FORM No. M.E. 443

DRILLING RECORD

SCHEME:- GREAT LAKE POWER DEVELOPMENT

LOCATION:- Tailrace Tunnel

POSITION PLOTTED ON DRAWING No.

DATES: (a) DRILLED (b) WATER TABLE

METHOD USED D.D. DIAMETER

SITE REMARKS

POSITION: CO-ORDINATES E 483.2400 N 851.1461 | ON LINE BEARING AT CH | FROM STN BEARING DIST

LEVEL: SURFACE FORMATION WATER TABLE | 1062 S Meander Creekton Wood side

INCL: HOLE DRILLED DEPRESSION ANG. INCL. BEARING | VERT ~~HOR~~ INC

HOLE No. 5117

FILE No.

SHEET 1 OF 5 SHEETS

STANDARD LEVEL 1062

DEPTH

CORE DRAWN

RECOVERY 0-2 2-4 4-6 6-8 8-10

GRAPHIC LOG

JOINTS

WATER

REMARKS

0 - 62'9" MEANDER MUDSTONE

Rock weathered to clay to 2'6" then soft weathered rock (especially mudstone bands to 14'.

Joints weathered with thick iron concentrations to 30'

Pebbly weathered dirty sandstone to 26'3"

18' Chocolate coloured weathered Clay

Bedding planes have iron deposits and softened joints with clay

Current bedded mudstone dark grey with increasing sandstone current beds downwards to 62'9"

40' thin worm cast bed 2"

47' thin worm cast bed 3"

Soft dark grey mudstones with light grey sandstone current beds and stringers, disturbed and slumped beds

62'9" - 73'6" CREEKTON

Medium worm cast sandstone mottled dark grey - few small ¼" dia. pebbles.

73'6" - 99'10" WOODSIDE

8" black siltstone then siltstone with light grey quartz sandstone current beds, then light grey (weathered brown) quartz current bedded sandstone usually medium grained but coarser grades at 81' approx. 85' and 89'

dark grey current bedded partings common especially from 89-92, 94'8" - 95'2" and 99'10" - 101'2"

262

FORM No. H.E. 443

DRILLING RECORD

SCHEME:- GREAT LAKE POWER DEVELOPMENT

LOCATION:- Tailrace Tunnel

POSITION PLOTTED ON DRAWING No.

DATES: (a) DRILLED (b) WATER TABLE

METHOD USED: D.D. DIAMETER

SITE REMARKS:

POSITION	CO-ORDINATES	E	N	HOLE No. 5117
	ON LINE	BEARING	AT CH	
	FROM STN.	BEARING	DIST	FILE No
LEVEL	SURFACE	FORMATION	WATER TABLE	
	1062	KOPANICA FLATTOP MACRAE		SHEET 2 OF 5 SHEETS
INCL	HOLE DRILLED	DEPRESSION ANG.	INCL BEARING	
	VERT/~~HOR~~INC			

STANDARD LEVEL	DEPTH	CORE DRAWN	RECOVERY 0-2 2-6 6-8 8-10	GRAPHIC LOG	JOINTS	WATER	REMARKS
962	10						U of T. GD
					60/		99'10" - 110' KOPANICA
	5					X	SAMPLE TO U of Louisville
							Light grey medium quartz sandstone with black current beds
	110						110' - 155'7" FLATTOP
					20/		109'11 - 120'4" commences as dark grey siltstone with white quartz sandstone stringers and grades down into mottled dark grey worm cast sandstone with
	15						
	120				40/ V		pebbles up to 1" diam. at bottom
							120'4 - 142'3" medium quartz sandstone with dark grey siltstone current bedding partings and thin beds often mica rich. Finer above 126'6" about 1' of coarse sandstone then gradually becomes finer downwards.
	25						
	130						
	35						
							142' black mudstone 3" with current bedding
	140						light grey medium sandstone with black carbonaceous
							partings on current bedding
	45						146'6" - 145' black current bedded siltstone
							145' - 147' current bedded quartz sandstone coarser towards 147'
	150						147' - 148' current bedded quartz sandstone medium grained
							pyrite abundant and leaves pits on leaching.
	55				Ca/		
					80/		148'1" - 155'7" medium dark grey sandstone with pebbles
	160						and limey matrix especially at 150'3" - 150'9", 152'11"
							155'7" - 269'10" MACRAE
					95/		
	65				75/		161'3" limey band 6" Dark grey siltstone with
					40/		disturbed massive bedding (worm borings?)
					Ca/		
	170						
						X	SAMPLE TO U of Louisville
					80/		170 pyrite nodule
	75						175' joint system near V Ca
					Ca/ V		
					45/		
	180						
	85				70/ Ca/		
	190						
	95				70/ Ca/		1" diam pebble
							Beyeziens
862	200						

FORM No. H.E. 443

DRILLING RECORD

SCHEME:- GREAT LAKE POWER DEVELOPMENT

LOCATION:- Tailrace Tunnel

POSITION PLOTTED ON DRAWING No.

DATES: (a) DRILLED (b) WATER TABLE

METHOD USED: D.D DIAMETER:

SITE REMARKS:

POSITION: CO-ORDINATES E N; ON LINE BEARING AT CH; FROM STN BEARING DIST.

LEVEL: SURFACE 1062; FORMATION MACRAE / BILLOP / BRUMBY; WATER TABLE

INCL: HOLE DRILLED DEPRESSION ANG. INCL. BEARING; VERT/~~HORIZ~~

HOLE No. 5117

FILE No.

