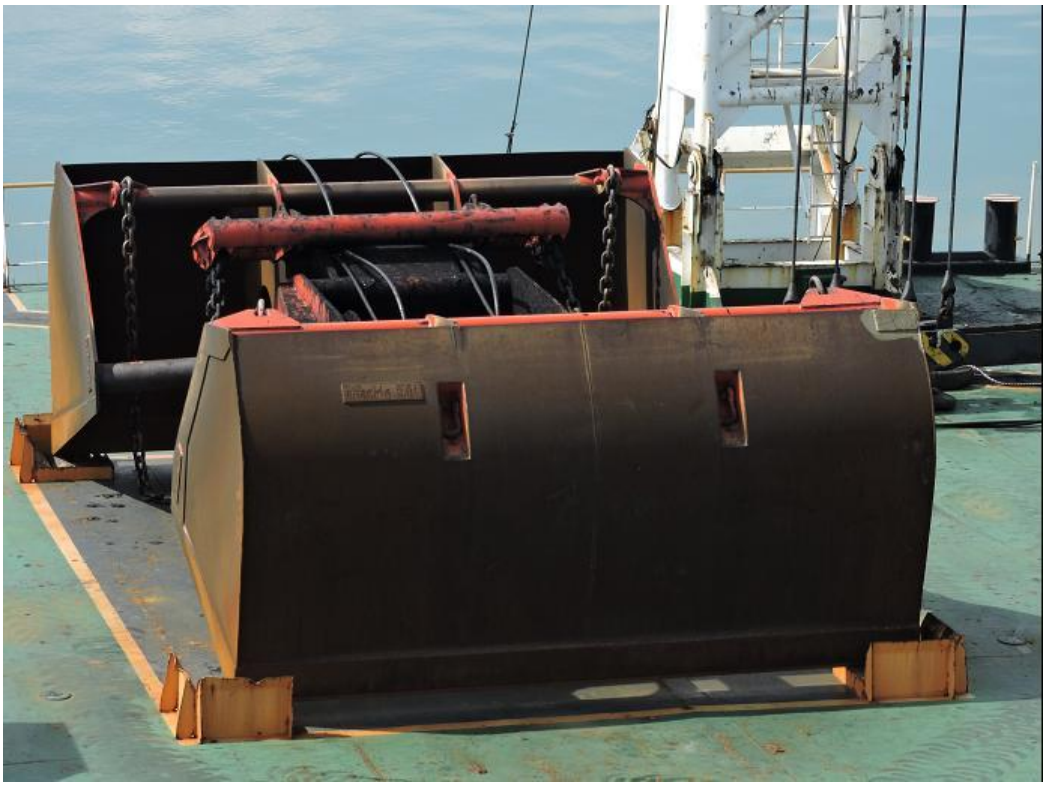


圖100 KJB Floating Crane抓斗

圖101 KJB Floating Crane相關設備

圖102 KJB Floating Crane相關設備

圖103 Maules Creek礦區地理位置

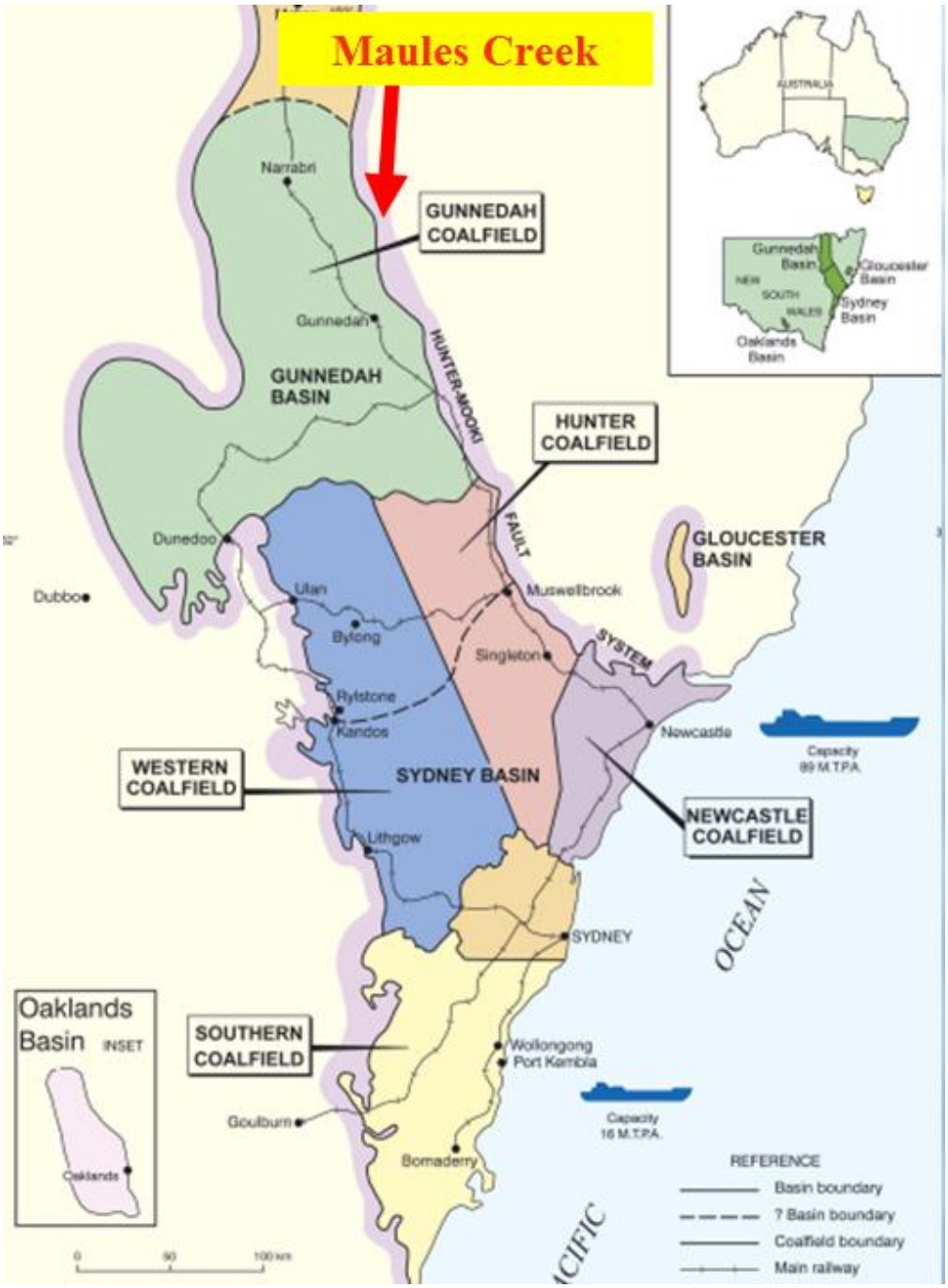


圖104 Maules Creek礦區地理位置圖

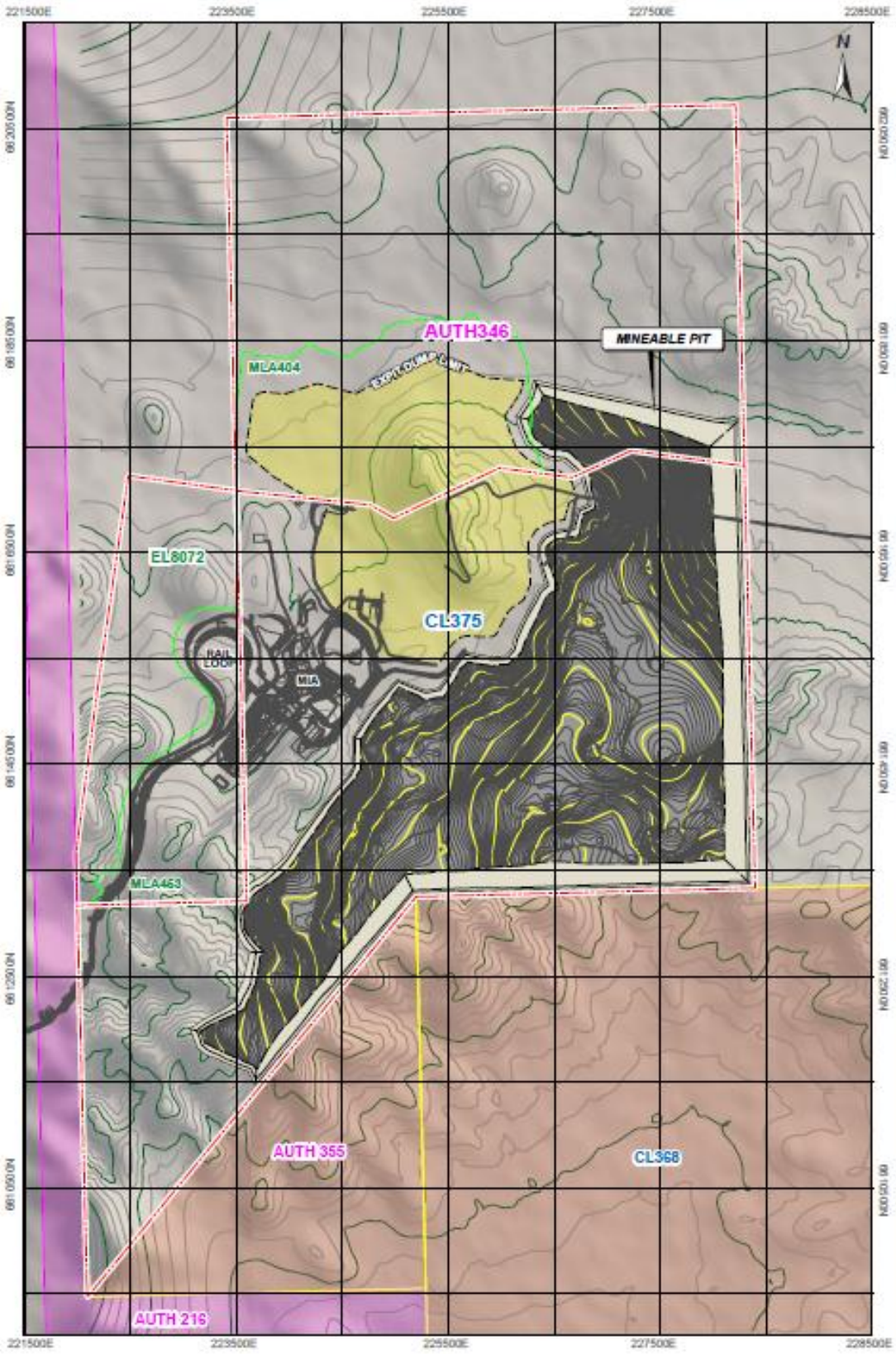


圖105 Maules Creek礦區礦權範圍圖

