



Moranbah North Coal



**ANGLO
COAL**

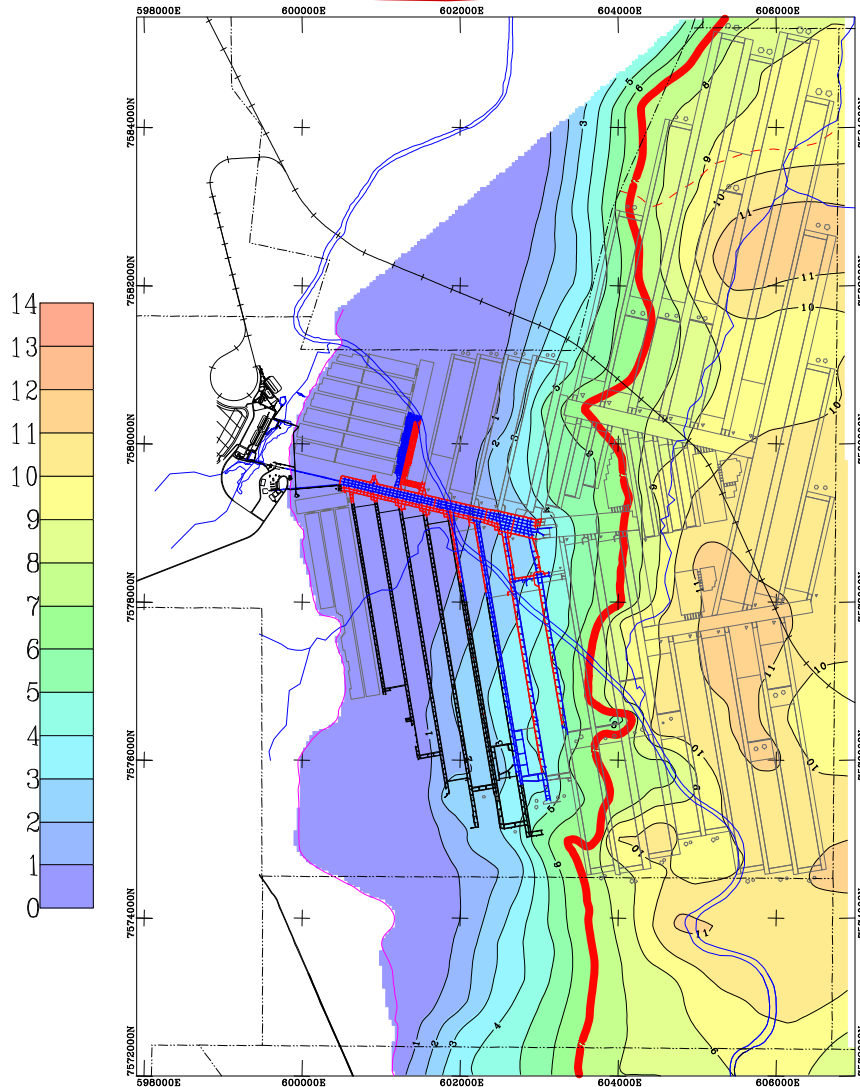
Gas Management at Moranbah North

Presentation to ACARP
Gas & Outburst Workshop
16th Sept 2005

Bruce Robertson



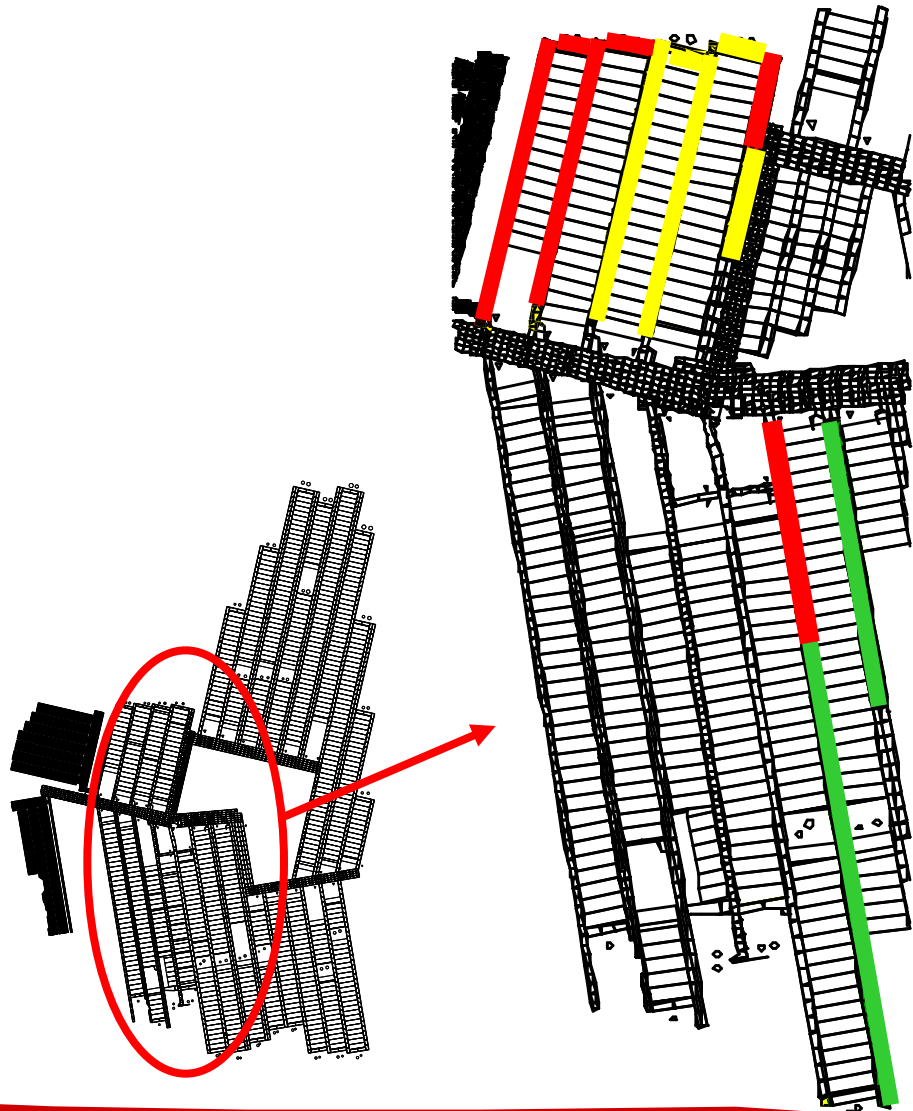
GMI seam - Total Desorbable Gas Content (m³/t)



- Current development in 5-6 m³/t coal
- High permeability, 100mD
- OMP in place
 - DRI900 at 7.2m³/t
- Mining 100s – 200s
- Preparing for transition to gassy mine operations:
 - Pre-drainage - now
 - Goaf Drainage – trials



