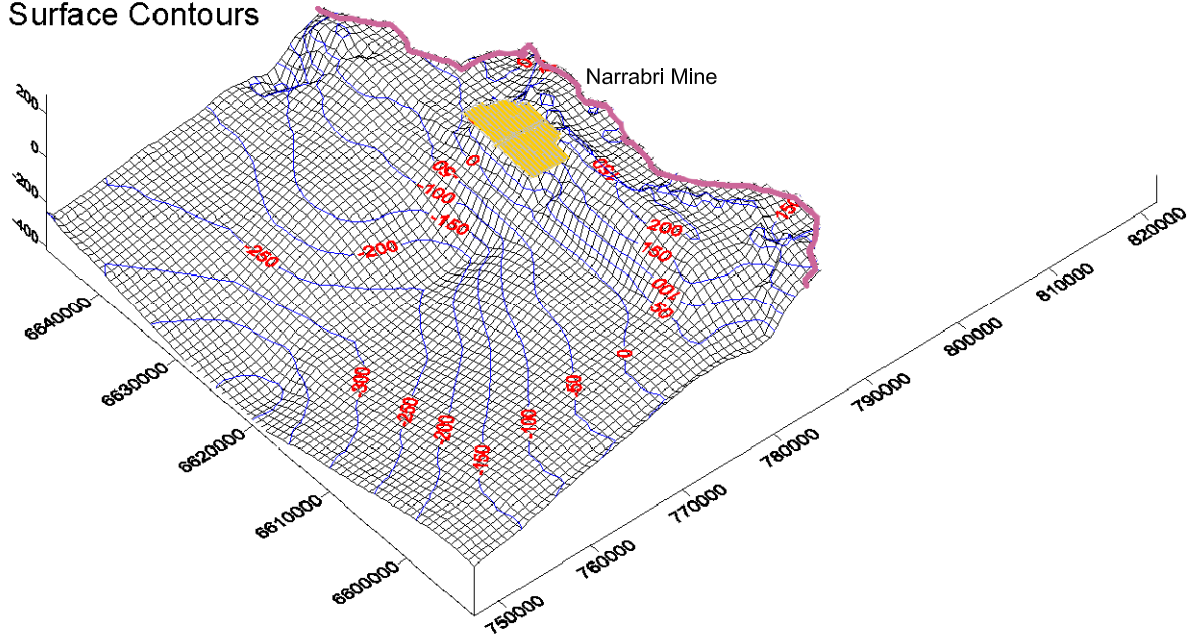
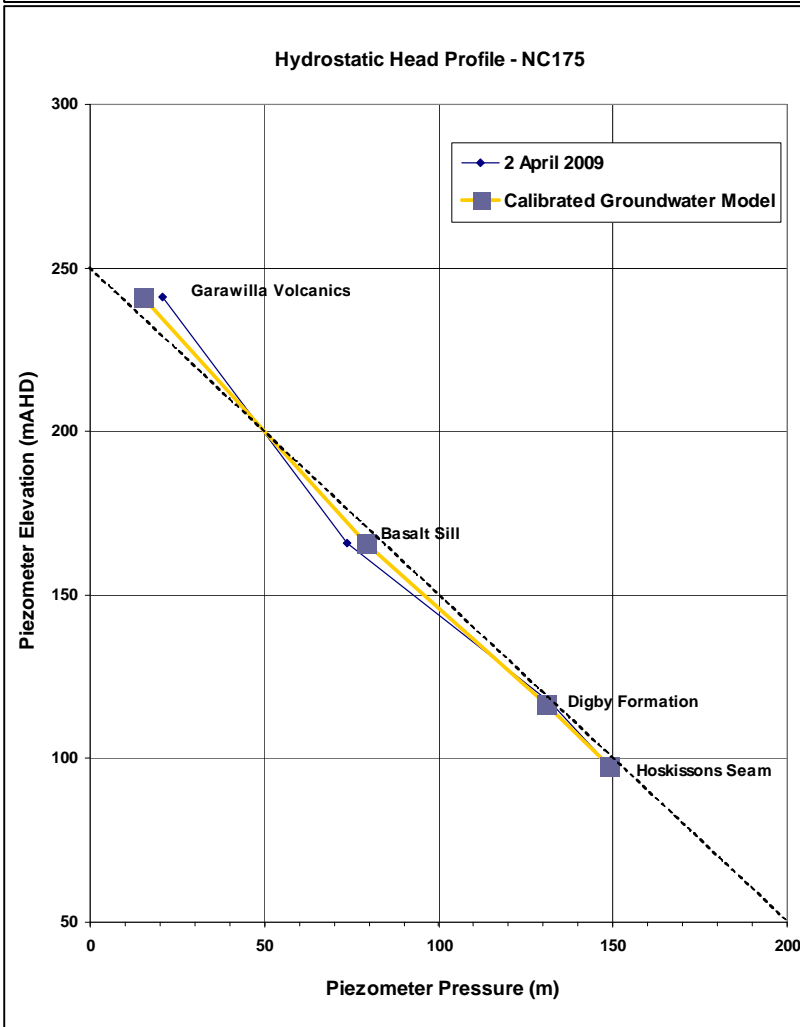
