



Section of: Markham Colliery
L30's Intake Drift (Second Ell to Second Waterloo)

Purpose: Access to Second Waterloo Seam

(Nat. Grid, Sheet & Qtr.) B/H REGD. NO.

Exact Site: Top of drift: E445274; N.371855

SK 47 SE/60

53

Bottom of drift: E.445070; N.371390

Level at which drift commenced relative to
O.D. Minus 360.7 m

Date of Sinking: September 1981 to September 1982

Measures examined by D.J. Green, N.C.B. Geologist

GEOLOGICAL CLASSIFICATION	NATURE OF STRATA	THICKNESS		CUMULATIVE HEIGHT ABOVE SECOND ELL	
		m	cm	m	cm

N.B. The Second Waterloo was sampled
for analysis nearby at E.445295;
N.371851, level - 314 m. O.D.
See Laboratory Report EMRL/129/82

Top of Drift

65 92

Mudstone highly carbonaceous; shaly

0 40+

65 52

SECOND WATERLOO
(Middle Leaf)

Cannel 15
Coal, bright 23
Mudstone, canneloid 20
58

0 58

Seatearth

64 94

Mudstone grey, listric

0 08

64 86

Mudstone silty, laminated

0 33

64 53

Mudstone silty, poorly laminated, common
plant remains; 0.03
ironstone at the top

0 75

63 78

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Mudstone	highly carbonaceous, canneloid; common <u>coal</u> laminae in the top 0.05	0	51	63	27
<u>SECOND WATERLOO</u> <u>(Lower Leaf)</u>	Cannel	0	15	63	12
Siltstone	fine, unlaminated, no roots seen	0	10	63	02
Siltstone	medium, poorly laminated, occasional minor fine siltstone passages; rare plant remains - passage -	5	20	57	82
Mudstone	silty; laminated; rare plant remains; locally common worm tracks	1	50	56	32
Mudstone	highly carbonaceous; shaly; occasional non-marine lamellibranchs including <u>Naiadites</u>	0	45	55	87
<u>COAL</u>	bright	0	21	55	66
Seatearth Mudstone	silty, unlaminated, carbonaceous; common irregular listric surfaces; common roots	0	13	55	53
Mudstone	silty, grey; unlaminated; common irregular listric surfaces; common roots	0	75	54	78
Siltstone	fine; poorly laminated; occasional roots near the top passage	0	70	54	08
Mudstone	laminated; common worm tracks; rare plant remains	1	60	52	48
<u>COAL</u>	dirty	0	25	52	23
Seatearth Mudstone	unlaminated common irregular listric surfaces; common roots	0	48	51	75
Siltstone	fine, locally muddy; unlaminated; common roots, becoming less common towards the base	1	05	50	70

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Siltstone	fine with common fine sandstone laminae; locally ripple bedded	0	60+	50	10
<u>FAULT</u>	<u>Downthrow about 2.5 m to the N.E.</u>				
Siltstone	fine to medium with common fine sandstone laminae; common micaceous carbonaceous planes; locally ripple bedded	1	00+	49	10
Sandstone	fine to medium; occasional micaceous planes; vaguely dune bedded	1	70	47	40
Siltstone	fine, and fine sandstone interlaminated and interlayered; locally ripple bedded; common micaceous carbonaceous planes sharp	0	66	46	74
Sandstone	medium, generally massive erosional base	2	80	43	94
Mudstone	laminated; listric and crushed near the top; common worm tracks	2	20	41	74
Mudstone	carbonaceous, common coal laminae; occasional listric surfaces	0	28	<u>41</u>	<u>46</u>
<u>Seatearth</u>					
Siltstone	medium, with occasional irregular root disturbed sandstone laminae; common roots passage	0	60	40	86
Siltstone	medium, unlaminated; rare roots near the top; occasional ironstone patches	1	60	39	26
Sandstone	medium grained, off white; massive	2	20	37	06
Sandstone	fine grained, common irregular micaceous carbonaceous planes erosional	0	98	36	08
Mudstone	laminated; common worm tracks	1	34	34	74
<u>COAL</u>	dirty	0	<u>20</u>	<u>34</u>	<u>54</u>