Development 2006 - 2008



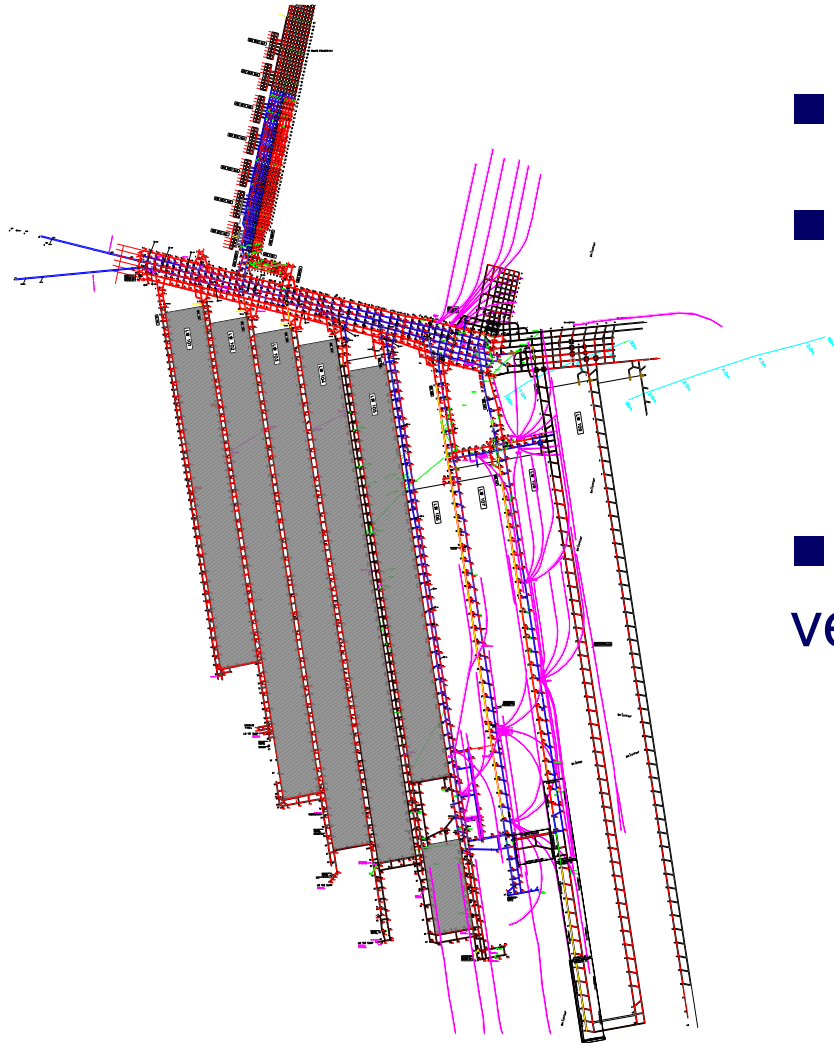
Legend

- 2006
- 2007
- 2008

- Transition from south to north district
- Use this phase to establish drainage lead time