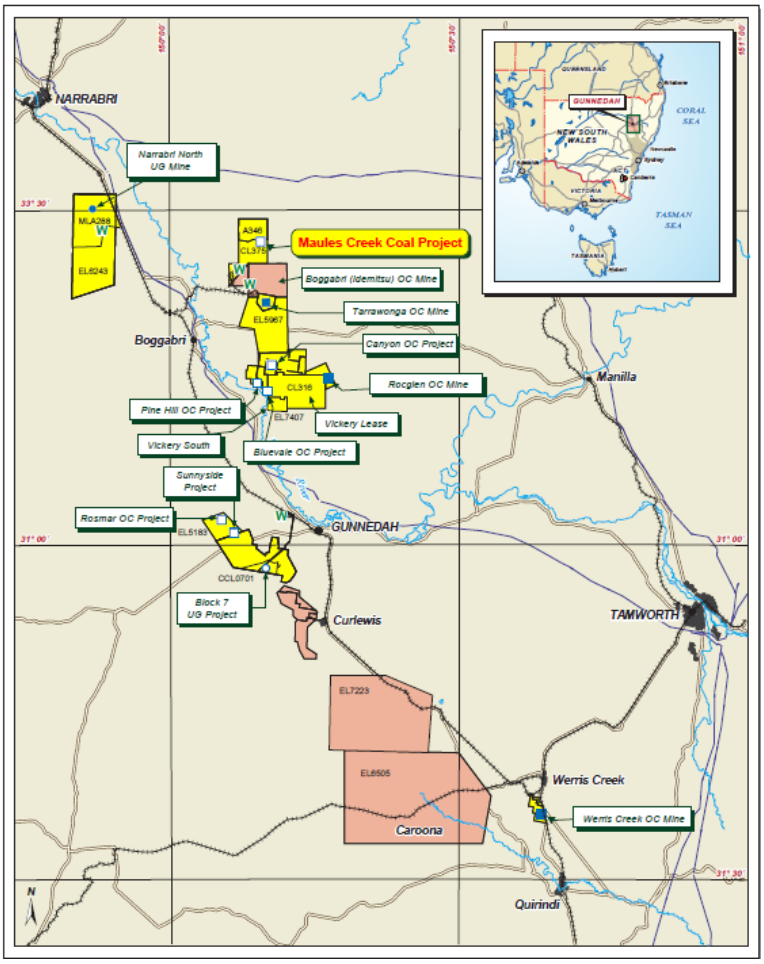


圖106 Whitehaven在Gunnedah盆地相關礦區位置圖

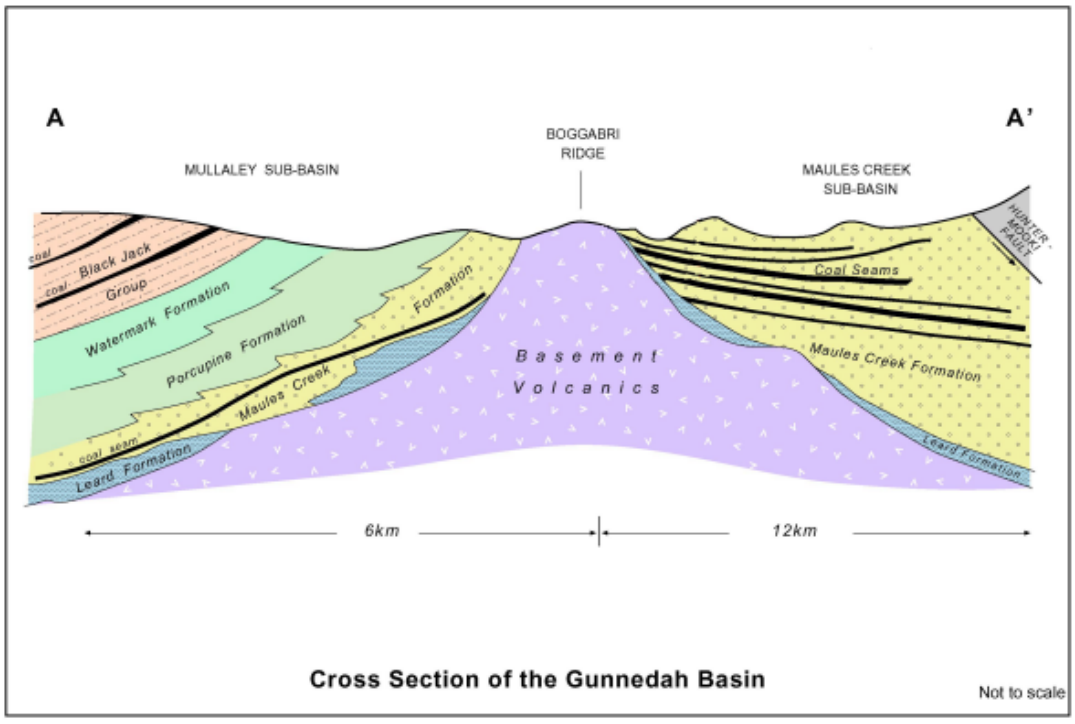


圖107 Maules Creek 地區地質圖

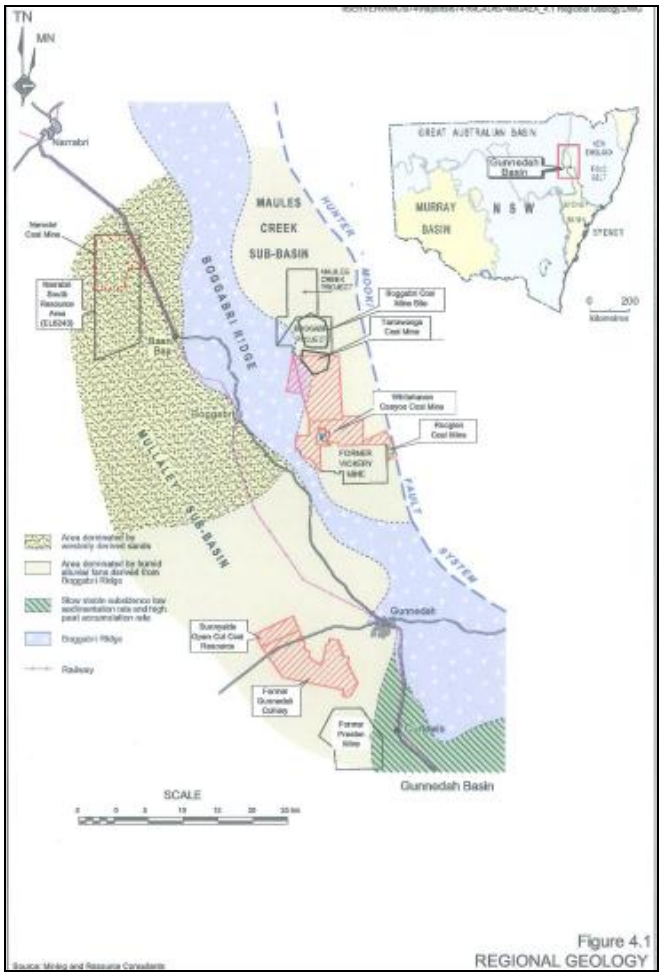


圖108 Maules Creek地區地質圖

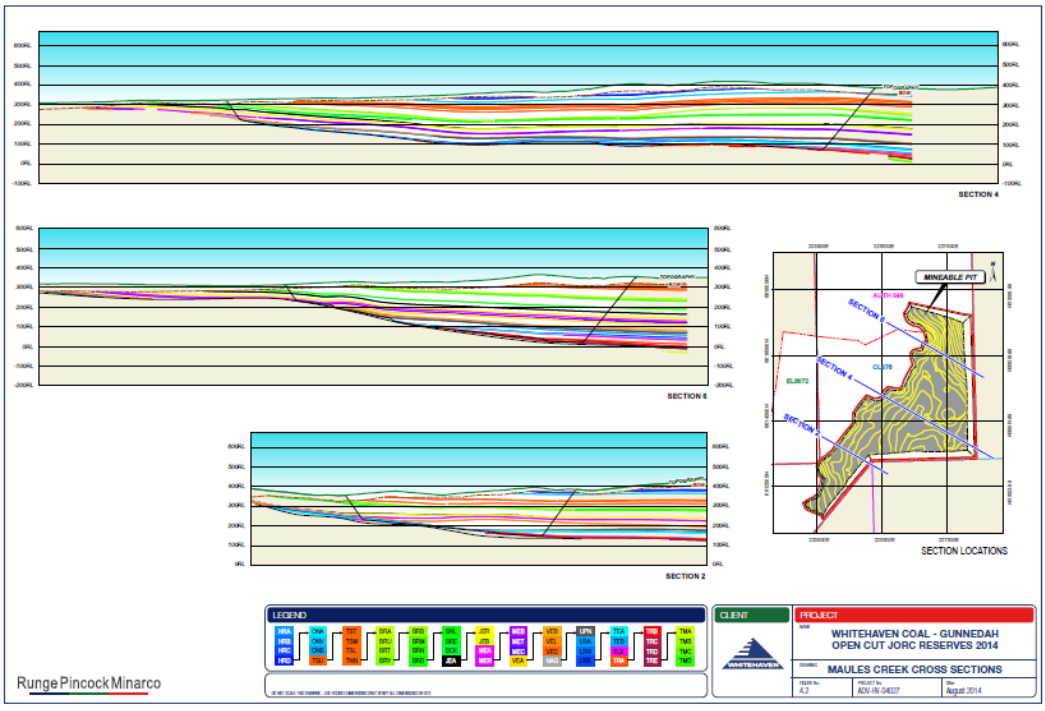


圖109 Maules Creek煤礦煤礦地質剖面圖(Cross Section)

