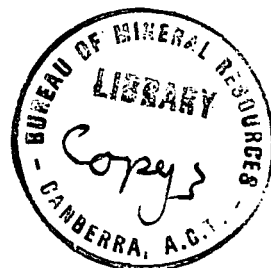


COMMONWEALTH OF AUSTRALIA.

DEPARTMENT OF NATIONAL DEVELOPMENT.
BUREAU OF MINERAL RESOURCES
GEOLOGY AND GEOPHYSICS.

RECORDS.

1953/88



K I L L I N G W O R T H A R E A

DRILLING RESULTS

By T.H. Rodger

Bureau of Mineral Resources, Geology and Geophysics

OPEN CUT COAL INVESTIGATIONS IN NEW SOUTH WALES

NEWCASTLE REGION

K I L L I N G W O R T H A R E A

DRILLING RESULTS

By T.H. Rodger

RECORDS
1953/88

C O N T E N T S .

Text; Bore Logs; Map N14/120

The area investigated is to the south west of the West Wallsend Extended Colliery near the township of Killingworth within Portion 34, Parish of Teralba, County Northumberland.

Drilling was carried out for the Joint Coal Board as part of the programme of the proposed Barnsley Australasian Open Cut, to locate the Great Northern and Fassifern Seams which outcrop at the base of the hills. Five bores were sunk (see BMR Map N14/128) Bores BMR 1 to 4 penetrated the Fassifern Seam.

The coal in the seams was found to be of extremely poor quality and the seams very banded. Therefore drilling was discontinued. There are dykes shown on the Caledonian Collieries Ltd. "Plan Showing Outcrop of the Great Northern and Fassifern Seams" (Plan W.W.E. 184C.) One of these is visible near BMR 5, but the others near BMR 3 cannot be seen on the surface. Cindereed coal was not encountered during drilling operations.

The seams dip to the north west.

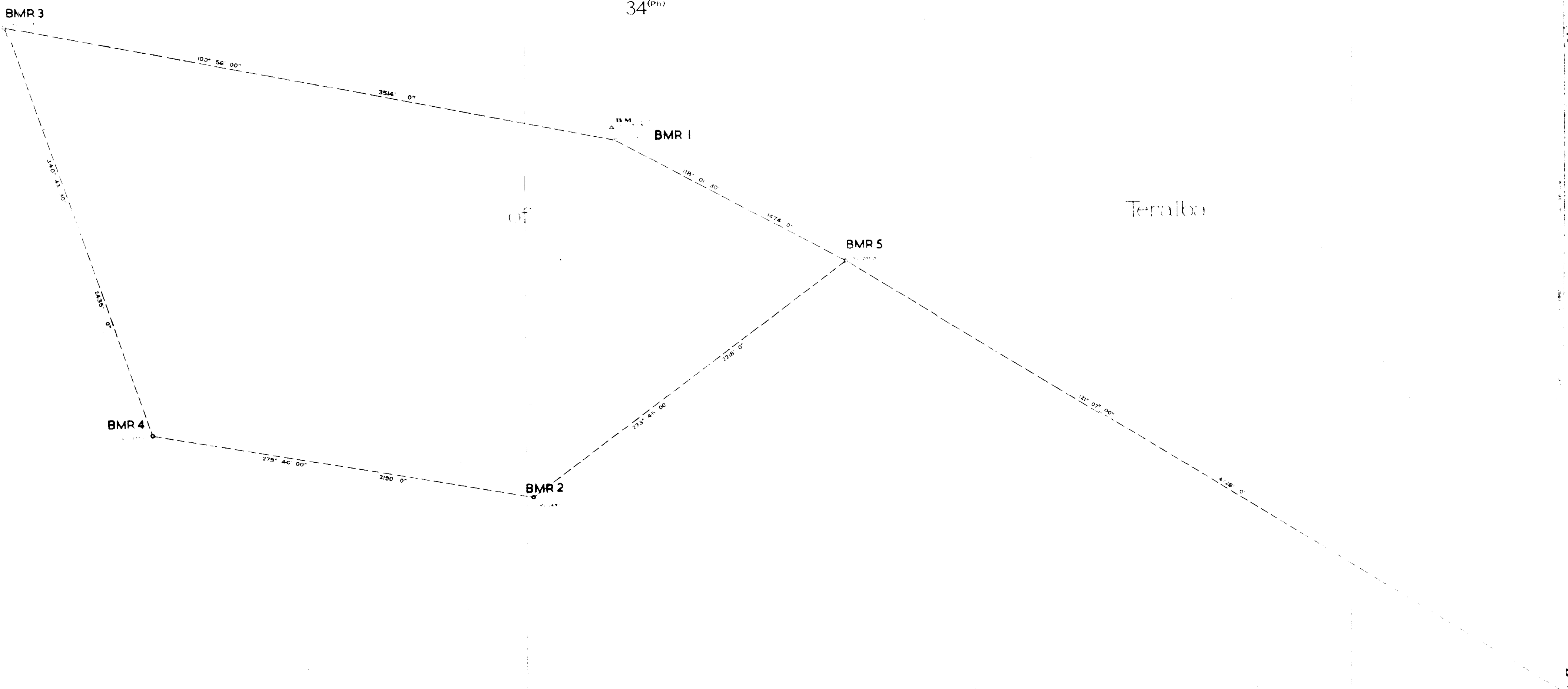
KILLINGWORTH BUREAU OF MINERAL RESOURCES