SHEET 3 OF 5 SHEETS

STANDARD LEVEL	DEPTH	CORE DRAWN	RECOVERY 0.2 0.5 0.8 1.0	GRAPHIC LOG	JOINTS	WATER	REMARKS
862	200						
	5						Dark grey mudstone with scattered pebbles and fossils - bryozoans and few brachiopods
	210				45/ Co 70/		210' 45° & 60° joints
					Ca 45/ V/		
	15				V V		216'6" 45° slickensided joint
					Ca 45/		217' replacement breccia in calcite (recemented fault?)
	220						
					Co 40/ 45/ Ca/ 80/		225' black mudstone 80° joint
	25						From 217 downwards core has numerous white specks - some limey some sand grains of various types.
	230						
	35						
	240						239'6" - 240'1" Limestone (Conreation?)
	45						
	250						Dark mudstone with scattered pebbles and fossils
	55						253' Stenopora band
	260						
	65						
	270						269'10" - 281' BILLOP
	75						269'10" mudstone becomes sandier and conglomeratic
							271' matrix becomes limey but still conglomeratic becoming finer towards 281' where bryozoans (coarse Stenopora) become predominant - some Eurydesma and Brachiopods but not abundant.
	280						281 - BRUMBY
	85						286'6" - 291'6" most limey part with patches of pure limestone
	290						
	95						
762	300						

FORM No. H.E. 443

DRILLING RECORD

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POSITION PLOTTED ON DRAWING No.

DATES: (a) DRILLED: (b) WATER TABLE:

METHOD USED: D.D. DIAMETER:

SITE REMARKS:

POSITION				
	CO-ORDINATES	E	N	HOLE No. 5117
	ON LINE	BEARING	AT CH.	
	FROM STN.	BEARING	DIST.	FILE No
LEVEL	SURFACE	FORMATION	WATER TABLE	
	1062	BRUMBY QUAMBY		
INCL.	HOLE DRILLED	DEPRESSION ANG.	INCL. BEARING	SHEET 4 OF 5 SHEETS
	VERT/~~HOR~~/INC			

STANDARD LEVEL 762	DEPTH	CORE DRAWN	RECOVERY 0.2 0.4 0.6 0.8 1.0	GRAPHIC LOG	JOINTS	WATER	REMARKS
	300'						
	5'						302 Bryozoans - thinner type and Mudstone increases downwards.
	310'						
	15'						
						X	SAMPLE TO U of Louisville
	320'						
	25'						
	330'		[redacted]				
	35'						BRUMBY - QUAMBY BOUNDARY LOST
							Quamby rather sandy especially 356' - 361'
	340'						
	45'						345'2" pebble 2" diam.
							347'8" pebble 1" diam. 348' fossil band - bryozoans
	350'				30/		349'3" pebble ½" diam 349'10" - 350'2" pebble band 2"d
							351'10" - 352'2" pebble 2" diam
	55'						354' pebble band with fossils 3" diam schist pebble
							355'6" pebble 1" diam.
	360'						356 - 357 pebble conglomerate - fossils with Stenopora band at bottom.
	65'						fossils and pebbles up to 2" diam. continue to 260'10" then siltstone with bryozoans and scattered ¼" diam. pebbles.
	370'						366'10" pebble ½" diam
							367'3" pebble 1" diam
	75'						371'3" pebble 1" diam Core broken between
							373'5" pebble ½" diam
							374'2" pebble 1" diam 373' and 376'11" by
	380'						378' pebble ½" diam. drilling
							378'6" pebble band 3", ½" pebbles.
							380'5" pebble ½"
	85'						381'4" pebble band 3", 2" pebbles
							383' pebbles ½", ¼" diam
	390'						386' pebble 1" diam. 386'8" pebble ½" diam.
							389'6" - 390' pebbles 2" diam and fossils
	95'				77/ Ca		391'0" - 391'5" pebble 2" diam.
							392'3" pebble ¼ diam
662	400'						

FORM No. H.E 443

DRILLING RECORD

SCHEME:- GREAT LAKE POWER DEVELOPMENT

LOCATION:- Tailrace Tunnel

POSITION PLOTTED ON DRAWING No.

DATES: (a) DRILLED: (b) WATER TABLE:

METHOD USED: D.D DIAMETER:

SITE REMARKS:

POSITION	CO-ORDINATES:	E:	N:	HOLE No. 5117
	ON LINE:	BEARING:	AT CH:	
	FROM STN.	BEARING:	DIST:	FILE No.
LEVEL	SURFACE:	FORMATION:	WATER TABLE:	
	1062	QUAMBY		
INCL	HOLE DRILLED	DEPRESSION ANG.:	INCL. BEARING:	SHEET 5 OF 5 SHEETS
	VERT ~~HOR'ING~~			

STANDARD LEVEL	DEPTH	CORE DRAWN	RECOVERY 0.2 0.6 0.8 1.0	GRAPHIC LOG	JOINTS	WATER	REMARKS
662	400						402'5" pebble ¼" diam. and fossils
	5						404' pebble 1" diam. and pyrite
	410						406'8" pebble ½" diam. 407' pebble ½" diam
	15						408'2" pebble ¼" diam. pyrite 409' scattered ¼" pebbles
	420						410'5" pebble 2" diam. pebble ½" diam.
	25						413' pebble 2" diam.
	430						
	35				70 20		431'6" - 432' joint system 70° strike partly calcite partly leached, transverse slickensides
					45		435' open joint
622	440				45		436' pebble 1"
							437'4" open not slickensided
616	45						439'1" pebble ½" diam.
					45		446' system of 45° joints, no calcite - slight slickensides
	450						446'3" END OF HOLE
	55						
	60						
	65						
	70						
	75						
	80						
	85						
	90						
	95						
	00						