1

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 m | THICKNESS cm | CUMULATIVE HEIGHT ABOVE SECOND ELL m | CUMULATIVE HEIGHT ABOVE SECOND ELL 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 coal laminae in the top 0.05 | 0 | 51 | | |
| | | | | 63 | 27 |
| SECOND WATERLOO (Lower Leaf) | 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 | 5 | 20 | | |
| | - passage - | | | 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 Naiadites | 0 | 45 | | |
| | | | | 55 | 87 |
| COAL | 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 | 0 | 70 | | |
| | passage | | | 54 | 08 |
| Mudstone | laminated; common worm tracks; rare plant remains | 1 | 60 | | |
| | | | | 52 | 48 |
| COAL | 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 tha base | 1 | 05 | | |
| | | | | 50 | 70 |

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|---|---|---|---|---|---|
| Siltstone | fine with common fine sandstone laminae; locally ripple bedded | 0 | 60+ | | |
| FAULT | Downthrow about 2.5 m to the N.E. | | | 50 | 10 |
| 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 | 2 | 80 | | |
| | erosional base | | | 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 | | |
| | | | | 41 | 46 |
| Seatearth | | | | | |
| Siltstone | medium, with occasional irregular root disturbed sandstone laminae; common roots | 0 | 60 | | |
| | passage | | | 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 | 0 | 98 | | |
| | erosional | | | 36 | 08 |
| Mudstone | laminated; common worm tracks | 1 | 34 | | |
| | | | | 34 | 74 |
| COAL | dirty | 0 | 20 | | |
| | | | | 34 | 54 |

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|---|---|---|---|---|---|
| Seatearth Mudstone | silty; common coaly laminae; common roots | 0 | 43 | 34 | 11 |
| Siltstone | fine to medium; unlaminated; grey; abundant roots | 1 | 30 | | |
| | passage | | | 32 | 81 |
| Siltstone | fine, laminated; occasional ironstone bands; common roots including Stigmaria, becoming less common towards the base | 1 | 10 | | |
| | passage | | | 31 | 71 |
| Mudstone | locally silty; laminated; occasional ironstone lenses; locally common non-marine lamellibranchs including Anthracosia; occasional guilielmites | 3 | 95 | 27 | 76 |
| Mudstone | silty, laminated; occasional ironstone bands; common plant remains, mainly Calamites | 0 | 95 | | |
| | passage | | | 26 | 81 |
| Siltstone | fine, muddy in parts; poorly laminated; occasional ironstone bands and lenses; common and locally abundant plant remains including Calamites | 2 | 20 | 24 | 61 |
| Siltstone | medium with rare, diffuse sandstone laminae; strong | 0 | 57 | | |
| FAULT | Downthrow 0.3 metres to the west | | | 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 | 1 | 15 | | |
| | passage | | | 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 | | | |
| | | 251 | 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 | | 0 | 98 | |
| | sharp | | | | 13 53 |
| Siltstone | fine and fine sandstone, interlaminated and interlayered; some sandstone units up to 30 cm thick | | 0 | 83 | |
| | sharp | | | | 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 | 0 | 40 | | |
| | passage | | | 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 epecially near the base, including Naiadites with attached Spirorbis | | | | |
| | | 1 | 32 | | |
| | | | | 0 | 97 |
| SECOND ELL | Coal | 0 | 97 | | |
| | | | | 0 | 00 |
| | Bottom of Drift | | | | |

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