

FORM P 70 SERIES 680	e · ·	<b>4.4 -</b>	, I. G.S.		8-1N(	Н МАР	B/H	REGD. No
	DK	47 5 V	<b>4</b> /53					
	KHAM COLLIER	Y			nty, She	et and Qt	r.)	
DEF	EP HARD TO BL	ACKSHALE RETUR	N DRIFT	. s	K 47	SE/	1,	51 47SI
Purpose				. S	K 47	•	re	fers top
Exact Site	TOP	BOTTOM				ng from a f possible		
					cii iiiqp 1	, possis.	*	
	commenced relative to 0 drift  or boring August 1973 -  National Coal P.K. Boam  NATURE  OB (i) Composite Geologist Surveyor' (ii) Thickness angles to (iii) Depths ar stratigra the Deep  fine; ironstone; with sandstone; 'train' drift  vitrain streaks  coal; pyritic in dirt. carbonaceo coal  shaly; non-marin				RCIAL I	N CONF	IDENC	E
d	rift	relative to 0.D.	- 453•38 m			·		
Sinker or borer	Na	tional Coal Bo	ard					,
Examined by	P.	K. Boam				Delete as a		
GEOLOGICAL CLASSIFICATION	39)	NATURE OF	STRATA		m THIC	KNESS cm	m DE	P TH
	NB (i)	Composite se	ction from Mine			J		
		Geologist's	<u>observations an</u>			-	-	
	(ii)		evers. measured at rig	ht		<del>- </del>		1
		angles to the	e bedding					
	(iii)		he approximate			_		-
			d (cumulative).					
Q131 I	Sino.	inongtone sh	undent nlents		0	91		
Siltstone	1 ine;	fromstone; ab	undant prants		0	91		
Siltstone			ple drift and		-	56		
	'trai	n' drift				70	<del> </del>	1
Mudstone	vitra	in streaks			0	13_		
DEEP HARD	coal:	pyritic in to	p 10cms 71				ļ <u></u>	
(Main Leaf)	dirt.		4					
	coal		<u>58</u> 133		1	33		
			<u></u>				0	00
26 2 4	ahalm	· non-mamino 1	omo llibronoha		0	28	<u> </u>	
Mudstone <u>Seat Earth</u>	Shary	, non-marine i	ameriroranchs			20	0	28
		17 171			<u> </u>	90	ļ	
Mudstone	sligh	tly silty, coa	1 laminae		<del>                                     </del>	89	1	17
Siltstone	with	sandstone; iro	nstone; Stigman	<u>ia</u>	1	22	2	39
Siltstone	fine,	laminated; ra	re plants		11_	52	3	91
•								71
						_	ļ	
					4		-	
							ļ	
							-	-
	1					1		1



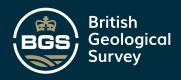
8-INCH MAP B/H FORM P 71 SERIES 580 COMMERCIAL IN I CAMPINGNOE - - OCT 1980 MARKHAM COLLIERY SK 47 SW Section of ..... DEEP HARD TO BLACKSHALE RETURN DRIFT \*Delete as appropriate THICKNESS GEOLOGICAL CLASSIFICATION NATURE OF STRATA m or ft\* cm or in\* m or ft\* cm or in\* NO RECORD 1 20 5 11 Sandstone medium; ripples ripple drift 0 30 41 52 Siltstone fine, with rare sandstone 6 93 NO RECORD 1 20 8 13 fine; ironstone 12 Silts tone 25 9 Mudstone laminated, slightly silty, ironstone 2 45 WOIMY 70 11 FIRST PIPER coal 23 SEAM dirt 93 coal dirty coal coal <u>32</u> dirty coal 10 coal 37 115 1 15 SEAT EARTH 12 85 Mudstone brown 75 13 60 Siltstone medium; iron-rich patches; plants. 4 ferns 41 18 01 medium, siltstone laminae, pellets; Sandstone 0 plants 86 18 87 Siltstone with thin rhythmic sandstone laminae; micaceous planty planes 1 22 20 09 Siltstone medium, with rare sandstone laminae 68 77 21