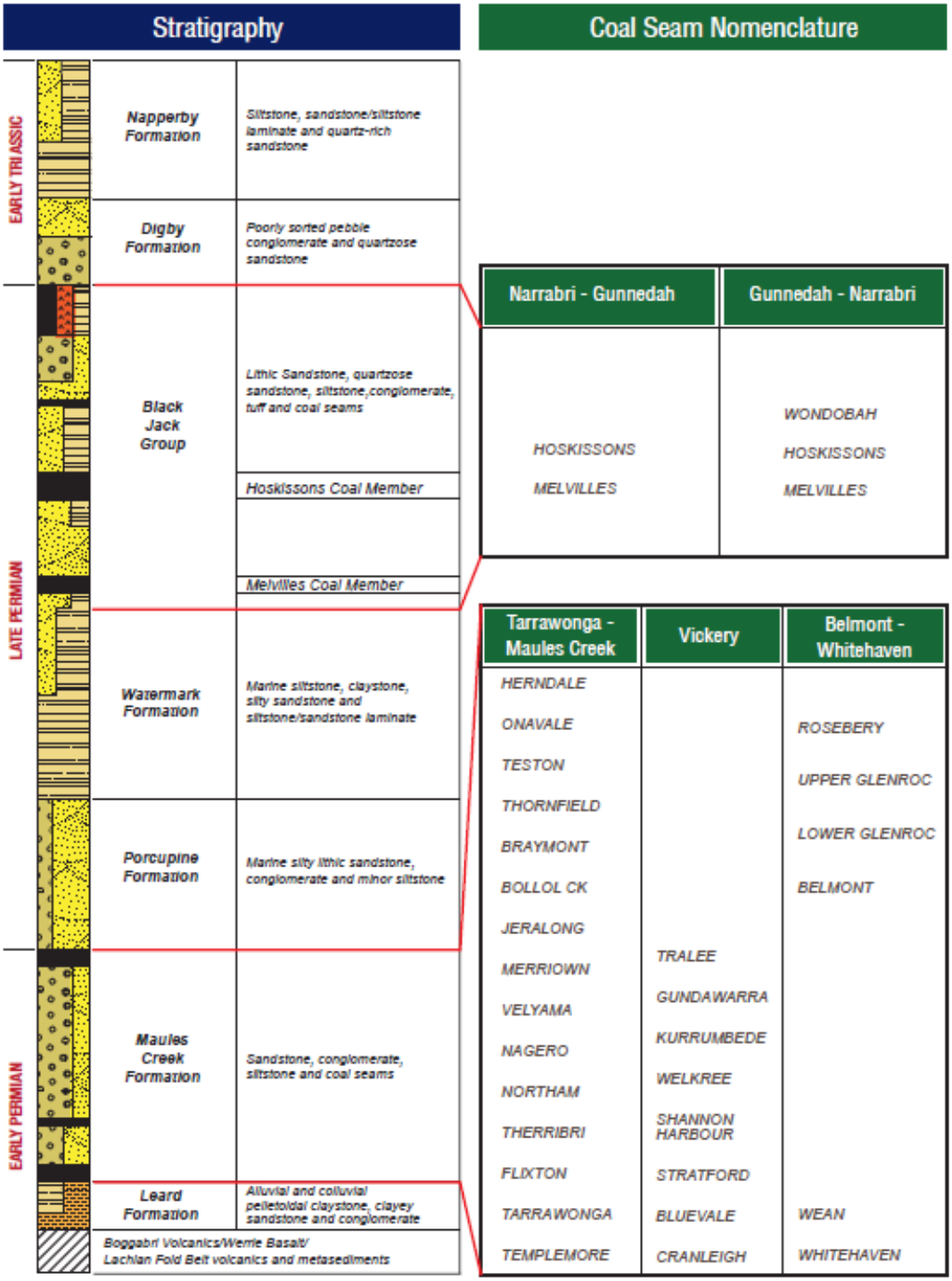
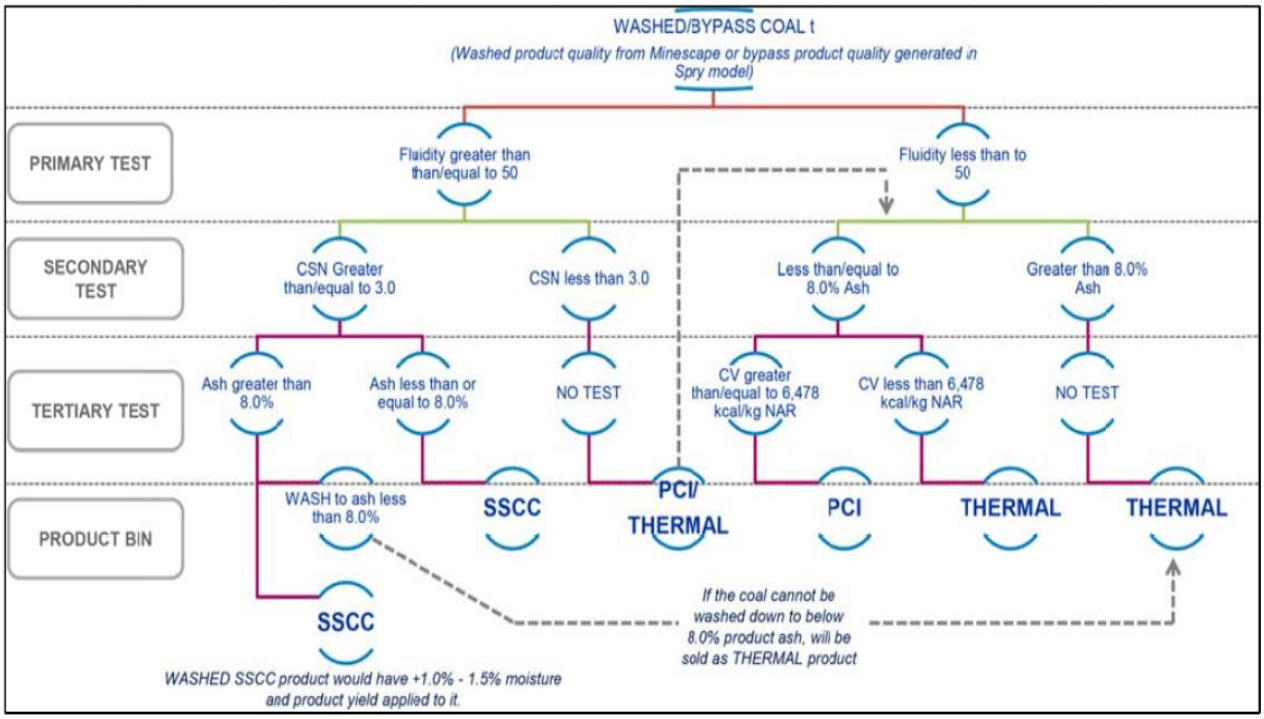


圖110 Maules Creek煤礦柱狀圖(Stratigraphic Column)

