# APPENDIX B

TABLE B1 – SHAFT REGISTER KEVIN PRICE DATA SUMMARY

#### TABLE B1 REGISTER OF SHAFT LOCATIONS

Name	General Location	Desingation on RT	ISG Easting	ISG Northing	MGA Easting	MGA Northing	Elevation	Survey origin	C&A Number	Status on25/2/69 (Coal & Allied Records)	Status on 5/9/75 (Coal & Allied Records)	DPI - Minerals Information	Visual Assessment 2008
A	Below house on West side of Woodford St, North of Railway St	Pit A	357411	1360197	370413	6360939	Not Measured	M&P Survey 1994	4	Have been filled some years ago. Slight subsidence from time to time has been made good.	Filled as described previously		House constructed over
В	South side of Railway St, just to west of Woodford St.	Pit B	357345	1360117	370349	6360858	20.74	M&P Survey 1994	5	Have been filled some years ago. Slight subsidence from time to time has been made good.	Filled as described previously		Filled with no obvious capping - grasse only
с	South of Railway St in paddock	Pit C	357065	1360014	370071	6360749	24.76	M&P Survey 1994	6	Shaft sealed at groud level with concretre slab, appears to be in sound condition. Approximatel 150-200' deep.	y Concrete slab appers safe and secure		Capped 9 x 9m Concrete Slab, Dated 1992
	paddolik	140	557005	1500014	570071	0300743	21.70	mar ourrey root					1002
ABC entry	Blue Gum Hills	unlabelled entry	357268	1360194	370270	6360933	Not Measured	RT257		Not mentioned	Not mentioned		Not Located. Mapped location is covered with dense vegetation.
B2	Blue Gum Hills	No 2 Entry	358034	1359718	371045	6360472	Not Measured	RT257		Not mentioned	Not mentioned		Not located. Mapped location is off access track in area of filling
В4	Blue Gum Hills	No 4 Entry	357877	1359665	370889	6360416	Not Measured	RT257		Not mentioned	Not mentioned		Not Located. Mapped location is in area of overburden filling. Shaft probably covered over.
										South of Back Creek Open Cut workings and approximatiley 50 yards north of Miller's coal access road. Reported to be covered with mahogany logs and filled over with loam about 1	Shafts no located, assumed to be filled		Not Located. Undulating surface, Coarse overburden and chitter,
B5	Blue Gum Hills	unlabelled	358008	1359628	371021	6360381	Not Measured	RT257	1	years prior (1959). Shaft about 100 ' deep	over.		Moderate vegetation.
B6	Blue Gum Hills	unlabelled	358066	1359649	371078	6360403	Not Measured	RT257	2	As per 1, 50 yards to the east.	Shafts no located, assumed to be filled over. Later found and was already partly filled - 10' deep.		No Located. Mapped location is near the toe of a cut with some filling oushed over. Dense vegetation is present.
B7	Blue Gum Hills	shaft	358187	1359496	371202	6360253	Not Measured	RT257		Not mentioned	Not mentioned		Not located. Mapped location is near various remanant structures incldued concrete pedestals and masonry structes. Steel railing is also evident.
													Not Located. Mapped location is in
B8	Blue Gum Hills	shaft	358221	1359518	371236	6360275	Not Measured	RT257		Not mentioned	Not mentioned		Not Located. Mapped location is in dense vegetation.
B9	Blue Gum Hills	Furnace	357742	1360085	370770	6360840	Not Measured	RT257		Not mentioned	Not mentioned		Undulating, small trees, No signs of shaft.
B10	Blue Gum Hills	unlabelled entry	357959	1359698	370971	6360450	Not Measured	RT257		Not mentioned	Not mentioned		Not located Mapped location is in cut with mine spoil pushed over, highly undulating, mature trees, erosion in place
Dam	NE of corner of Link Road and Woodford St, near masonry dam.	unlabelled			370030	6359462	Not Measured		16	Known as No.9 Shaft Minmi Colliery. Walls of what was substantial fan building still standing. Shaft not located but reported to be covered wit concrete slab at ground level.	n Not sealed but well fenced.		Slab built 500mm above ground level, Mass concrete about 500mm thick, Partially overgrown, Appears to be backfilled 1-2m down from top of cap, Inscribed with W. Grillsy 1988, Concrete footings on eastern side.
Furnace Shaft	Blue Gum Hills		358305	1359155	371327	6359914	23.5	M&P Survey 1994	3	Furnace shaft, 12' diameter brick lined, about 300' deep, brick chimney above surface.	sound		Chimney still present
Purple Hill	Between Minmi Creek and Purple Hill Open Cut	Not shown			369979	6360965	Not Measured		12	Shaft approximatley 10' by 8' rectangular section in solid sandstone, fenced with barbed wire. Shaft is openand appears to be bottom at abou 30' but cover would be about 50-100' in this area	t		Approximatley 7m diameter grass covered, Earth fill with some slumping and piping evident