FORM P,71					B/H
SER1E5 680	COMPANE.	<b></b> 0	CT 198	30	
Section of	MARKHAM COLLIERY	SK 4	75	h / '	<u> </u>
	DEEP HARD TO BLACKSHALE RETURN DRIFT				
5501 0 G1 G41		THICKNESS			тн
CLASSIFICATION	NATURE OF STRATA	m or ft*	em or in•	morft*	om or i
				21	77
		<u> </u>	<u> </u>		DEPTH mor fit* om or 21 77  23 57  24 94  25 09  26 84  27 04  28 31  28 81  30 94  33 84  35 06  35 26  35 72
NO RECORD		11	80	07	L
2 \			-	25	57
Siltstone	fine: man manine levellikususka		77		
21103 00116	Tine: Pare non-marine lametilibranchs	<del>                                     </del>	57	24	04
NO RECORD  Siltstone fine:  Mudstone shaly.  SECOND PIPER coal seat e dirty  Seat Earth  Mudstone with s  NO RECORD  Siltstone fine t  Mudstone dark, lamell  Mudstone dark; non-ma			<del>                                     </del>	54	74
Mudstone	MARKHAM COLLIERY   DEEP HARD TO BLACKSHALE RETURN DRIFT   DEEP HARD TO BLACKSHALE RETURN DRIFT   THICKNESS   20   21   20   21   20   22   25   25   25   25   25   25				
	CORD	25	09		
SECOND PIPER					
SEAM			<b>\</b>		
	175	10	75		
Seat Earth				26	84
<u> </u>					_
Mudstone			20		04
ŀ			ļ	21	04
Sanda tono	with ciltatone: plants	+	27		+
Danus cone	"Tott STITES totte, brantes	+ -		28	31
· ·				20	1
NO RECORD		0	50		
				28	81
Siltstone	fine to muddy, laminated; ironstone	2	13	•	
				30	94
<u>,</u> , ,	3-3-2-1				<u> </u>
Mudstone					ļ <u> </u>
+	lamelilibranchs and shelly ironstones	2	90	37	04
ŀ				- 22	04
Mudstone	dark: ironstone: coal laminae nlents				
1	non-marine lamellibranchs	1	22		ļ
			7.	35	06
[					
Mudstone	highly listric in parts; guilielmites	0	20		
ļ.				35	26
	· · · · · · · · · · · · · · · · · · ·				
COCKLESHELL	coal	0	41		
Seat Earth	,			<u>35</u>	67
Mudstone		- <del></del>	05		
TIME COITE		<del>                                     </del>	05	35	72
					14
Siltstone	with sandstone towards base	1	07		<del> </del>
			,	36	79
Sandstone		0	30		
-	- 1944 is in the second of the			37	09
-				****	
}					<u> </u>
}					
}	107				<del> </del>
<u> </u>		7.4		-	<del></del>
ŀ		<del>- </del>			<del></del>
ļ t		+	<del>  </del>		<del> </del>



FORM P 71		B-INCH	MAP		B/H
SERIES 680	COMMERCIA	Mar. E.		[20]	
Section of	COMMERCIAL IN CONFIDENCE MARKHAM COLLIERY DEEP HARD TO BLACKSHALE RETURN DRIFT	5K 45	7 SW		53
	DEEL HARD TO BURGESHADE RETURN DRIFT	*Delet	e as appro		
GEOLOGICAL CLASSIFICATION	NATURE OF STRATA	THICK	cm or in*		PTH
-		H 01 1(-	City Of Tite	37	(
					<del>  `</del>
Sands tone	fine to medium; ripples; micaceous				
	planty planes	11	83	70	┾,
				38	
Siltstone	coarse with sandstone laminae and pods	0	46		<del></del>
				39	
Sandstone	Ain 1: 13.1				ļ
Sandstone	fine, rippled; micaceous planty planes	_	55	70	+
		<del>-  </del>		39	+9
Siltstone	with sandstone	2	26	·	
				42	1
<b>0</b> 1 . 1					
Sands tone	medium, rippled	0	38	42	5
				42	+
Siltstone	medium, with sandstone; ripple and				
•	'train' drift, micaceous planty planes	0 ,	76		
				43	1 2
NO RECORD		10	40		+
		<del>                                     </del>	40	43	1 7
7 )			1	т.	
Siltstone	fine to medium; even sandstone fine				
	laminae, micaceous planty planes. abundant plants, ferns	5	~		+-
	counted to plantes, lerms		00	48	1 7
				70	1
Siltstone	fine with even sandstone fine laminae:				
•	abundant plants, ferns	2	11		<del>  _</del>
LOW TUPTON		/.		50	8
SEAM	coal, bright	0	67		
Seat Earth	V.			51	5
Siltstone	and due the same and a second second				ļ
pricatone	muddy, brown; sphaerosiderite	- 0	30_	51	8
					+ -
Siltstone	grey	0	30		
				_52	1
NO RECORD		+1	20		ļ
			-20	53	3
					Ĺ
	The state of the s			*****	
					-
					-
		100			