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Seatearth Mudstone	silty; common <u>coaly</u> laminae; common roots	0	43	34	11
Siltstone	fine to medium; unlaminated; grey; abundant roots passage	1	30	32	81
Siltstone	fine, laminated; occasional ironstone bands; common roots including <u>Stigmaria</u> , becoming less common towards the base passage	1	10	31	71
Mudstone	locally silty; laminated; occasional ironstone lenses; locally common non-marine lamellibranchs including <u>Anthracosia</u> ; occasional guilielmiites	3	95	27	76
Mudstone	silty, laminated; occasional ironstone bands; common plant remains, mainly <u>Calamites</u> passage	0	95	26	81
Siltstone	fine, muddy in parts; poorly laminated; occasional ironstone bands and lenses; common and locally abundant plant remains including <u>Calamites</u>	2	20	24	61
Siltstone	medium with rare, diffuse sandstone laminae; strong	0	57		
<u>FAULT</u>	<u>Downthrow 0.3 metres to the west</u>			24	04
Siltstone	fine, poorly laminated, occasional ironstone bands; rare wispy thin sandstone laminae	1	45	22	59
Mudstone	silty, laminated; varved appearance; common worm tracks	2	10	20	49
Mudstone	laminated, dark, slightly carbonaceous passage	1	15	19	34
Mudstone	highly carbonaceous, shaly; occasional plant remains; occasional pyritic non-marine lamellibranchs near the base	0	55	18	79

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FIRST ELL

Coal, bright	13
Coal, dull	3
Seatearth; mudstone dark, coaly laminae	16
Seatearth; mudstone silty, grey	6
Coal, mainly bright	9
Seatearth; mudstone silty, dark	138
Coal, bright	28
Seatearth; mudstone silty, dark	20
Coal, bright with a few dirt partings	6
Seatearth; mudstone	6
Coal, dirty	6
	<u>251</u>

2 51

16 28

Seatearth
Siltstone

fine to medium, unlaminated; grey;
abundant roots

0 07

16 21

Sandstone

fine with occasional thin, root disturbed
siltstone laminae; occasional root nodules;
abundant roots

0 54

15 67

Sandstone

fine, and fine siltstone interlaminated
and interlayered; locally ripple bedded;
common micaceous carbonaceous planes;
rare roots near top; occasional large
sand-filled burrows towards the base

1 16

14 51

Siltstone

fine, with occasional fine sandstone
laminae, locally iron-rich
sharp

0 98

13 53

Siltstone

fine and fine sandstone, interlaminated
and interlayered; some sandstone units
up to 30 cm thick
sharp

0 83

12 70

Siltstone

medium, slurried texture; large fine
sandstone pouch structures near the
top; large flute-like structures at
the base
sharp

0 45

12 25

Mudstone

silty, laminated; rare wispy sandstone
laminae near the top; occasional ironstone
lenses; common worm tracks; occasional
non-marine lamellibranchs
passage

3 25

9 00

Mudstone

locally silty, laminated; irregular
listric surfaces common and locally
abundant non-marine lamellibranchs
including Naiadites and Anthracosia

1 80

7 20

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Siltstone	fine and fine sandstone; common micaceous carbonaceous planes, common lenticular ripples	2	76	4	44
Siltstone	fine with occasional fine sandstone laminae; locally vaguely ripple bedded; occasional ironstone bands passage	1	30	3	14
Sandstone	fine with common fine siltstone laminae (80:20); common micaceous planty planes; iron rich layers; locally vaguely ripple bedded; abundant sand-filled burrows passage	0	40	2	74
Siltstone	fine to medium with common fine sandstone laminae (70:30, locally 60:40); common micaceous planty planes; iron-rich patches; common small burrows	0	45	2	29
Mudstone	silty, laminated, dark; occasional ironstone patches near the top; occasional plant remains; common and locally abundant non-marine lamellibranchs especially near the base, including <u>Naiadites</u> with attached <u>Spirorbis</u>	1	32	0	97
<u>SECOND ELL</u>	Coal	0	97	0	00
	<u>Bottom of Drift</u>				

DJG/91359/PH.XI