ws	West of Woodford St, South of old school	Water shaft			369824	6360046	Not Measured		15	Brick collar extends above ground surface inside fenced area. Shaft is covered with 8 inch mahogany logs filled over with loam - ends of logs visible. Been covered 10 years plus.	Log and loam seal now partially open. Plently of fill available. In October 1975 filled and piled 2 m above surface.		Concrete Capped 4 x 4m, 600mm thick slab, Steel pipe and bolted end plate in centre
1	Blue Gum Hills		358549	1358955	371574	6359719	23.4	M&P Survey 1994		Not mentioned			Not assessed (off site)
	Bide Gdiff Hills		00040	1556555	571574	0000710	20.4	Mar Survey 1354		Normendoneu			Cut into Eastern Side of Road
2	Blue Gum Hills		358187	1359452	371203	6360209	28.4	M&P Survey 1994		Not mentioned			Embankment - no obvious shaft or capping present
3			358112	1359581	371126	6360336	25.7	M&P Survey 1994		Not mentioned			7 x 7m battered cut - no obvious shaft o capping present.
4	Gully near transmission line	unlabelled	357535	1359325	370554	6360069	16	M&P Survey 1994	14	100 yards east of 13. Site fenced with barbed wire and heavily overgrown with lantana. Shaft not visible but rock thrown into depression resounded form water level estimated to be 60- 100' below surface.	Open, sides falling in, fill available. In October 1975 filled and piled 2 m above surface.		Not located
	Gully near transmission									Shaft top not located but reported to be covered with mahogany logs and loam, depth estimated to			
5	line		356487	1360710	369480	6361434	46.5	M&P Survey 1994	10	be 200-300'	and fenced over.		
18	Gully near transmission line		355701	1360618	368696	6361327	90.25	M&P Survey 1994	11	Brick collar extends above surface and is open. Area is fenced. Depth about 300'.	Not located		
21	Gully near transmission line		356569	1360111	369573	6360837	26.5	M&P Survey 1994	8	Similar to 7.	Filled and secure. In October 1975 sealed including two thickness of mech and thickness of concrete 150 mm.		
23	Gully near transmission line		356061	1360017	369067	6360733	27.99	M&P Survey 1994	9	In bushland west of town. Shaft sealed at surface with concrete slab, appears to be in sound condition.	Seal has collapsed and shaft is extremely dangerous. To be capped. In October 1975 sealed with two thicknesses of mesh and thickness of concrete of 150 mm.		
27	Gully near transmission line		355869	1359596	368883	6360309	44.74	M&P Survey 1994	not shown				
6	Gully near transmission line	unlabelled	357442	1359337	370461	6360080	24.5	M&P Survey 1994	13	Fan shaft. Substantial brick fan structure over shaft. Shaft currently used to dewater Miller's	Brickwork now dismantled. Open and insecurley fenced. Fill available.	3.06m square, lined with bricks	concrete capping observed
12	Link Road North	No 12 Shaft	358129.51	1358188.38	371169.55	6358944.53	55.169m	Gretley Survey/GPS	17	Know as No.12 shaft. Old fan building stills tanding. Concrete slab over shaft top at ground level with is intact and appears to be in sound condition. Depth to seam about 550'	Used as fan shaft and dewatering by Gretley who have broken previous concrete seal.	2.7m lined with bricks to	4 x 4m square cap, Capped and filled 1993, cap 150mm above ground level, Heavley overgrown, slab at edge of cut, Galvinised steel plate with plug.
14	Link Road North	No. 14 Shaft	358614.04	1358323.69	371651.34	6359088.97	52.444	Gretley Survey/GPS	18	Known as No.14 shaft. Brick collar of shaft protrudes about 18' aove grounhd level and is covered with 8' mahogany logs filled over with loam, ends of logs visible.	Steel girder and chain wire mech cover in place sitting on brickwork rising 1.25 m above ground.	depth of 12.25 metres	Hexagonal Shaped Slab, 250mm above ground, 75mm galvinised screw pipe and cap, Heavly vegetated.
40	West side of Gully in Minmi West	Not shown	356863	1359914	369871	6360646	23.45	M&P Survey 1994	7	Old prospect shaft, depth unknown. Has been filled in . Surface Depression approximatley 6 ff holds water for stock watering.	Fille and secure		Capped 7 x 7m Concrete Slab, 200mm above Ground Level, 2 Holes in Slab
Undesignated	Minmi East - Near Fletched	Unlabelled	Not Measured		lot Measure	ed	Not Measured	RT257		Not mentioned			Numerous shafts shown on RTs. No attempt to locate on site as numerous potholes present in area.