Figure 5.2 Coal Flow Sheet



Source: WHC

圖111 Maules Creek礦區煤礦分類流程圖

圖112 Hitachi EX8000 挖土機

圖113 Hitachi EX3600 挖土機

圖114 Hitachi EH5000卡車

圖114 Cat 789卡車

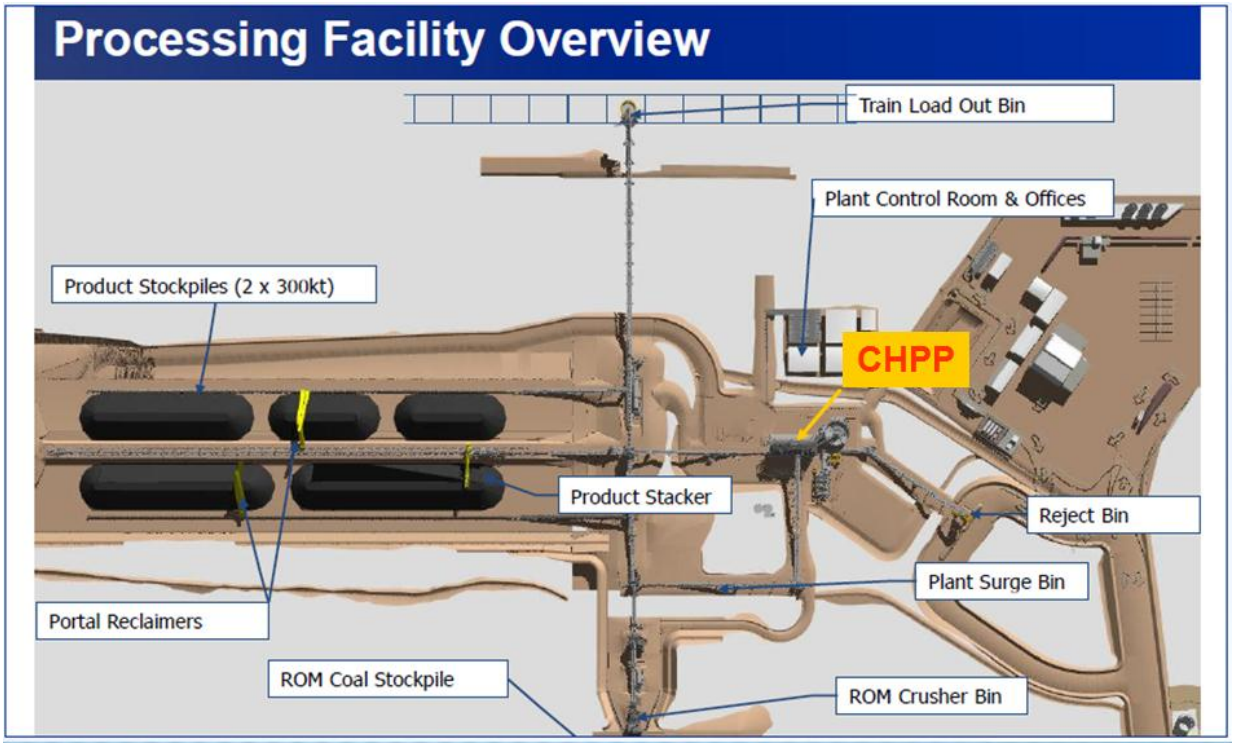


圖115 Maules Creek礦區配置圖

圖116 Maules Creek礦區空照圖

圖117 Maules Creek煤礦原煤儲存場

圖118 Maules Creek礦區生產流程圖

圖119 Maules Creek 礦區臨時辦公室

圖120 Maules Creek礦區開採情形

圖121 Maules Creek 礦區開採情形

圖122 Maules Creek 礦區開採情形

圖123 Maules Creek 礦區鑽井機

圖124 Maules Creek礦區覆土移除作業

圖125 Maules Creek礦區原煤開採作業

圖126 Maules Creek礦區Front End Loader

圖127 Maules Creek礦區原煤儲存場

圖128 Maules Creek礦區原煤碎煤作業

圖129 Maules Creek礦區產品煤輸送系統

圖130 Maules Creek礦區產品煤輸送系統

圖131 Maules Creek礦區產品煤儲煤場與堆煤機

圖132 Maules Creek礦區產品煤儲煤場與取煤機

圖133 Maules Creek 礦區臨時取煤設備

圖134 Maules Creek 礦區覆土堆置區

圖135 Maules Creek 礦區CHPP

圖136 Maules Creek 礦區CHPP之Thickener