FORM P 71		8 - I N C	MAP		B/H
SER: E9 6'80				,	
	COMMERCIAL IN CONFIDENCE MARKHAM COLLIERY DEEP HARD TO BLACKSHALE RETURN DRIFT		1		
Section of	MARKHAM COLLIERY DEEP HARD TO BLACKSHALE RETURN DRIFT	K 4	7 SV	<u> </u>	53
	DEET HARD TO BLACKSHALE RETURN DRIFT	*Delet	e as appro	oriate	
GEOLOGI CAL	NATURE OF STRATA	THICK	-,		
CLASSIFICATION	The state of the s	m or ft*	cm or in*		
<u> </u>		<b>-</b>	<del> </del>	_53	3
Siltstone	fine, unlaminated, ironstone;				+
	abundant plants, ferns	0	76		<b>-</b>
? \         [				_54	O
4					
Siltstone	fine, with sandstone laminae;				
}-	micaceous planty planes: Stigmaria	1_1_	12		1
ļ-				55	1 1
Sandstone	medium, micro-breccia	+	7-		<del> </del>
Danus cone	medium, midro-preddia		33	55	-
ř	,	1			<del> </del>
no record		1	95		<del> </del> -
				_57	4
Siltstone	fine; ironstone; plants including				00 11 5 4 60 83 14
ļ.	Calamites	0	61		
-				58	O
Camdatana	-247 - 274 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2	ļ			ļ
Sandstone		lamites 0 61  th siltstone; ripple and 'train'  ift, variously inclined small  splaced blocks, anostomosing  ultlets; local coaly breccia 0 36  58 44			
		<u> </u>	-		-
			36		<del> </del>
2)	Zarratoma focal Coafa piecola	<del>                                     </del>	<del></del>	58	1-1
			<u> </u>		1
Siltstone	fine to medium	1	22		
_				59	66
Sandstone	and siltstone, brecciated; ironstone,	<u> </u>			ļ
-	coal laminae	0	15		<del> </del>
-				59	8
Siltstone	fine with thin sandstone laminae	0	33		-
	TOTAL DELICO TOTAL CO			60	14
		100			<u> </u>
Sandstone	medium; well-cemented; coal laminae;				3 0 1 1 5 4 4 66
<u> </u>	stained fissures	0	69		
<b> </b>				60	83
Siltstone	medium, with sandstone; micaceous	<del> </del>			ļ
	planty planes; long burrows, bioturbated	0	61		<del> </del>
<u> </u>	promote tong burrows, bloturoated	1 0	61	61	A A
			-	01	44
Siltstone	medium, rare plants	2	25		
				63	60
Siltstone	fine, with lenticular sandstone laminae;				
WILL BENCH A TOWNS	plants	1 1	20		<u> </u>
THREEQUARTER	(seam washed out)				ļ
HORIZON Seat Earth	/ Deam washed off/	<del> </del>	-	61	00
Har 611				64	85
	7.6		51		
					1.