Shaded entries are not located on proposed development site

Bold entries are where accurate survey has been undertaken

#### BRUNSKILL PTY LIMITED ACN 092 418 650 ABN 70 092 418 650

3/24 Kilgour Avenue Bar Beach NSW 2300 Phone: 0249292333 Fax: 0249 292231 Mobile: 0418 119864 e-mail: pricek@bigpond.net.au

# **REPORT**

#### Douglas\_Partners\_Report\_091107

SUBJECT: Preliminary Research Into Borehole Seam Workings – Minmi AreaTO: Steven Ditton (Ditton Geotechnical Services Pty Ltd)<br/>Will Wright (Douglas Partners Pty Ltd)

DATE : 10 November 2007

Following a meeting at Douglas Partners offices on Friday 24 October 2007, Brunskill has been requested to research various information relating to possible working heights, shafts, and limits of both first and second workings in the Borehole Seam in an area adjacent to Minmi township. Preliminary reference to workings in the Young Wallsend Seam has also been made.

Listed below is a summary of information relating to the above items located in records at Mineral Resources (Maitland office), personal records and various enquiries. The information cannot be guaranteed as accurate or complete as it consists of a compilation of information, prepared by others obtained in a preliminary investigation. The actual mine workings, particularly their extent, is reliant on the accuracy of the plans held at Mineral Resources as Record Tracings.

As noted above, the information provided is preliminary and is intended to provide an overview. Please advise if a more detailed study of any of these items is required.

## Workings Shown on Plans Provided by Douglas Partners

The workings shown on the plans provided by Douglas Partners generally agree with the Record Tracings reviewed at Mineral Resources. However some workings in the area near A Pit are shown in more detail on Sheet 2 of Record Tracing 497 (Browns or Browns Minmi).

#### **Mines and Mining Methods**

The mines in the study area that mined the Borehole seam are Browns or Brown's Minmi (RT 497), Duckenfield No1 and No2 (RT 256, 257 and 257A) and Minmi Open Cut (RT 621).

The mines in the study area that mined the Dudley / Young Wallsend seam are Wallsend Borehole and Gretley.

Underground mining method in the Borehole seam was hand mining which generally consisted of first workings including Welsh bords, pillar extraction and a limited amount of hand mined longwall.

Underground mining in the upper seam (Dudley / Young Wallsend) was mechanised (continuous miner) consisting of first working followed by pillar extraction, including some Wongawilli type lifts.

## **General Accuracy of Workings**

#### **Borehole Seam**

The underground workings in the Borehole seam date from the late 1800's through to 1955. Mine surveying methods have obviously improved over the years and equipment is much more sophisticated. However, the accuracy of surveyed workings of this era have been shown to be accurate, in some cases to within less than a metre. The extent of the Borehole seam workings in the study area cannot be guaranteed. The plans viewed are not "certified as accurate", although they have date lines near or at the extremity of the majority of workings. These date lines do not, however, coincide with the date of discontinuance or abandonment so the prospect of unrecorded workings cannot be disregarded. These workings have been, in some cases reproduced at 4 chain to 1 inch from the original, then later converted and traced, digitised or later scanned into either ISG or MGA format with the resultant potential inaccuracies.

"Best fit" and "rubber sheeting" techniques following the introduction of ISG and MGA may limit accuracy to +/- 10 metres.

On previous occasions, at another mine, when this method has been employed, later exposure in open cut workings has confirmed inaccuracies in the order of 6 metres.

#### **Dudley / Young Wallsend Seam**

The workings in No 4 Tunnel at Gretley and Wallsend Borehole have been surveyed with closed traverses with modern equipment.

In later years the Gretley No 3 Tunnel workings were deliberately holed into the old Wallsend Borehole workings with a closing survey between the two mine surveys revealing a misclose in the order of 3 metres.

The limit of the extent of workings and accuracy of the survey of the workings would be considered to be accurate to within say 3-5 metres.

## Total Height and Working Heights in the Borehole Seam

Various information has been researched regarding the seam height and working height of the Borehole seam. A summary is listed below.