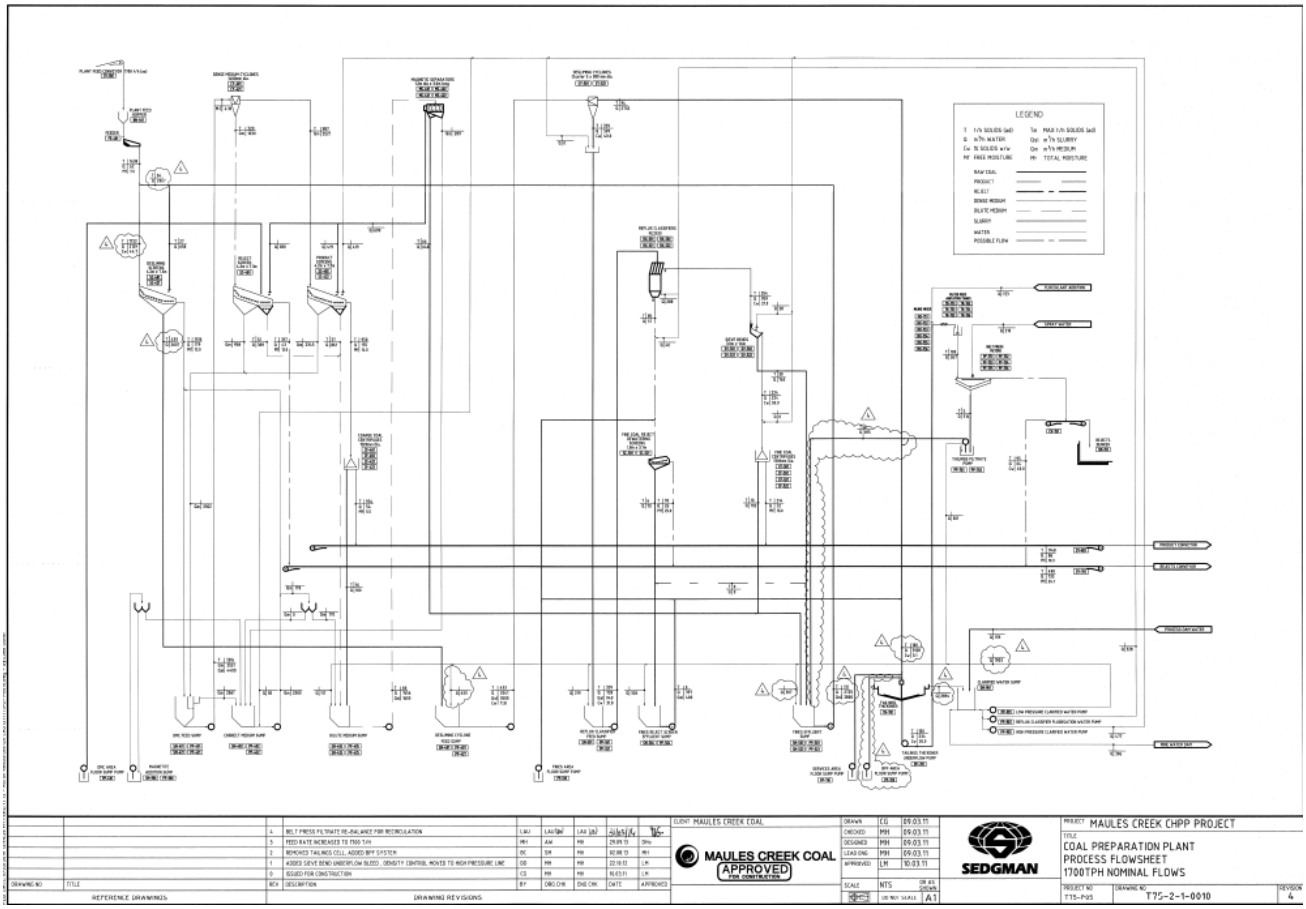


圖137 Maules Creek礦區CHPP流程圖

圖138 Maules Creek 礦區火車裝煤站

圖139 Maules Creek 礦區運煤火車

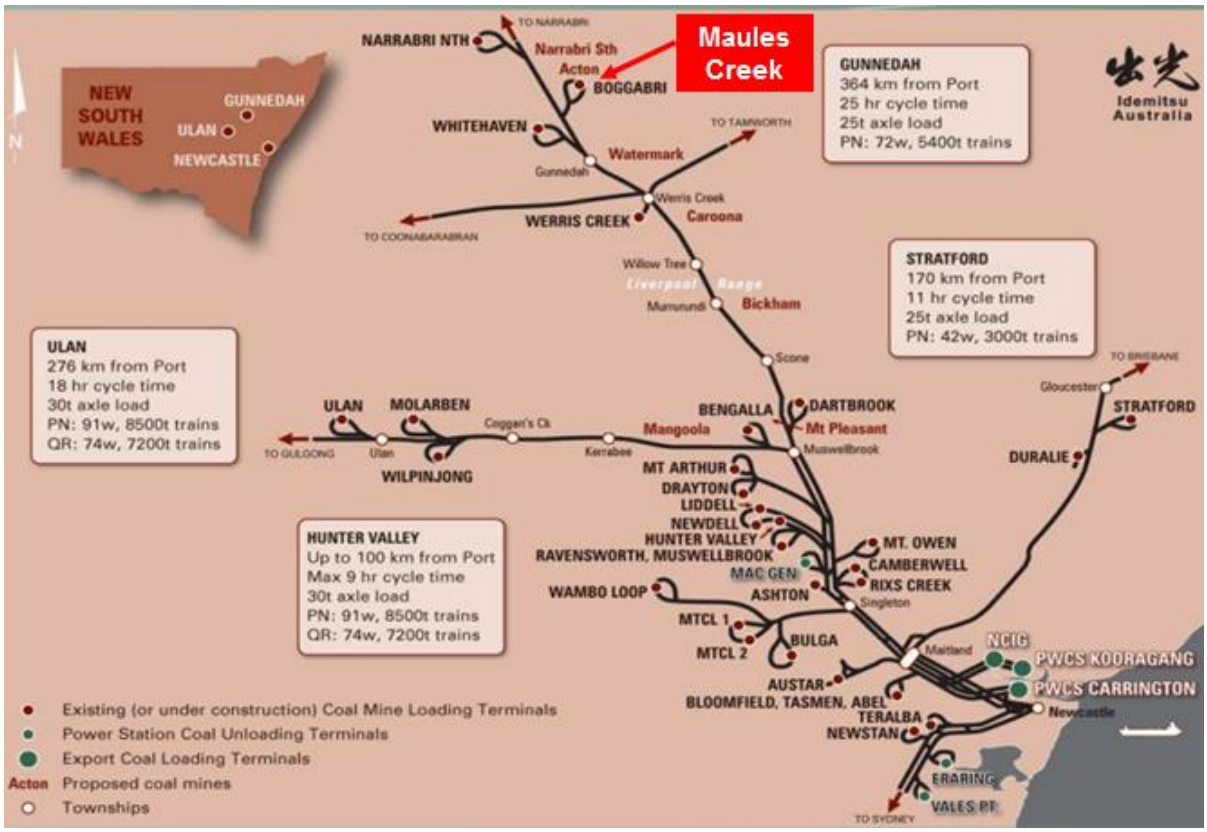


圖140 Hunter Valley Coal Chain

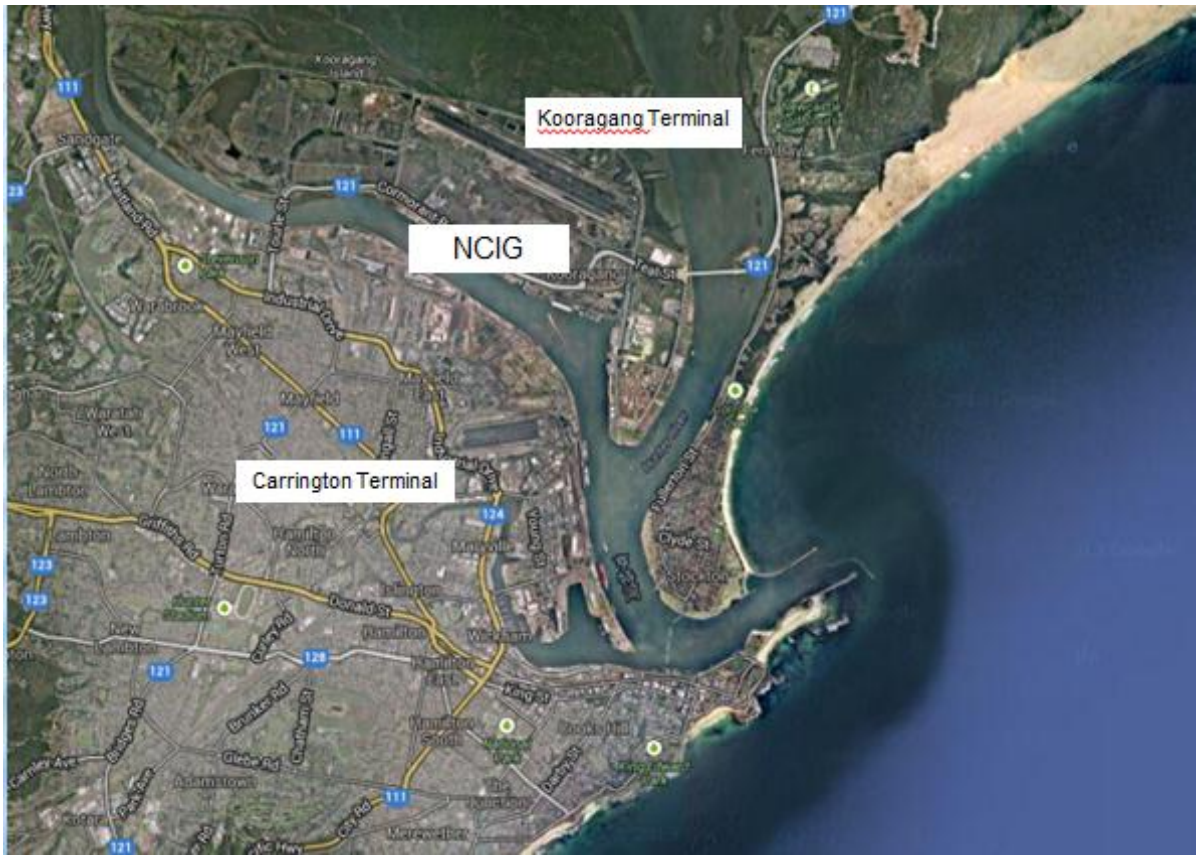


圖141 PWCS與NCIG裝煤碼頭位置圖

圖142 PWCS與NCIG裝煤碼頭位置圖

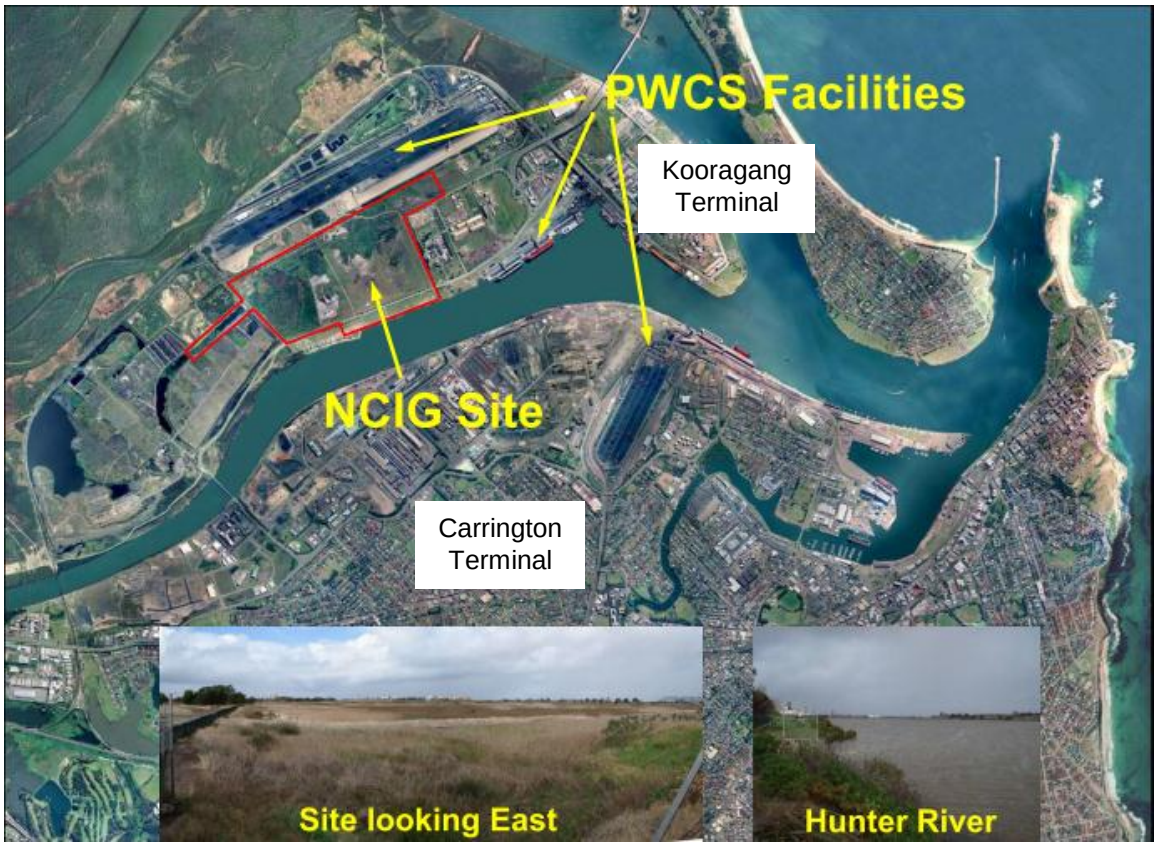


圖143 Newcastle PWCS與NCIG裝煤碼頭位置圖

圖144 Newcastle 碼頭出海口

圖145 PWCS 火車卸煤站

圖146 PWCS 火車卸煤站取樣站

圖147 PWCS 火車卸煤站取樣站

圖148 PWCS 堆煤機(Stacker)堆煤作業

圖149 PWCS 堆煤機(Stacker)堆煤作業

圖150 PWCS 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖151 PWCS 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖152 PWCS 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖153 PWCS 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖154 PWCS 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)取煤作業