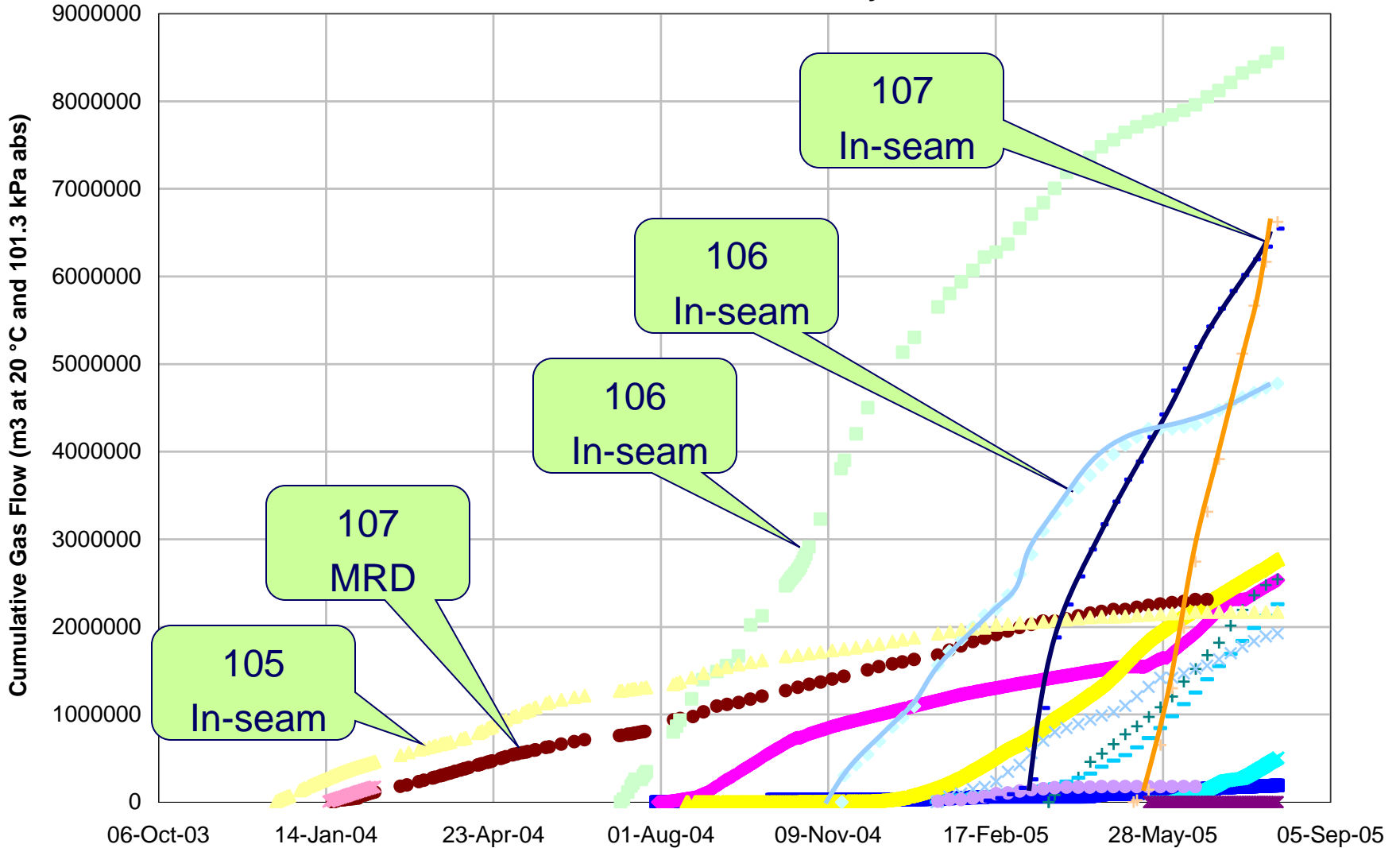
Existing Drainage



- Gas drainage req'd at 3.5–4 m³/t
- MRD variable success, improving
 - Collaborating with CH₄
 - Require long lead times
- Inseam drilling from niches, vented by risers
 - ~ 22km in 2006, good conditions
 - High perm, much water, good gas make, recharge



