

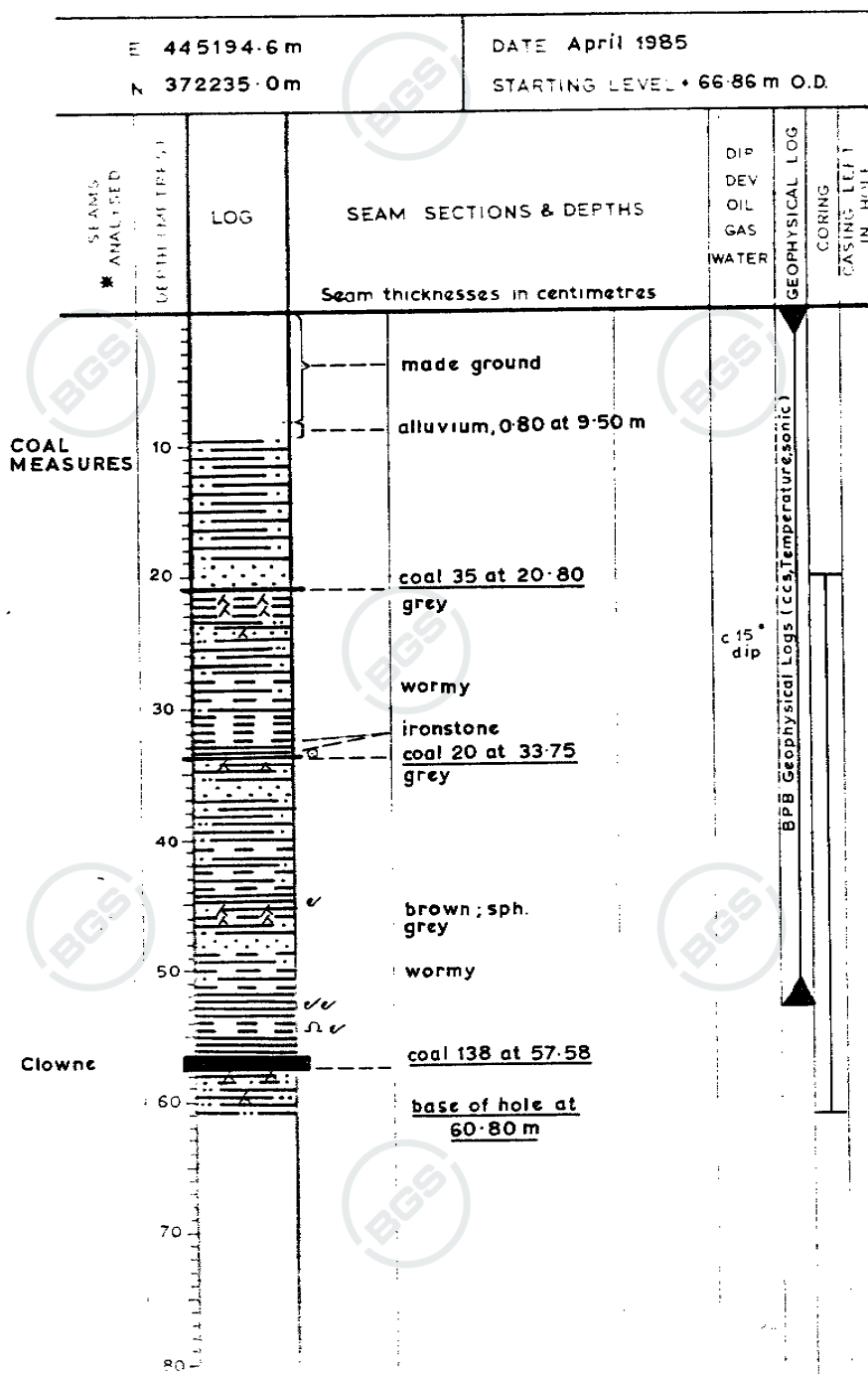
54 J

SK 47 S.E. / 72

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MARKHAM COLLIERY

Borehole No. 9 for proposed
surface drift (1985)





SK 47 SE/72

Section of: MARKHAM COLLIERY, No. 9 Borehole
for proposed surface drift

Purpose: Site investigation

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

Exact Site: E.445194.6
N.372235.0

SK47SE

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Level at which bore commenced relative to
O.D. + 66.86m.

Date of Drilling: 20.3.85 to 29.3.85

Driller: Soil Mechanics Ltd.,

Core examined by J.H. Rippon, N.C.B. Geologist

GEOLOGICAL CLASSIFICATION	NATURE OF STRATA	THICKNESS		DEPTH	
		m	cm	m	cm
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<u>See also the geological log by Soil Mechanics Ltd. This hole was logged geophysically by B.P.G. Instruments Ltd. Open hole to 20.00 m.</u>					
Record from driller's description of chippings and B.P.B. geophysical logs:-					
				0	00
<u>MADE GROUND</u>	Colliery fill, grey shale	4	00	4	00
	Colliery fill, red shale	4	70	8	70
<u>ALLUVIUM</u>	Clay, brown and grey	0	80	9	50
<u>COAL MEASURES</u>	Siltstones (geophysical logs; driller reports weathered grey mudstones)	9	50	19	00
	Sandstone	1	00	20	00



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Cores from 20.00 m.