圖155 PWCS 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)維修中

圖156 PWCS Shiploader 裝煤作業

圖157 PWCS Shiploader 裝煤作業

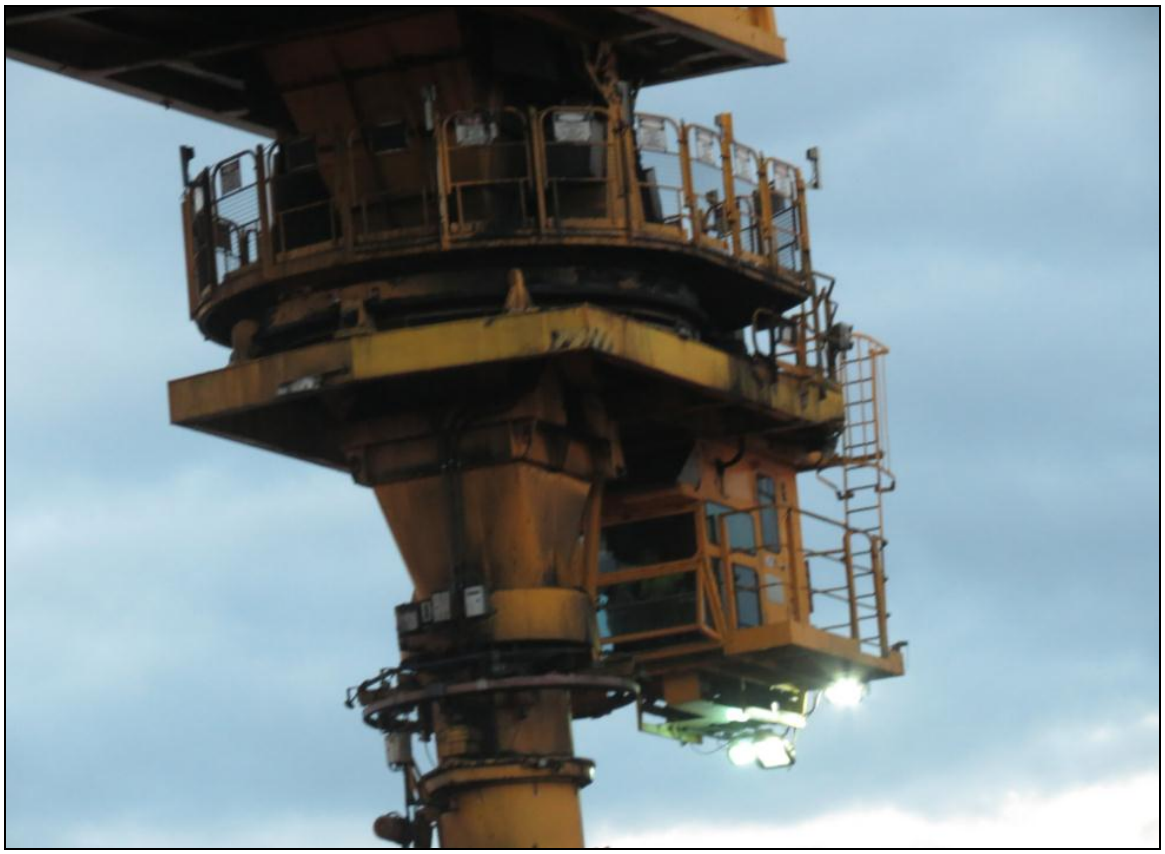


圖158 PWCS Shiploader 裝煤控制室

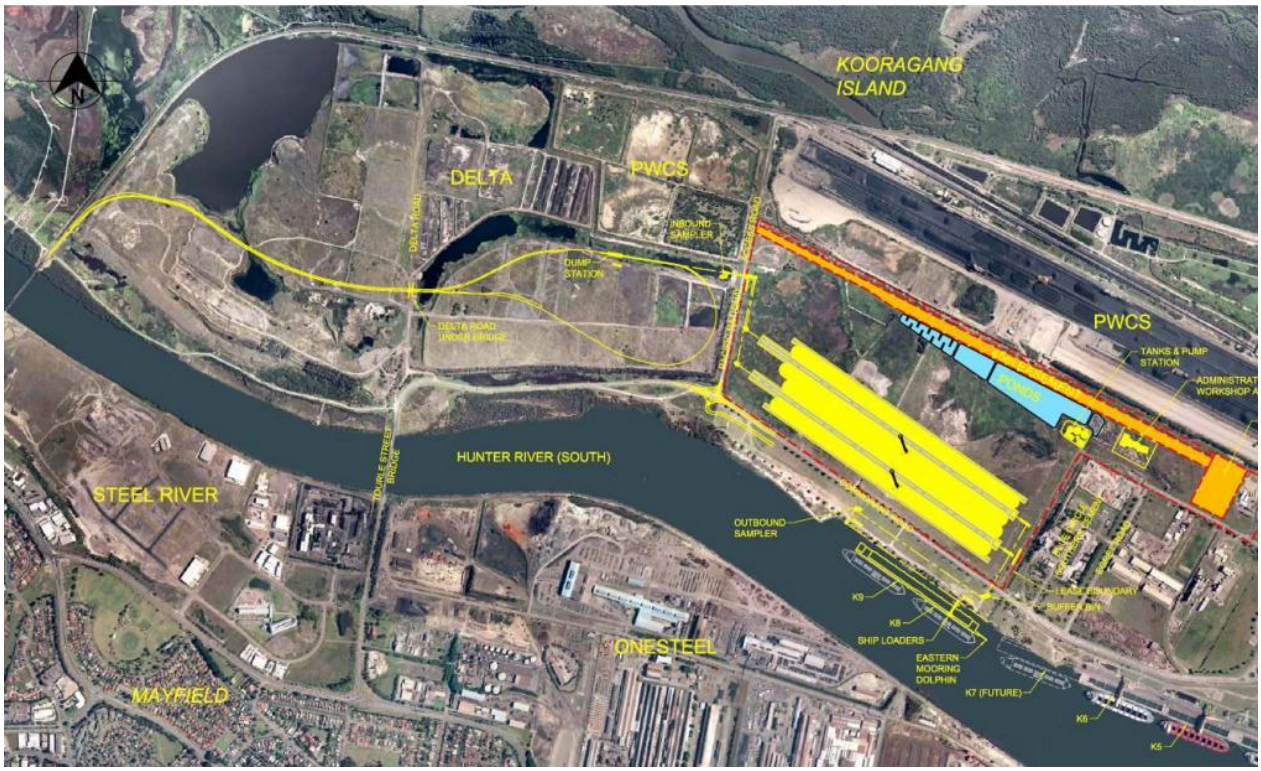


圖159 NCIG 第一階段 30Mtpa

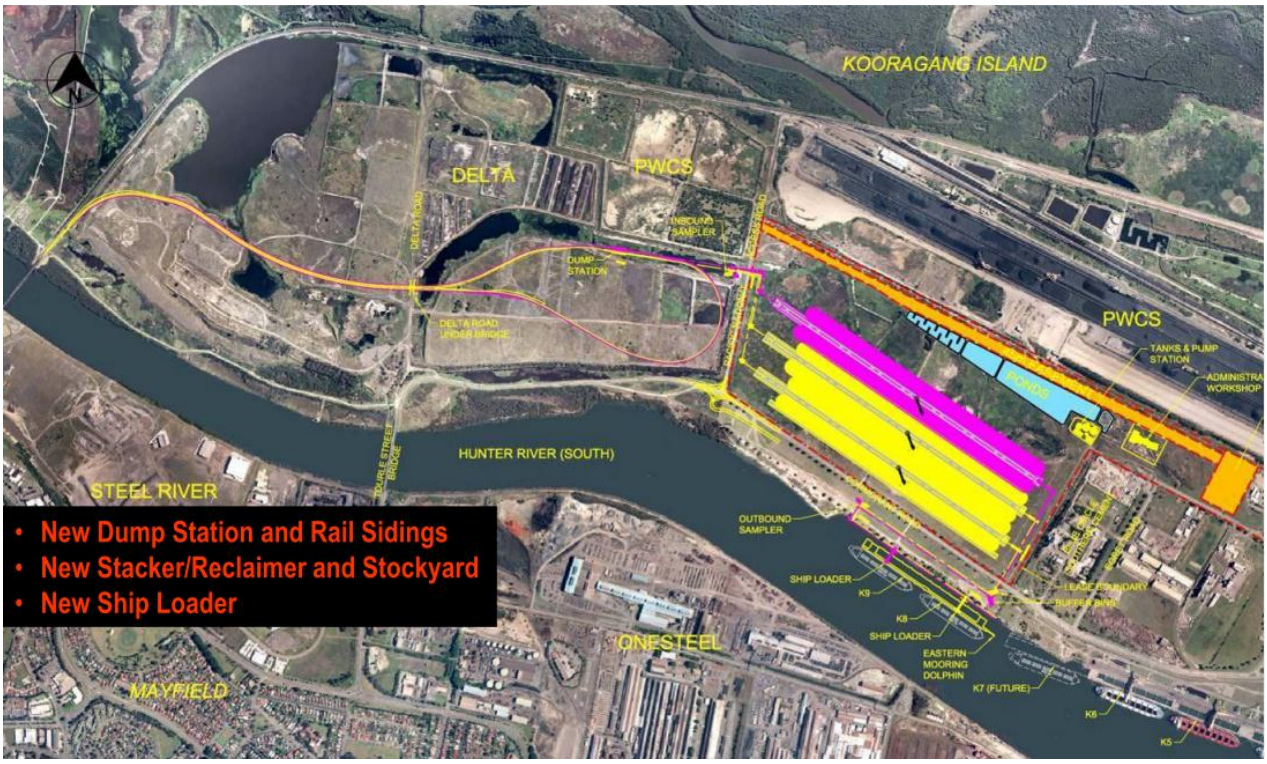


圖160 NCIG 第二階段擴充 53Mtpa

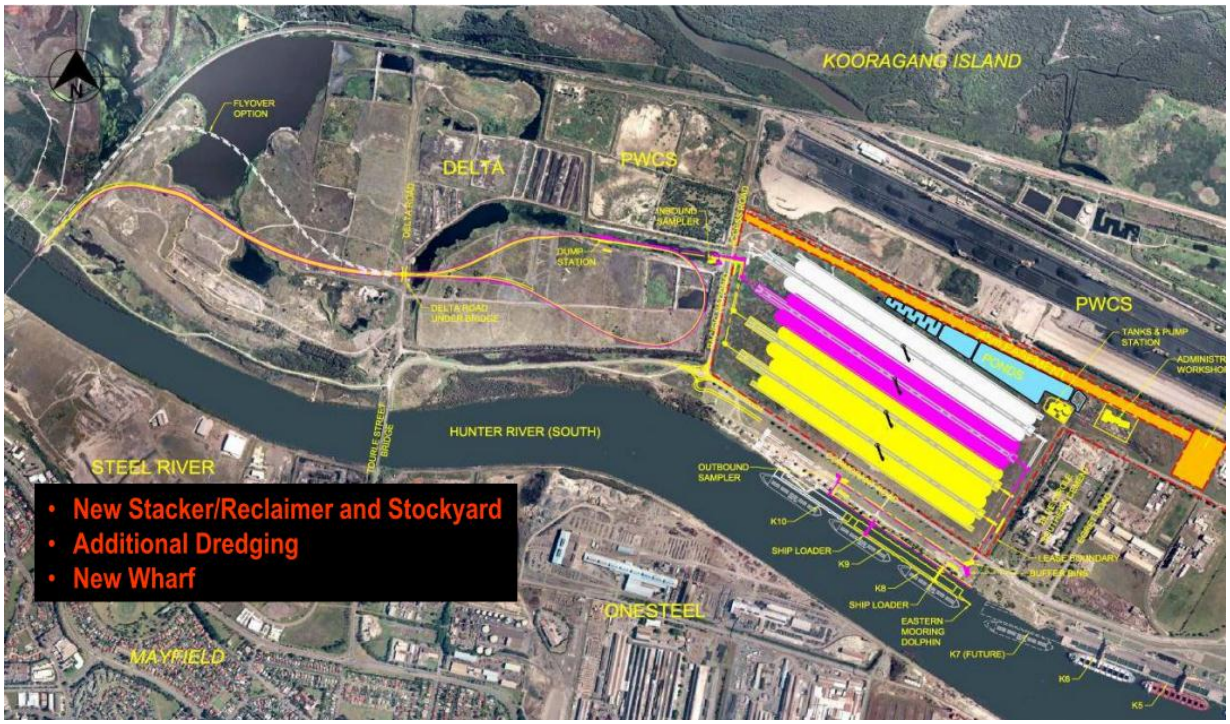


圖161 NCIG 第三階段擴充 66Mtpa

圖162 NCIG 廠區配置

圖163 NCIG 火車卸煤站

圖164 NCIG火車卸煤作業

圖165 NCIG火車卸煤站

圖166 NCIG 火車卸煤後之取樣站

圖167 NCIG 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖168 NCIG 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖169 NCIG 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖170 NCIG 斗輪式堆/取煤機(Bucket Wheel Stacker/Reclaimer)

圖171 NCIG Buffer Bin (2,000t×2)

圖172 NCIG 裝煤碼頭

圖173 NCIG Shiploader 1 裝煤作業中

圖174 NCIG 新建Shiploader 2

圖175 NCIG Shiploader 裝煤過程

圖176 NCIG Shiploader及船席

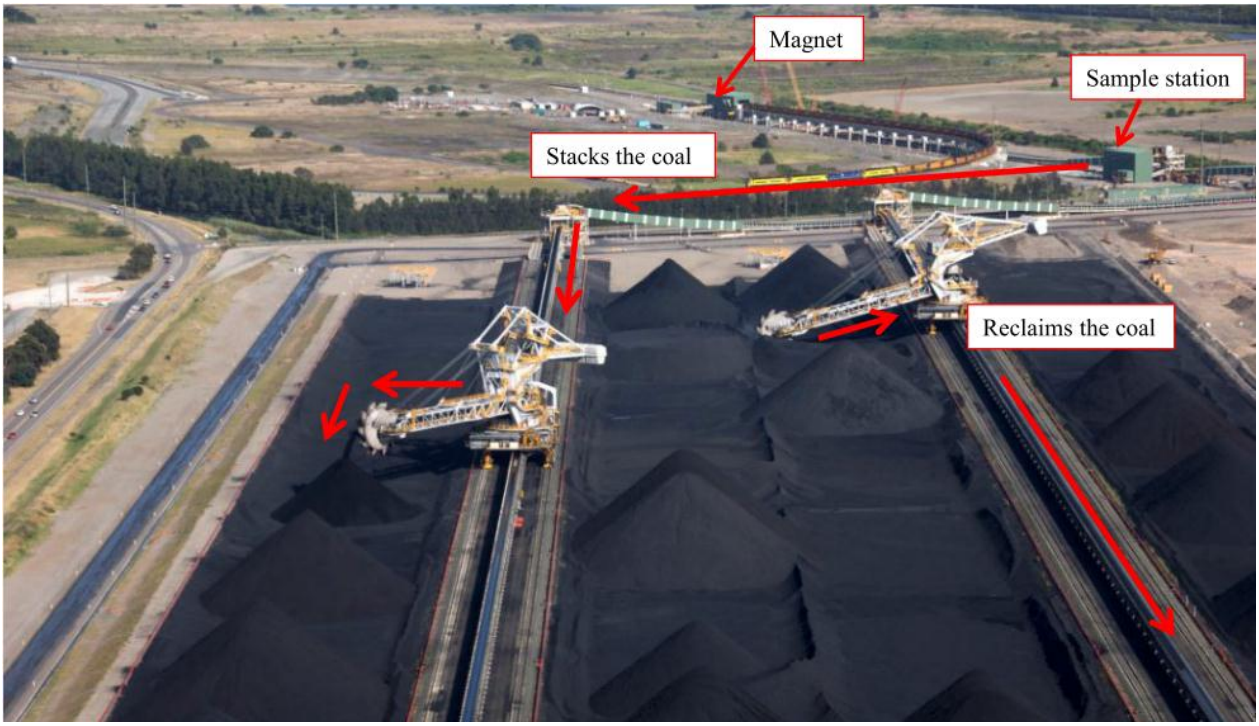


圖177 NCIG 儲煤場及堆/取煤機作業流程

圖178 NCIG Shiploading System

附件1 – Firman Ketanun Perkasa 煤礦礦權文件(印尼原文)

DEPARTEMEN ENERGI DAN SUMBER DAYA MINERAL
REPUBLIK INDONESIA

KEPUTUSAN MENTERI ENERGI DAN SUMBER DAYA MINERAL
Nomor: 318.K/30/DJB/2008

TENTANG

PERMULAAN TAHAP KEGIATAN PRODUKSI PADA SEBAGIAN WILAYAH
PERJANJIAN KARYA PENGUSAHAAN PERTAMBANGAN BATUBARA
PT FIRMAN KETAUN PERKASA

MENTERI ENERGI DAN SUMBER DAYA MINERAL,

Membaca : Surat PT Firman Ketaun Perkasa Nomor 049/FKP-DJMB/JKT/XI/2007 tanggal 7 November 2007.