PLAN

of positions and levels of bores Nos. 1,2,3,4&5

Scale : 200 Feet to an inch
400

DATUM : H.D.W.B. STANDARD



Teralba

BMR N14+20
DEPT. OF THE INTERIOR
Neg. No. 5383

KILLINGWORTH AREA.

List of Approximate Locations from Point
of Origin, SE Cnr. Portion 34; Parish of
Teraiba. (Map N14-120.)

BMR 1	310°50'	6190'	BMR 3	304°30'	9580'
BMR 2	291°50'	5935'	BMR 4	291°00'	7125'
		BMR 5	311°30'	4725'	

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
47	3		11	Siltstone, light grey, clayey		7										
48	7	1	4	Greywacke, light yellow fine grained	1	0										
49	11	1	4	Greywacke, light yellow to grey medium w. current bedding	1	4										
54	11	5	0	Greywacke, as above	1	0										
60	7	5	8	Greywacke, as above	1	0										
70	7	10	0	Greywacke, deep yellow medium to very coarse	5	0										
72	8	2	1	Greywacke, light yellow medium to coarse		7										
74	6	1	10	Greywacke, light grey & black banded fine to medium		10										
80	0	5	6	Siltstone, light grey w. some sandy & clayey patches irregularly bedded	4	3										
83	2	3	2	Siltstone, grey sandy & clayey in patches	2	9										
83	11		9	Clayshale, light grey soft		7										
87	1	3	2	Siltstone, grey sandy in patches	2	0										
87	4		3	COAL, dull		$\frac{1}{2}$										
88	6	1	2	Shale, black, carbonaceous		3										
90	0	1	6	COAL, dull, shaly		4										
90	3		3	COAL, thin bright bands		2										
90	4		1	Siltstone, black, carbonaceous		1										
90	7		3	COAL, mainly bright		3										
90	11		4	Claystone, grey soft shattered		4										
91	1		2	Shale, coaly		2										
94	4	3	3	COAL, dull w. bright bands		5										
95	5	1	1	Shale, black, coaly w. thin bright bands		3										
96	1		8	Claystone, yellow, soft		6										
96	5		4	COAL, mainly bright		2										
96	10		5	COAL, dull		2										
97	5		7	Greywacke, light grey, fine to medium		7										
98	4		11	Greywacke, as above		11										
98	11		7	Clayshale, grey, soft		3										
99	8		9	Greywacke, light grey, fine to medium		9										
103	10	4	2	Siltstone, grey, carbonaceous	2	4										
104	1		3	COAL, bright		1										
106	10	2	9	Siltstone, grey, carb. sandy in places	1	4										
				Hole completed												
												FASSIFERN SEAM (T.H.R.)				
												typed 26.10.53				

BUREAU OF MINERAL RESOURCES

Name and No. of Bore BMR 2 KILLINGWORTH
 DISTRICT Newcastle COUNTY Northumberland PARISH Teralba PORTION 34 LOCATION APPROX. SE. Corn. of Port. 34.
291 50' / 5935'

Surveyed by Dept. Interior Survey Method Theodolite Trav. Elevation 269.5' Ref. Map M14-120
 Logged by N. Hoyling Cased Not Datum H.W.B. Ref. Report BMR Records 1953/88
 Sunk by BMR Type of Drill Failing 750/262 Depth 158'10" Date Begun/Finished 8.7.52/18.7.52