FORM P 71		8 - I NC			B/H
SERIES #80	CONTRACTOR OF THE STATE OF THE S	<u>بر</u> مرسو	CT 1980	)	
Section of	MADETIAN GOTT TODAY	SK 4 "		ı	53
	DEEP HARD TO BLACKSHALE RETURN DRIFT		e as approj		20
GEOLOGICAL		THICK		DEPTH	
CLASSIFICATION	NATURE OF STRATA	m or ft*	cm or in*	m or ft*	CM or
-				64	89
Siltstone	medium to fine, rare roots	0	91		
-				65	80
Mudstone	listric: plants, rare roots	0	15		
_				65	95
THREEQUARTER					
FLOOR COAL	coal, fusainous	. 0	14		
Seat Earth				66	00
Mudstone	listric	0	03	65	4.5
F		100		_66	12
Siltstone		0	48	-	
· •		-	<del>  </del>	66	60
Sandstone	Stigmaria	0	66	CF	
				67	26
NO RECORD		0	80	60	
\	(4)		<u> </u>	68	06
Siltstone	fine, with rare thin sandstone laminae;				
<u> </u>	rare plants	5	50	73	56
					).
Siltstone	medium, with sandstone laminae, micaceous planty planes	1 1	70		
	micaceous pranty planes		70	75	26
Sandstone	medium to fine, rippled; micaceous	/	51		
-	planty planes	2	35		
-				77	61
Siltstone	with sandstone; micaceous planty				
-	planes	0	79		4.0
				78	40
Siltstone	medium to fine, laminated; wormy	0	55		
			-	78	95
Mudstone	shaly, ironstone at base; wormy	1	71		
/		_	<b>—</b>	80	66
-					
					<u> </u>
-	11.47.				ļ
		-			<del>                                     </del>
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6-INCH MAP B/H FORM P.71 SERIES 680 COMMERCIAL IN CONFIDENCE -- OCT 1980 MARKHAM COLLIERY SK 47 Sh Section of ..... DEEP HARD TO BLACKSHALE RETURN DRIFT \*Delete as appropriate THICKNESS GEOLOGICAL-CLASSIFICATION NATURE OF STRATA m or ft\* cm or in\* m or ft\* cm or in\* 66 Sandstone 0 30 80 96 Siltstone with lenticular samstone ripples 44 83 40 Siltstone fine with thin sandstone laminae; 3 65 micaceous planty planes 87 05 Siltstone fine to medium 22 88 27 Mudstone laminated, ironstone nodules and bands; WOIMY 73 00 dark, slightly carbonaceous; Muds tone ironstone nodules 2 13 92 13 Mudstone laminated: ironstone 29 2 94 42 YARD SEAM Coal 0 61 Seat Earth 95 03 Mudstone listric: ironstone nodules 0 20 95 23 Siltstone ironstone at base 32 96 55 BLACKSHALE cannel 10 (FOURTH LEAF) coal 16 0 16 Seat Earth 71 96 Mudstone ō highly listric: ironstone nodules 36 07 Mudstone coal laminae 0 15 97 22 Siltstone ironstone nodules; Stigmaria  $\overline{\circ}$ 91 98 13



₹ <sup>*</sup> Form P 71		8 - I N CH			B/H
SERIES 680	COMME	(		30	
	COMMERCIAL IN CONCIDENCE		4		
Section of	MARKHAM COLLIERY  DEEP HARD TO BLACKSHALE RETURN DRIFT	3K41	7 SL	J   A	53
	DEEP HARD TO BLACKSHALE RETURN DRIFT		e as appr		<u>ب ر</u>
GEOLOGICAL		THICK	NESS	DEF	ТН
CLASSIFICATION	NATURE OF STRATA	m or ft*	cm or in*	morft*	
				98_	13
Siltstone	medium to fine; ironstone; plants	3	00	<del> </del>	
Sires cone	modium so line, fions tone, pictics	<del>                                     </del>	<del>  W</del>	101	13
5			1		· ·
Sandstone	and siltstone; diastems, ripple				
	drift; ironstone nodules	5	90		
				107	03
04344					
Siltstone	medium with thin, even sandstone laminae	3	25	ļ <u> </u>	<del> </del>
	rantruae	<del>  2</del>	25	110	28
				1	- 20
NO RECORD		3	00	1	<b> </b>
				113	28
	Lay /				
BLACKSHALE					
LEAVES 1-3	Dec. 0 3-204				<u> </u>
(GOAF)	Base of drift		ļ		
i					
			<del>                                     </del>	<del></del>	
		-			ļ <u>.</u>
2)					
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