Mine	Borehole Seam Total Thickness	Borehole Seam Working Thickness	Note
Minmi (later Duckenfield)	3.18m	1.74m with 0.41m of bottoms left below working section – westward workings	RT 257 Sheet 3 (mined in 1950's) north of study area.
Minmi (later Duckenfield)	3.18m	2.16m – eastward workings	RT 257 Sheet 3 (mined in 1950's) north of study area
Minmi (later Duckenfield)	1.9 (?)	1.65m with 0.25m bottom coal left below working section	RT 257 Sheet 5 early workings
Killingworth	2.52m	1.56	Edgeworth David Memoirs 4 - 1907
Killingworth	3.22m	1.60m	Edgeworth David Memoirs 4 – 1907. Tops all inferior coal
Seaham (formerly Monkwearmouth)	2.45m	1.66m	Edgeworth David Memoirs 4 – 1907
Young Wallsend	2.91m	1.54m	Edgeworth David Memoirs 4 - 1907

Bold - Workings below site.

## Working Heights in the Dudley / Young Wallsend Seam

Though unconfirmed by hard copy information at this point, memory is that mining height in both Gretley No 4 Tunnel and Wallsend Borehole workings was in the order of 2.3 to 2.4 metres. A small area of Gretley No 4 Tunnel was mined at about 1.52 metres, though its exact location is unconfirmed at this point.

Information from Edgeworth David indicates that the Young Wallsend thickness in mines in and around the study area ranged form 1.83m to 2.52m.

### Shafts in the Area

A number of shafts were sunk in the study area, including several within the sub lease area to Gretley (No 12 and No 14 Shaft).

No detailed research has been carried out on the Minmi Shafts at this stage.

Nos 12 and 14 Shafts were filled and sealed in 1986 in accordance with the recommendations of the then Mines Department. Both shafts were capped with an engineered designed concrete cap.

Shaft Name	ISG Coords N	ISG Coords E	Reduced Level of Collar	Diameter
No 12	1358188.38	358129.51	55.169m	3.06m square, lined with bricks
No 14	1358323.69	358614.04	52.444	2.7m lined with bricks to depth of 12.25 metres

### Subsidence Surveying in the Area

Some subsidence surveys were carried out in the early 1970's over the Gretley pillar extraction workings. Any records would be hard copy only and may no longer exist. Please advise if this area is to be further researched.

<u>MINE NAME ;</u>	BROWNS or BROWNS MINMI					
<u>SEAM ;</u>	Borehole					
COLLIERY CARD INDEX :	Papers 31/21585 Now Duckenfield No 1 Colliery No 4 Tunnel					
COLLIERY NAMES INDEX :	Listed under Browns Minmi – Formerly Stockrington : Borehole Seam Now Duckenfield					
COLLIERY WORKINGS AND HOL	DINGS MAP INDEX :					
DISTRICT / PARISH WORKINGS N	<b>IAP :</b> Duckenfield holding – RT 257 Old Minmi workings – RT 497 See also Minmi Open Cut – RT 621					
COLLIERY HOLDINGS DISTRICT/PARISH MAP :						
COLLIERY HOLDING PLAN / REG	ISTER :					
TITLES SERIES MAP :						
MINE RECORD TRACING :	RT 497					
FIELD NOTES / BOOKS :						
SURVEY PLANS (M,P etc)						
RECORD TRACING CHECK LIST						
PLAN OF ABANDONMENT :	Note on spine of sheets					
DATE OF ABANDONMENT :	No date					
NOTATION :						
DATE LINES :	Some dates, no lines					
SURVEYOR'S SIGNATURE :	No					
SURVEY INFORMATION :	No					
<u>DRIFT / SHAFT :</u>	Tunnels and shafts					
<b>CONNECTION TO BOUNDARY :</b>	No, but some cadastral information shown.					
NAME OF LAST SURVEYOR :						
NOTES :						

MINE NAME ;	DUCKENFIELD No 1			
<u>SEAM ;</u>	Borehole			
<u>COLLIERY CARD INDEX :</u>	Notice of discontinuance 5/5/1955 26-2-31.1 No 6 Tunnel - near Minmi boundary No 5 Tunnel – small tunnel near Stockrington No 4 Tunnel – Browns 3-32.1 No 6 Tunnel then No 5 Tunnel – discontinuance Notice of discontinuance 5-5-1955			
<u>COLLIERY NAMES INDEX :</u>	Duckenfield Old, Portion 96 Parish Stockrington RT 256 (Borehole seam). Portions 28, 29 etc Parish Teralba, Portion 52 Stockrington, Portion 15 Hexham. Two separate mines. RT 257, Plan of encroachment M11211 No 4 Tunnel RT 257A. <u>Abandoned 23-5-55 / 4923 Ms (ruled</u> <u>through)</u> Discontinuance only, vide report by CICM dated 1-3-56 papers Ms 55 / 9374.			
COLLIERY WORKINGS AND HOLDINGS MAP INDEX :				
DISTRICT / PARISH WORKINGS MAP : Abandoned				
COLLIERY HOLDINGS DISTRICT/PARISH MAP :				