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
46	0	46	0	Greywacke, light brown, originally greyish white ferruginous, medium grained to finely conglomerate rather friable	16	9										
79	0	33	0	Sandstone greyish white to light brown fine to medium grained, soft & friable												
82	0	3	0	Shale, grey, medium, soft												
97	0	15	0	Sandstone, brown, medium grained somewhat friable												
97	2		2	Shale, greyish, black, medium, soft												
129	8	32	4	Shale, dark grey, medium soft, with rare black bands in the top 5'	22	6										
130	2		6	Shale, black, medium hard		2										
130	6		4	Claystone, greyish yellow & black soft		4										
131	8	1	2	COAL												
131	11 1/2		3 1/2	COAL, with bright bands		3 1/2										
132	3		3 1/2	Shale, brownish-yellow, soft		3 1/2										
132	9		6	COAL, rather shaly with bright bands		3 1/2										
134	0	1	3	COAL, dull, rather shaly		3										
134	5 1/2		5 1/2	Shale, brownish, yellow, medium soft		5 1/2										
134	9		3 1/2	COAL, dull		3 1/2										
135	3		6	COAL, dull with bright bands		3										
135	9		6	Shale, yellow, medium soft		6										
136	2		5	Shale, yellow, medium soft		5										
136	9		7	COAL, dull with bright bands fragmentary		7										
137	5		8	Shale, yellow, soft		8										
137	8		3	COAL, dull shaly		1										
138	2		6	COAL, mostly bright		5 1/2										
138	3		1	Shale, grey, soft		1										
138	8		5	COAL, dull with bright bands		3 1/2										
140	8	2	0	COAL, with bright bands broken to frag.	1	0										
141	8	1	0	COAL ?												
142	8	1	0	COAL ?												

GT. NORTHERN SEAM (T.H.R.)

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
143	2		6	Shale, yellow & reddish brown soft		5 1/2										
143	4		2	COAL, with bright bands		2										
143	5 1/2		1 1/2	COAL												
145	3	1	9 1/2	Sandstone, light grey medium grained & medium hard	1	9 1/2										
145	4		1	Shale, grey, silty		1										
158	10	13	6	Shale, grey sandy with black bands												
Hole completed																
													typed 26.10.53			

BUREAU OF MINERAL RESOURCES

Name and No. of Bore BMR 3 KILLINGWORTH

DISTRICT Newcastle COUNTY Northumberland PARISH Taralba PORTION 34 LOCATION APPROX. SE Corn. of Port. 34. 304 30' / 9580'

Surveyed by Dept. Interior Survey Method Theodolite Trav. Elevation 271.6' Ref. Map N14-120

Logged by N. Hoyling Cased Not Datum H.W.B. Ref. Report BMR Records 1953/88

Sunk by BMR. Type of Drill Failing 750/262 Depth 229' Date Begun/Finished 18.7.52/1.8.52

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
10	0	10	0	Sandstone, light grey, fine to medium grain friable												
14	0	4	0	Sandstone, light yellowish-brown fine grained, soft & clayey												
19	0	5	0	Shale, light brownish-grey												
39	0	20	0	Sandstone, light grey, fine to medium grained, conglomerate in bands friable												
68	6	29	6	Shale, greyish, white medium hard												
68	10		4	COAL, dull soft												
69	9		11	COAL, dull, rather shaly		6 1/2	1/BMR 3									
70	9		1	COAL, dull		6 1/2										
71	7		10	COAL, dull		8 1/2										
71	9		2	Shale, grey, hard		1 1/2										
73	9	2	0	COAL, dull												
74	9	1	0	COAL, dull with bright bands		8	2/BMR 3									
75	9	1	0	COAL, dull with bright bands		8										
75	10		1	Shale, brown		1			1							
76	9		11	COAL, dull with bright bands		7										
77	7	10		COAL, dull with bright bands		5 1/2	3/BMR 3									
77	7 1/2		1 1/2	Shale, brownish-grey		1 1/2				1/2						
78	3		7 1/2	COAL, dull with bright bands		3 1/2										
79	9	1	6	COAL, dull very shaly in bands	1	0										
81	2	1	5	Shale, black												
81	8		6	Shale, black with rare bright coal bands		5 1/2										
81	11		3	Claystone, light brown soft		3										
82	0 1/2		1 1/2	Shale, black		1 1/2										
83	2 1/2		2	Claystone, light brown, soft		2										
82	6		3 1/2	Shale, black		3 1/2										
83	7		10	Shale, black with bright coal bands		4										

GT. NORTHERN SEAM (T.H.R.)