Menimbang : a. bahwa sesuai ketentuan Pasal 10 ayat (1) Perjanjian Karya Pengusahaan Pertambangan Batubara antara Pemerintah dan PT Firman Ketaun Perkasa tanggal 13 Oktober 1999, perusahaan tersebut pada tanggal 7 November 2007 telah mengajukan permohonan untuk memulai Tahap Kegiatan Produksi pada sebagian Wilayah Perjanjian Karyanya sesuai dengan peta sebagaimana tercantum dalam Lampiran Keputusan Menteri ini;

b. bahwa berdasarkan penelitian terhadap laporan teknis dan data yang diajukan oleh PT Firman Ketaun Perkasa, terdapat cukup alasan bagi Pemerintah untuk memberikan persetujuan bagi PT Firman Ketaun Perkasa untuk memasuki Tahap Kegiatan Produksi pada sebagian wilayahnya.

Mengingat : 1. Undang-undang Nomor 11 Tahun 1967 (LN Tahun 1967 Nomor 22, TLN Nomor 2831);

2. Undang-undang Nomor 25 Tahun 2007 (LN Tahun 2007 Nomor 67, TLN Nomor 4724);

3. Peraturan Pemerintah Nomor 32 Tahun 1969 (LN Tahun 1969 Nomor 60, TLN Nomor 2916) sebagaimana telah diubah dua kali, terakhir dengan Peraturan Pemerintah Nomor 75 Tahun 2001 (LN Tahun 2001 Nomor 141, TLN Nomor 4154);

4. Keputusan Presiden Nomor 75 Tahun 1996 tanggal 25 September 1996;

5. Keputusan Presiden Nomor 182/M Tahun 2005 tanggal 9 Nopember 2005;

6. Keputusan Menteri Pertambangan dan Energi Nomor 680.K/29/M.PE/1997 tanggal 6 Juni 1997 sebagaimana telah diubah dengan Keputusan Menteri Energi dan Sumber Daya Mineral Nomor 0057.K/40/MEM/2004 tanggal 16 Februari 2004;

7. Keputusan Menteri Energi dan Sumber Daya Mineral Nomor 812.K/40/MEM/2003 tanggal 23 Mei 2003;

8. Keputusan Menteri Energi dan Sumber Daya Mineral Nomor 07.K/40.00/DJB/2007 tanggal 22 Januari 2007.

MEMUTUSKAN : .....

附件2 – Firman Ketanun Perkasa 煤礦礦權文件(英文譯本)

DEPARTMENT OF ENERGY AND MINERAL RESOURCES OF THE REPUBLIC OF INDONESIA

DECREE OF THE MINISTER OF ENERGY AND MINERAL RESOURCES

Number 318.K/30/DJB/2008

ON

THE COMMENCEMENT OF PRODUCTION ACTIVITY STAGE IN SEGMENT OF COAL CONTRACT OF WORK AREA OF PT FIRMAN KETAUN PERKASA

THE MINISTER OF ENERGY AND MINERAL RESOURCES

With regards to : PT. Firman Ketaun Perkasa letter Number 049/FKP-DJMB/JKT/XI/2007 dated 7 November 2007.

Considering :

a. Whereas in accordance with the provision of Article 10 paragraph (1) of Coal Contract of Work between the Government and PT Firman Ketaun Perkasa dated 13 October 1999, the Company has filed an application on 7 November 2007 to commence the Production Activity Stage in segment of its Coal Contract of Work Area as shown in the map attached to this Ministerial Decree;

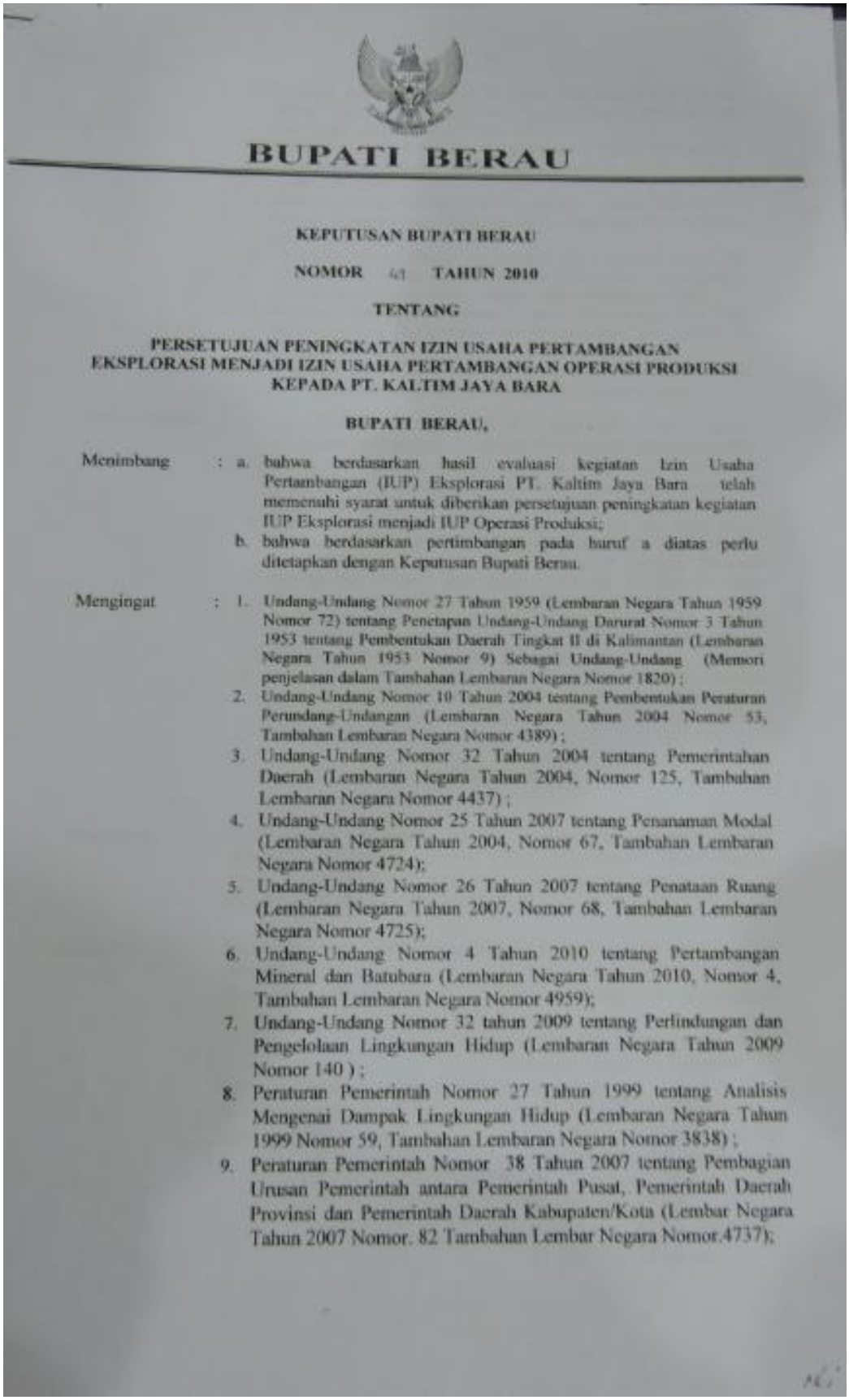
b. Whereas based on inspection of technical report and data as filed by PT Firman Ketaun Perkasa, there are sufficient basis for the Government to approve the application of PT Firman Ketaun Perkasa to proceed to Production Activity Stage in segment of its area.

In view of :

1. Law Number 11 Year 1967 (State Gazette Year 1967 Number 22, Supplement to the State Gazette Number 2831);
2. Law Number 25 Year 2007 (State Gazette Year 2007 Number 67, Supplement to the State Gazette Number 4724);
3. Government Regulation Number 32 Year 1969 (State Gazette Year 1969 Number 60, Supplement to the State Gazette Number 2916) as already amended twice, most recently with Government Regulation Number 75 Year 2001 (State Gazette

AUTHORIZED & SWORN TRANSLATOR SK GUB. DKI JKT 1955/2011 LINDA BOENTARAM (021) 5414210

附件3 – Kaltim Jaya Bara 煤礦礦權文件(印尼原文)



BUPATI BERAU

KEPUTUSAN BUPATI BERAU

NOMOR 41 TAHUN 2010

TENTANG

PERSETUJUAN PENINGKATAN IZIN USAHA PERTAMBANGAN EKSPLORASI MENJADI IZIN USAHA PERTAMBANGAN OPERASI PRODUKSI KEPADA PT. KALTIM JAYA BARA

BUPATI BERAU,

Menimbang : a. bahwa berdasarkan hasil evaluasi kegiatan Izin Usaha Pertambangan (IUP) Eksplorasi PT. Kaltim Jaya Bara telah memenuhi syarat untuk diberikan persetujuan peningkatan kegiatan IUP Eksplorasi menjadi IUP Operasi Produksi;

b. bahwa berdasarkan pertimbangan pada huruf a diatas perlu ditetapkan dengan Keputusan Bupati Berau.