**COLLIERY HOLDING PLAN / REGISTER :** 

TITLES SERIES MAP :

MINE RECORD TRACING : RTs 256, 257 (in 3 sheets) and 257A

FIELD NOTES / BOOKS :

SURVEY PLANS (M,P etc)

## **RECORD TRACING CHECK LIST – RT 257**

No

No

No

Dates

PLAN OF ABANDONMENT : Not noted as abandoned

DATE OF ABANDONMENT :

NOTATION :

DATE LINES :

SURVEYOR'S SIGNATURE :

**SURVEY INFORMATION :** 

<u> DRIFT / SHAFT :</u>

Tunnel and shaft

### **CONNECTION TO BOUNDARY :**

No

#### NAME OF LAST SURVEYOR :

NOTES :RT 256 – Limited information available.<br/>For preliminary area refer to Colliery Names Index.<br/>Workings in Portion 96, Parish of Stockrington, also Parishes of Teralba<br/>(Portions 28, 29 etc) and Hexham (Portion 15)

RT 257 – Provides some further detail. Workings in Portions 52 and 96, Parish of Stockrington, Portion 7 Parish of Hexham. Note date of abandonment (No 5 Tunnel – Sheet 3) at 16-4-1955) Extremities mined up to 1917 (Sheet 1) - 4 chains to 1 inch

Page 7 of 9

<u>MINE NAME :</u>	DUCKENFIELD No 2				
<u>SEAM ;</u>	Borehole				
COLLIERY CARD INDEX :	1930 – Recommenced operations with a prospecting tunnel.				
Later note	This proposed tunnel now No 5 Tunnel No 1 Colliery				
COLLIERY NAMES INDEX :	Borehole seam – now Stockrington RT 318				
COLLIERY WORKINGS AND HOLD	DINGS MAP INDEX :				
DISTRICT / PARISH WORKINGS M	AP: Abandoned				
COLLIERY HOLDINGS DISTRICT/F	PARISH MAP :				
COLLIERY HOLDING PLAN / REGI	<u>STER :</u>				
TITLES SERIES MAP :					
MINE RECORD TRACING :	<b>RTs 256</b> (2 sheets)				
FIELD NOTES / BOOKS :					
SURVEY PLANS (M,P etc)					
REC	ORD TRACING CHECK LIST				
PLAN OF ABANDONMENT :	Not on spine of sheets				
DATE OF ABANDONMENT :	No				
NOTATION :					
DATE LINES :	Some dates				
SURVEYOR'S SIGNATURE :	No				
SURVEY INFORMATION :	No				
<u>DRIFT / SHAFT :</u>	Shaft and tunnel				
CONNECTION TO BOUNDARY :	No, but some cadastral information shown.				
NAME OF LAST SURVEYOR :					
<u>NOTES :</u>	Note on sheet – For early workings (Minmi) see RT 497				

<u>MINE NAME ;</u>	MINMI OPEN CUT
<u>SEAM;</u>	Borehole
COLLIERY CARD INDEX : Notice	Papers 49/3306 Notice of opening – Open Cut mine 25/3/49 Papers 54/8039 Notice of discontinuance 19/8/54 of recommencement of operation
COLLIERY NAMES INDEX : 497	RT 621 (Duckenfield Holding RT 257, Old Minmi workings RT
COLLIERY WORKINGS AND HOL	DINGS MAP INDEX :
DISTRICT / PARISH WORKINGS	IAP :
COLLIERY HOLDINGS DISTRICT/	PARISH MAP :
COLLIERY HOLDING PLAN / REG	ISTER :
TITLES SERIES MAP :	
MINE RECORD TRACING :	RT 621
FIELD NOTES / BOOKS :	
SURVEY PLANS (M,P etc)	
REG	CORD TRACING CHECK LIST
PLAN OF ABANDONMENT :	
DATE OF ABANDONMENT :	
NOTATION :	
DATE LINES :	
SURVEYOR'S SIGNATURE :	
SURVEY INFORMATION :	

DRIFT / SHAFT :

**CONNECTION TO BOUNDARY :** 

NAME OF LAST SURVEYOR :

NOTES :

Workings around perimeter of RT 257