[illegible]

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
120	1 $\frac{1}{2}$		3 $\frac{1}{2}$	COAL, mostly dull		3 $\frac{1}{2}$										
120	9		7 $\frac{1}{2}$	Shale, dark grey, hard		7										
125	4	4	7	Shale, dark, silaceous, hard												
125	8		4	COAL, dull												
126	3		7	COAL, mostly dull		7										
126	3 $\frac{1}{2}$		1 $\frac{1}{2}$	Shale greyish brown soft		1 $\frac{1}{2}$										
126	8		4 $\frac{1}{2}$	COAL, mostly dull		4 $\frac{1}{2}$										
127	3		7	Shale greyish black, hard												
128	3	1	0	Shale greyish black hard	1	0										
150	0	21	9	Shale greyish black hard												
182	0	32	0	Sandstone, light brown, grey fine to medium grained dense medium hard												
182	6		6	Shale, grey & soft coal												
183	3		9	Shale, black, hard		9										
183	6		3	Siltstone, greyish black hard		3										
184	6	1	0	Sandstone grey to light grey fine to medium grained hard		11										
200	0	15	6	Sandstone, grey fine to medium grained with some grey shale bands												
201	2	1	2	Shale, black hard												
201	5		3	Shale light grey soft tuffaceous		3										
202	2		9	Shale black hard		9										
210	5	8	3	Shale dark grey to black hard												
211	2		9	COAL, mostly dull, fragmentary		7										
211	5		3	Siltstone, grey medium hard		3										
211	8		3	COAL, dull		2										
211	10		2	Shale, black		2										
212	10	1	0	Shale, light grey, medium soft, silty	1	0										
213	5		7	COAL, dull very shaly		4										
214	1		8	COAL, dull shaly		8										
214	10		9	Shale, light grey soft		9										
214	11		1	COAL, dull very shaly		1										
215	2		3	COAL, dull with bright bands		3										
215	3 $\frac{1}{2}$		1 $\frac{1}{2}$	Siltstone, light brown, medium soft		1 $\frac{1}{2}$										
215	9 $\frac{1}{2}$		6	COAL, dull shaly		6										
216	3 $\frac{1}{2}$		6	Shale, light grey, very soft		6										
217	3 $\frac{1}{2}$	1	0	COAL, dull with bright bands	1	0										
217	4 $\frac{1}{2}$		1	Shale, greyish brown, medium soft		1										
217	9		4 $\frac{1}{2}$	COAL, bright		1 $\frac{1}{2}$										
217	11 $\frac{1}{2}$		2 $\frac{1}{2}$	Shale, black, hard		2 $\frac{1}{2}$										

FASSIFERN SEAM (T.H.R.)

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
218	0 $\frac{1}{2}$	1		COAL, bright		1										
218	2 $\frac{1}{2}$	2		Shale, black		2										
219	9 $\frac{1}{2}$	1	7	Sandstone, l.gy. carb.f.grained	1	7										
220	2 $\frac{1}{2}$		5	Shale, black silty		5										
220	2 $\frac{3}{4}$		1 $\frac{1}{4}$	Shale brown		1 $\frac{1}{4}$										
220	5		2 $\frac{1}{4}$	COAL dull shale		2 $\frac{1}{4}$	4/BMR 3									
221	5	1	0	COAL, dull with rare bright bands		11										
222	5	1	0	COAL, dull with bright bands pyritiferous brownish grey shale lenses	1	0										
223	3 $\frac{1}{2}$		10 $\frac{1}{2}$	Sandstone, light grey carbonaceous fine grained		10 $\frac{1}{2}$										
224	0		8	Shale, black to dark grey		8										
224	3		3	Shale, dark grey, medium soft		3										
225	7	1	4	Siltstone, dark grey, medium soft	1	4										
226	0		5	Shale, greyish-black, medium soft		5										
226	8 $\frac{1}{2}$		8 $\frac{1}{2}$	Shale, greyish-black medium soft		8 $\frac{1}{2}$										
228	1 $\frac{1}{2}$	1	5	Sandstone, light grey fine grained	1	5										
229	0		7 $\frac{1}{2}$	Claystone, light brownish-grey hard		7 $\frac{1}{2}$										
				Dip of shale-sandstone & sandstone claystone junctions is only about 2°.												
				Hole completed												
												typed 27.10.53				

BUREAU OF MINERAL RESOURCES

Name and No. of Bore BMR 4 KILLINGWORTH
APPROX. SE. Cnr. of Port. 34.

