common secondary/accessory calcite in cleat	YPS010
23.460 - 23.470	( 0.010 )	CARBONACEOUS MUDSTONE dark brownish black solid core moderately weak rock fresh	YPS010
23.470 - 23.550	( 0.080 )	COAL, dull <1% bright black solid core moderately strong rock fresh	YPS010
23.550 - 23.660	( 0.110 )	COAL, dull <1% bright black carbonaceous infilling fault planes broken core moderately strong rock fresh with faults @45degree common secondary/accessory calcite in cleat	YPS011
23.660 - 23.890	( 0.230 )	COAL, <10% bright black broken core moderately strong rock fresh with faults common secondary/accessory calcite in cleat	YPS011
23.890 - 23.960	( 0.070 )	CARBONACEOUS SILTSTONE dark greyish black solid core moderately weak rock fresh secondary/accessory calcite laminae towards base of unit	YPS011
23.960 - 23.990	( 0.030 )	STONY COAL dark brownish black solid core moderately weak rock fresh	YPS011

23.990 \*\*\* BASE OF

\*\*\* GEOLOGICAL THICKNESS: 2.910 Metres \*\*\*

23.990 - 24.040	( 0.050 )	CARBONACEOUS SHALE very broken core moderately weak rock fresh common secondary/accessory calcite on bedding planes
24.040 - 24.280	( 0.240 )	SILTSTONE medium grey broken core moderately weak rock fresh with faults @45degree slickensides on fracture towards top of unit

**Hammer**

24.280 - 28.000	( 3.720 )	SILTSTONE medium grey carbonaceous wisps moderately weak rock fresh
28.000 - 29.750	( 1.750 )	CARBONACEOUS SILTSTONE dark grey siltstone bands moderately strong rock fresh

29.750 \*\*\*\*\* TOTAL DEPTH \*\*\*\*\*