Sandstone	fine, with small coal streaks and clasts, dipping about 50°, in top 0.13; abundant coal streaks, fragmented core below 20.13 m.	0	45	20	45
<u>COAL</u>	mostly bright with some dull bands up to 0.01 thick; fusainous; core fragmented; geophysical logs indicate coal 0.30 to 0.40 at about 20.80 m.	0	<u>35</u>	20	<u>80</u>
Seatearth:					
Mudstone	grey; small polished surfaces; silty in parts below 22.00 m with small ironstone nodules; abundant roots; core partly fragmented	1	72	22	52
Siltstone	fine, with fine sandstone lenses and layers; bedding disturbed by rootlets and ironstone nodules passage	0	25	22	77
Siltstone	muddy; some rootlets and small ironstone nodules	0	61	23	38
Sandstone	dune bedded with ironstone-rich patches near the top	0	60	23	98
	passage				
Siltstone	fine, with fine sandstone lenses and layers near the top	0	57	24	55
Sandstone	fine, and fine siltstone (50:50), interlaminated and interlayered; small sandstone ripples; small sandstone-filled burrows in parts; bedding dipping about 15°	0	60	25	15
	passage				
Siltstone	fine, with fine sandstone laminae (80:20)	0	40	25	55
	passage				

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Siltstone	fine, poorly laminated; common plant remains in parts; becoming muddy towards the base passage	2	10	27	65
Mudstone	silty; poorly laminated; local plant debris near the top; less silty below about 30.50 m, with vague wormy traces passage	3	00	30	65
Mudstone	silty in parts near the top; wormy in parts; weak; 0.03 ironstone at the base	2	00	32	65
Mudstone	very carbonaceous near the top, less so below about 33.00 m; <u>Planolites cf. ophthalmoides</u> abundant near the top; 0.05 ironstone band at 33.53 m.	0	90	33	55
<u>COAL</u>	bright; fragments; geophysical logs indicate coal approximately 0.20	0	<u>20</u>	<u>33</u>	<u>75</u>
Seatearth:					
Siltstone	fine, grey, vague sandstone patches; rootlets passage	0	45	34	20
Siltstone	fine with sandstone ripples and rippled layers, abundant micaceous carbonaceous planes; small ironstone nodules passage	0	15	34	35
Siltstone	coarse with abundant plant debris; slurried appearance	0	20	34	55
Siltstone	fine, with fine sandstone (60:40) interlaminated; small sandstone ripples, some with erosional bases passage	1	05	35	60

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Siltstone	fine; laminated; some sandstone laminae in the top 0.15 and in the basal 0.10	0	60	36	20
Sandstone	large linguoid ripple sets with occasional siltstone laminae	0	60	36	80
Siltstone	fine with fine sandstone (70:30); common sandstone ripples and laminae in parts passage	0	60	37	40
Siltstone	fine; laminated; rare sandstone lenses and laminae; local plant debris passage	1	70	39	10
Siltstone	fine, poorly laminated passage	0	95	40	05
Mudstone	silty in parts; poorly laminated	4	08	44	13
Mudstone	carbonaceous near the top, less so downwards; shaly; occasional large thin-shelled mussels	0	53	44	66
<u>Seatearth:-</u>					
Siltstone	fine, muddy in parts including near the top; dark brownish-grey; abundant small polished surfaces; abundant sphaerosiderite near the base passage	1	04	45	70
Mudstone	silty, brown; abundant sphaerosiderite sharp	0	40	46	10
Mudstone	silty, dark grey; reworked texture passage	0	30	46	40
Siltstone	muddy, grey; common roots and small ironstone nodules	1	37	47	77
Sandstone	irregular ripples with some siltstone laminae sharp	0	48	48	25

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Siltstone	fine, laminated passage	0	05	48	30
Mudstone	silty near the top, laminated; thin ironstone bands; wormy rapid passage	3	20	51	50
Mudstone	shaly, carbonaceous; large siderite-infilled mussels in parts, locally common compressed <u>Anthracosia</u> ; wormy at 51.80 m; silty in basal 0.35	1	90	53	40
Mudstone	silty near the top with abundant mussels and ostracods; fauna decreasing downwards passage	0	85	54	25
Mudstone	shaly, carbonaceous; local pyritised <u>Anthracosia</u> and pyritised plant debris passage	0	35	54	60
Mudstone	shaly, carbonaceous; occasional pyritised plant debris	1	54	56	14
Mudstone	canneloid; abundant pyritised plant debris fitting	0	06	56	20
<u>CLOWNE</u>	coal, mostly bright (cylinders) attached	<u>1</u>	<u>38</u>	<u>57</u>	<u>58</u>
Seatearth:					
Mudstone	silty, brown-grey; core fragmented in parts	0	07	57	65
Siltstone	fine, light brown; occasional rootlets	0	20	57	85
Siltstone	very coarse; grey, well-cemented; occasional rootlets	0	55	58	40

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Siltstone	fine, and fine sandstone (60:40) irregular ripples; bedding disturbed by rootlets and a few ironstone nodules	0	65	59	05
	passage				
Sandstone	fine, with fine siltstone (80:20) abundant sandstone ripples; local siltstone-dominant layers with more irregular sandstone ripples; bedding near the top distorted by rootlets and ironstone nodules	1	13	60	18
Siltstone	fine with occasional sandstone laminae	0	30	60	48
	passage				
Siltstone	medium and sandstone (50:50), interlaminated; large slump structures	0	32 +	60	80

Base of hole at 60.80 m

JHR/1169R/PH