DISTRICT Newcastle COUNTY Northumberland PARISH Teralba PORTION 34 LOCATION 291°00'/7125'
Surveyed by Dept. Interior Survey Method Theodolite Trav. Elevation 337.9' Ref. Map N14-120
Logged by N. Hoyling Cased Not Datum H.W.B. Ref. Report BMR Records 1953/88
Sunk by BMR Type of Drill Failing 1500 Depth 176' Date Begun/Finished 22.7.52/28.8.52

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
65	6	65	6	Sandstone, brown, medium to very coarsd grained w. thin fine conglomerate bds.												
66	0		6	COAL, dull w. white claystone												
66	4		4	Claystone white very soft		4										
67	0		8	Claystone, dk. grey very soft		8										
70	0	3	0	Claystone, black, soft probably weathered Coal	1	3										
71	0	1	0	Shale, grey soft												
73	6	2	6	Sandstone, grey soft shaly in the bottom quarter	2	6										
144	6	71	0	Sandstone, grey very soft, shaly												
145	0		6	COAL, dull												
147	0	2	0	COAL, dull shaly w. bright bands	1	11										
147	2		2	Siltstone, grey		2										
149	0	1	10	COAL, soft & bright ?weathered	1	10										
149	6		6	Shale, black, medium soft		5										
149	9		3	Shale, black, hard		3										
152	0	2	3	Shale, black, soft to medium soft ?wd coal		11										
153	0	1	0	COAL, dull shaly		8										
153	1		1	Shale, greyish-brown medium soft		1										
153	10		9	COAL, dull with bright bands		9										
154	0 1/2		2 1/2	Shale, brown, soft		2 1/2										
155	0		11 1/2	COAL, dull with bright bands		5										
155	9		9	Shale, black, medium hard		6										
156	3		6	Shale, brown, medium soft sandy		6										
157	0		9	Shale, black, hard		2										
157	11		11	Shale, light grey. soft		11										
158	6		7	COAL, mostly dull		7										
159	0		6	Shale, dk. brownish-grey		1 1/2										
159	7		7	Shale, light brownish-grey		7										
162	10 1/2	3	3 1/2	COAL, dull with bright bands	1	5										

GT. NORTHERN SEAM (T.H.R.)

Estimated Depth		Estimated Thickness		GEOLOGICAL DESCRIPTION OF STRATA	Core Measured		Coal Sample No.	Min. Bands Included		Min. Bands Excluded		PROXIMATE ANALYSIS				
Ft.	Ins.	Ft.	Ins.		Ft.	Ins.		Ft.	Ins.	Ft.	Ins.	H.M.	V.	F.C.	ASH	B. TH. U/LB
163	0		1 $\frac{1}{2}$	Shale, l.brown, medium soft		1 $\frac{1}{2}$										
164	8	1	8	COAL, mostly dull		2										
164	10		2	Sandstone, yellowish-brown f.grd. soft		2										
165	10	1	0	Sandstone, greyish-white fine grained hd.	1	0										
168	11	3	0	COAL, dull & soft w. bright parts generally weathered	2	1										
169	1		2	Shale, grey silty hard		2										
169	6		5	Shale, dk. grey		5										
169	8		2	Claystone, grey dense sideritic		2										
170	11	1	3	Shale, black hard		10 $\frac{1}{2}$										
171	0		1	Shale, brownish-yellow soft		1										
172	0	1	0	COAL, shaly w. some bright bands		8 $\frac{1}{2}$										
172	5		5	Shale, greyish-black hard		3										
173	4		11	COAL, dull w. bright bands		2										
173	8		4	Shale, black medium hard-brittle		3 $\frac{1}{2}$										
173	9		1	Shale, light grey, carb. soft		1										
174	2 $\frac{1}{2}$		5 $\frac{1}{2}$	Shale, black, medium hard		5 $\frac{1}{2}$										
174	6		3 $\frac{1}{2}$	Shale, grey soft		2 $\frac{1}{2}$										
176	0	1	6	Shale, light brownish-grey very dense medium hard	1	6										
Hole completed																
													typed 27.10.53			

BUREAU OF MINERAL RESOURCES

Name and No. of Bore BMR 5 KILLINGWORTH
APPROX. SE. Cor. of Port. 34

DISTRICT	Newcastle	COUNTY	Northumberland	PARISH	Teralba	PORTION	34	LOCATION	311°30' / 4725'
Surveyed by	Dept. Interior	Survey Method	Theodolite Trav.	Elevation	205.0'	Ref. Map	N14-120		
Logged by	N. Hoyling	Cased	Not	Datum	H.W.B.	Ref. Report	BMR Records 1953/88		
Sunk by	BMR	Type of Drill	Failing 750/262	Depth	44' 4"	Date Begun/Finished	4.8.52/4.8.52		

[illegible]