Mengingat : 1. Undang-Undang Nomor 27 Tahun 1959 (Lembaran Negara Tahun 1959 Nomor 72) tentang Penetapan Undang-Undang Darurat Nomor 3 Tahun 1953 tentang Pembentukan Daerah Tingkat II di Kalimantan (Lembaran Negara Tahun 1953 Nomor 9) Sebagai Undang-Undang (Memori penjelasan dalam Tambahan Lembaran Negara Nomor 1820) ;

2. Undang-Undang Nomor 10 Tahun 2004 tentang Pembentukan Peraturan Perundang-Undangan (Lembaran Negara Tahun 2004 Nomor 53, Tambahan Lembaran Negara Nomor 4389) ;

3. Undang-Undang Nomor 32 Tahun 2004 tentang Pemerintahan Daerah (Lembaran Negara Tahun 2004, Nomor 125, Tambahan Lembaran Negara Nomor 4437) ;

4. Undang-Undang Nomor 25 Tahun 2007 tentang Penanaman Modal (Lembaran Negara Tahun 2004, Nomor 67, Tambahan Lembaran Negara Nomor 4724);

5. Undang-Undang Nomor 26 Tahun 2007 tentang Penataan Ruang (Lembaran Negara Tahun 2007, Nomor 68, Tambahan Lembaran Negara Nomor 4725);

6. Undang-Undang Nomor 4 Tahun 2010 tentang Pertambangan Mineral dan Batubara (Lembaran Negara Tahun 2010, Nomor 4, Tambahan Lembaran Negara Nomor 4959);

7. Undang-Undang Nomor 32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup (Lembaran Negara Tahun 2009 Nomor 140) ;

8. Peraturan Pemerintah Nomor 27 Tahun 1999 tentang Analisis Mengenai Dampak Lingkungan Hidup (Lembaran Negara Tahun 1999 Nomor 59, Tambahan Lembaran Negara Nomor 3838) ;

9. Peraturan Pemerintah Nomor 38 Tahun 2007 tentang Pembagian Urusan Pemerintah antara Pemerintah Pusat, Pemerintah Daerah Provinsi dan Pemerintah Daerah Kabupaten/Kota (Lembar Negara Tahun 2007 Nomor. 82 Tambahan Lembar Negara Nomor.4737);

REGENT OF BERAU

DECISION OF THE REGENT OF BERAU

NUMBER 41/2010

CONCERNING

APPROVAL FOR THE UPGRADE IN EXPLORATION MINING BUSINESS LICENSE TO PRODUCTION OPERATION MINING BUSINESS LICENSE TO PT. KALTIM JAYA BARA

THE REGENT OF BERAU,

Considering : a. that based on the evaluation results of the Exploration Mining Business License (IUP) activities, PT. Kaltim Jaya Bara has met the requirements to be granted the approval for the upgrade in Exploration IUP activities to Production Operation IUP;

b. that based on the consideration in letter a above it is necessary to stipulate a

CERTIFIED AND SWORN
JOSEPH P. KETAREN
TRANSLATOR

附件5 – Maules Creek 煤礦礦權文件

NSW GOVERNMENT | Trade & Investment Resources & Energy

RECEIVED
14 JUN 2013
BY:

Reference: 11/3032

Hugh Jennings
Aston Coal 2 Pty Ltd
PO Box 56
BOGGABRI NSW 2382

Dear Sir

COAL LEASE NO 375 (ACT 1973)

In accordance with the provisions of Section 114(1) (a) of the *Mining Act 1992*, the Minister renewed the lease subject to the terms and conditions set out in the attached Instrument of Renewal document.

The renewal took effect on 9 May 2013.

Please note prior to any mining activities being undertaken on the lease, a current Mining Operations Plan must be approved by the Director General. The holder of the lease may also be required to hold a current development consent/project approval before commencing activities in accordance with the *Environmental Planning & Assessment Act 1979*.

An overview of the environmental assessment and approval requirements for mining, in addition to guidelines regarding the preparation of a Mining Operations Plan are available from the Environment section of the Department's website: www.resources.nsw.gov.au.

In regard to Condition 24 (Cooperation Agreement) – the TASMAP system located on the Department's website (www.minerals.nsw.gov.au) will be of assistance in determining the presence of overlapping petroleum titles.

For further information, please contact the undersigned on (02) 4931 6451.

Yours faithfully

Margaret Lannen
Coal & Petroleum Titles
7 June 2013

Minerals - Titles 516 High Street Maitland NSW 2320
PO Box 344 Hunter Region Mail Centre NSW 2310
Email: webmineral.titles@industry.nsw.gov.au OR webcoal.titles@industry.nsw.gov.au
Fax: 02 4931 6776
www.resources.nsw.gov.au
ABN 72 189 919 072

附件6 – 本公司燃煤採購定期契約煤質規範 Quality A

Quality Specifications for Taipower's Term Tender of General Bituminous Coal – Quality A

April, 2008

Item	Minimum / Maximum
1. Gross Calorific Value (kcal/kg) A.R.	5,900 Min. (Remark 1)
2. Total Moisture (%) A.R.	15 Max. (Remark 2)
3. Ash Content (%) A.D.	16 Max.
4. Sulphur Content (%) A.D.	1.1 Max.
5. Volatile Matter (%) A.D.	26 Min.
6. Fixed Carbon (%) A.D.	60 Max.
7. Grindability (H.G.I.)	45 Min.
8. Ash Fusion Temperature (reducing, H=W) (℃)	1,150 Min.
9. Size (mm)	>50mm 5 % Max. <2mm 35 % Max.
10. Na_2O in Ash (%)	2 Max. (Remark 3)

Remarks:

1. Gross Heating Value greater than 6,900 kcal/kg will be treated as 6,900 kcal/kg.
2. Total Moisture can be raised to 18% max if Ash Content is less than 10%.
3. If (a).CaO + MgO > Fe_2O_3, and (b).CaO + MgO + Fe_2O_3 > 20%, then Na_2O in Ash can be raised to 5.0% max.
4. A.R. means As Received Basis; A.D. means Air Dried Basis.

Quality Specifications for Taipower's Term Tender of General Bituminous Coal – Quality B1

April, 2008

Item			Minimum / Maximum	
1. Gross Calorific Value (kcal/kg)		A.R.	5,500 (Remark 1)	Min.
2. Total Moisture	(%)	A.R.	15 (Remark 2)	Max.
3. Ash Content	(%)	A.D.	16	Max.
4. Sulphur Content	(%)	A.D.	1.1	Max.
5. Volatile Matter	(%)	A.D.	26	Min.
6. Fixed Carbon	(%)	A.D.	60	Max.
7. Grindability	(H.G.I.)		45	Min.
8. Ash Fusion Temperature (reducing, H=W)	(℃)		1,150	Min.
9. Size (mm)			>50mm 5 %	Max.
			<2mm 35 %	Max.
10. Na_2O in Ash	(%)		2 (Remark 3)	Max.

Remarks:

1. Gross Heating Value greater than 6,900 kcal/kg will be treated as 6,900 kcal/kg.
2. Total Moisture can be raised to 20% max if Ash Content is less than 10% .
3. If (a).CaO + MgO > Fe_2O_3, and (b).CaO + MgO + Fe_2O_3 > 20%, then Na_2O in Ash can be raised to 5.0% max.
4. A.R. means As Received Basis; A.D. means Air Dried Basis.

Quality Specifications for Taipower's Term Tender of General Bituminous Coal – Quality B2

April, 2008

Item	Minimum / Maximum
1. Gross Calorific Value (kcal/kg) A.R.	5,500 Min. (Remark 1)
2. Total Moisture (%) A.R.	15 Max.
3. Ash Content (%) A.D.	16 Max.
4. Sulphur Content (%) A.D.	1.1 Max.
5. Volatile Matter (%) A.D.	26 Min.
6. Fixed Carbon (%) A.D.	60 Max.
7. Grindability (H.G.I.)	42 Min.
8. Ash Fusion Temperature (reducing, H=W) (℃)	1,150 Min.
9. Size (mm)	>50mm 5 % Max. <2mm 35 % Max.
10. Na_2O in Ash (%)	2 Max. (Remark 3)

Remarks:

1. Gross Heating Value greater than 6,900 kcal/kg will be treated as 6,900 kcal/kg.
2. Total Moisture can be raised to 20% max if Ash Content is less than 10% .
3. If (a).CaO + MgO > Fe_2O_3, and (b).CaO + MgO + Fe_2O_3 > 20%, then Na_2O in Ash can be raised to 5.0% max.
4. A.R. means As Received Basis; A.D. means Air Dried Basis.

附件9－本公司燃煤採購定期契約煤質規範 Quality D

Quality Specifications for Taipower's Term Tender of General Subbituminous Coal – Quality D

April, 2008

Item			Minimum / Maximum	
1. Gross Calorific Value (kcal/kg)		A.R.	5,000 (Remark 1)	Min.
2. Total Moisture	(%)	A.R.	28	Max.
3. Ash Content	(%)	A.D.	15	Max.
4. Sulphur Content	(%)	A.D.	1.1	Max.
5. Volatile Matter	(%)	A.D.	28	Min.
6. Fixed Carbon	(%)	A.D.	60	Max.
7. Grindability	(H.G.I.)		42	Min.
8. Ash Fusion Temperature (reducing, H=W)	(℃)		1,150	Min.
9. Size (mm)			>50mm 5 %	Max.
			<2mm 35 %	Max.
10. Na_2O in Ash	(%)		2 (Remark 2)	Max.

Remarks:

1. Gross Heating Value greater than 6,900 kcal/kg will be treated as 6,900 kcal/kg.
2. If (a).CaO + MgO > Fe_2O_3, and (b).CaO + MgO + Fe_2O_3 > 20%, then Na_2O in Ash can be raised to 5.0% max.
3. A.R. means As Received Basis; A.D. means Air Dried Basis.

附件10－本公司燃煤採購定期契約煤質規範 Quality F

Quality Specifications for Taipower's Term Tender of High-Ash Bituminous Coal – Quality F

February, 2012

Item			Minimum / Maximum	
1. Gross Calorific Value (kcal/kg)		A.R.	5,900 (Remark 1)	Min.
2. Total Moisture	(%)	A.R.	15 (Remark 2)	Max.
3. Ash Content	(%)	A.D.	20	Max.
4. Sulphur Content	(%)	A.D.	1.1	Max.
5. Volatile Matter	(%)	A.D.	26	Min.
6. Fixed Carbon	(%)	A.D.	60	Max.
7. Grindability	(H.G.I.)		45	Min.
8. Ash Fusion Temperature (reducing, H=W)	(℃)		1,150	Min.
9. Size (mm)			>50mm 5 %	Max.
			<2mm 35 %	Max.
10. Na_2O in Ash	(%)		2 (Remark 3)	Max.

Remarks:

1. Gross Heating Value greater than 6,900 kcal/kg will be treated as 6,900 kcal/kg.
2. Total Moisture can be raised to 18% max if Ash Content is less than 10%.
3. If (a).CaO + MgO > Fe_2O_3, and (b).CaO + MgO + Fe_2O_3 > 20%, then Na_2O in Ash can be raised to 5.0% max.
4. A.R. means As Received Basis; A.D. means Air Dried Basis.