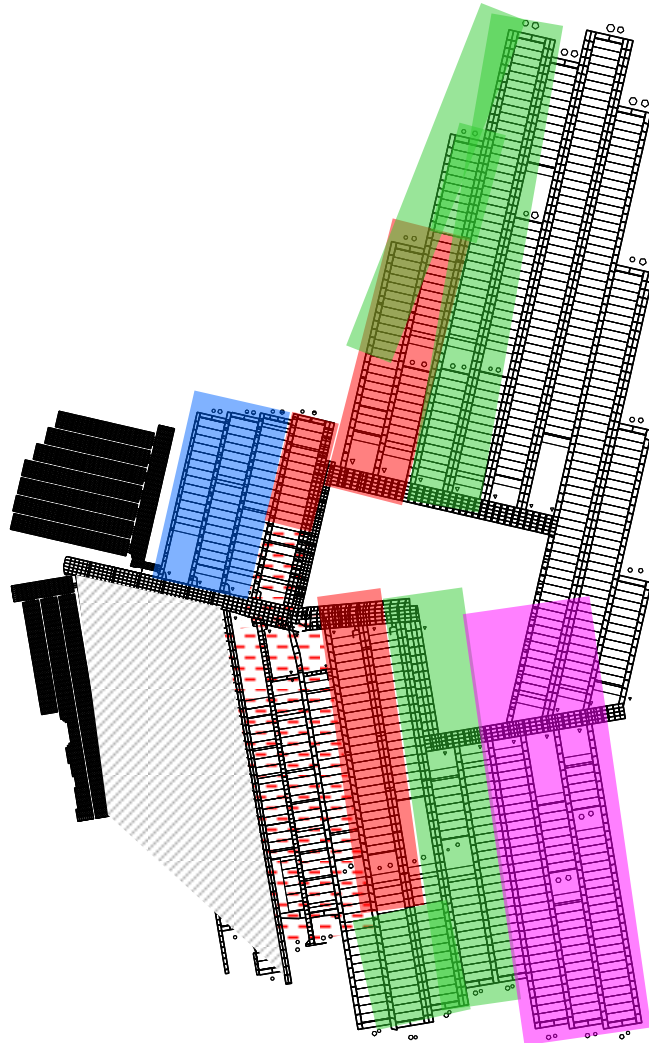
Gas Drainage Flows History





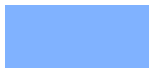





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Drainage Strategy



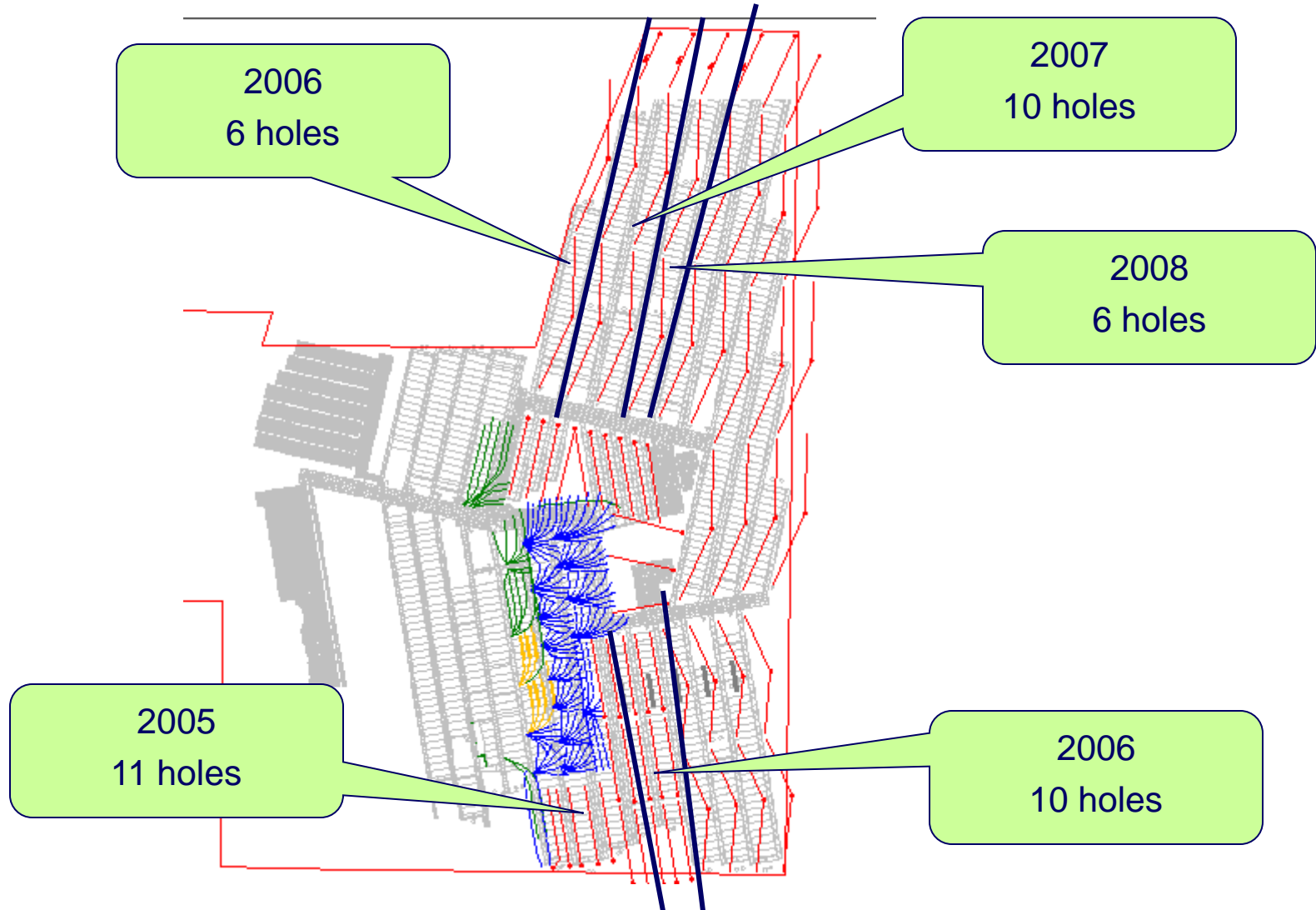
Key

-  Mined out
-  In-seam drainage in place
-  Low content (no drainage)
-  In-seam drainage
-  MNC MRD
-  CH4 MRD



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MRD Program





Gas Management



- Development
 - Outburst Management Plan – on threshold
 - Pre-drainage, dewatering advantage
 - High ventilation, long gate roads

- Longwall
 - High ventilation required
 - 3 entry gate roads for pressure drop and tailgate gas management
 - Goaf drainage will be required. trials pending
 - Pre-drainage of upper/lower seams is an option (P, GL etc)

- Gas Utilisation
 - Flaring practised
 - Pipeline off-take (CH₄/Enertrade)
 - Electricity generation – regional opportunity
 - Lots of gas – cost recovery