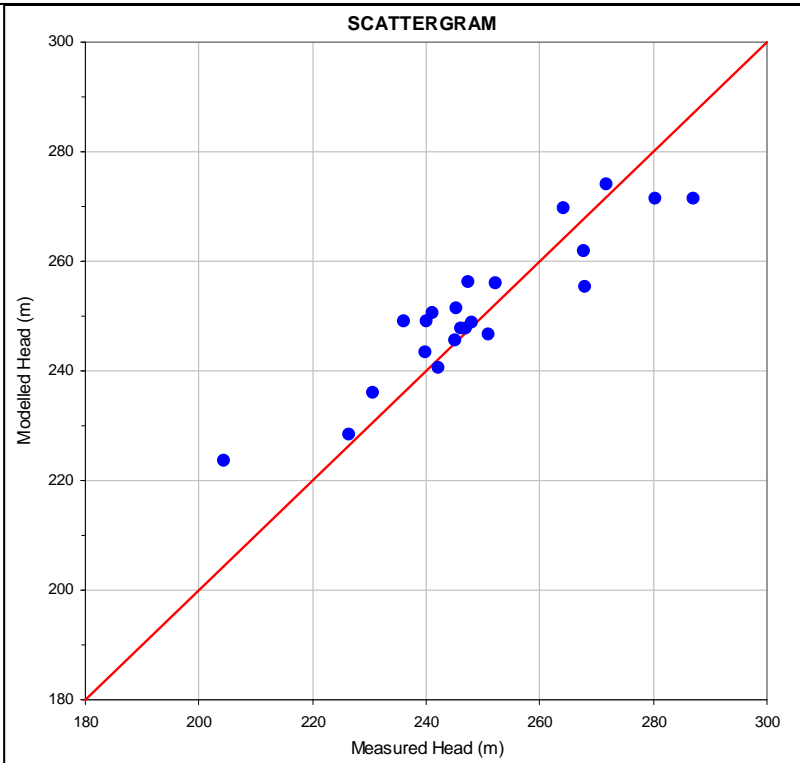


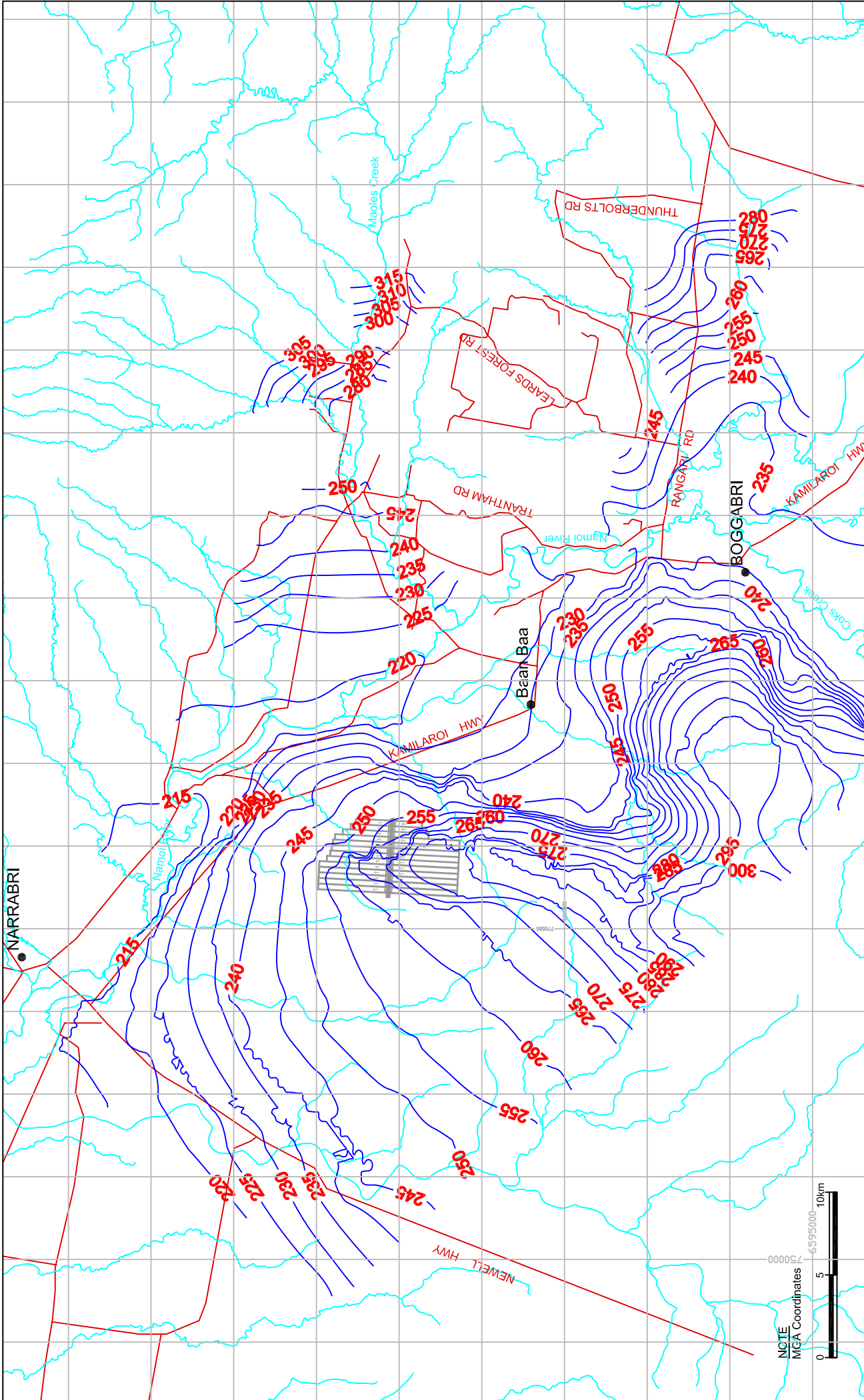
**Hoskinson Coal Surface Contours**



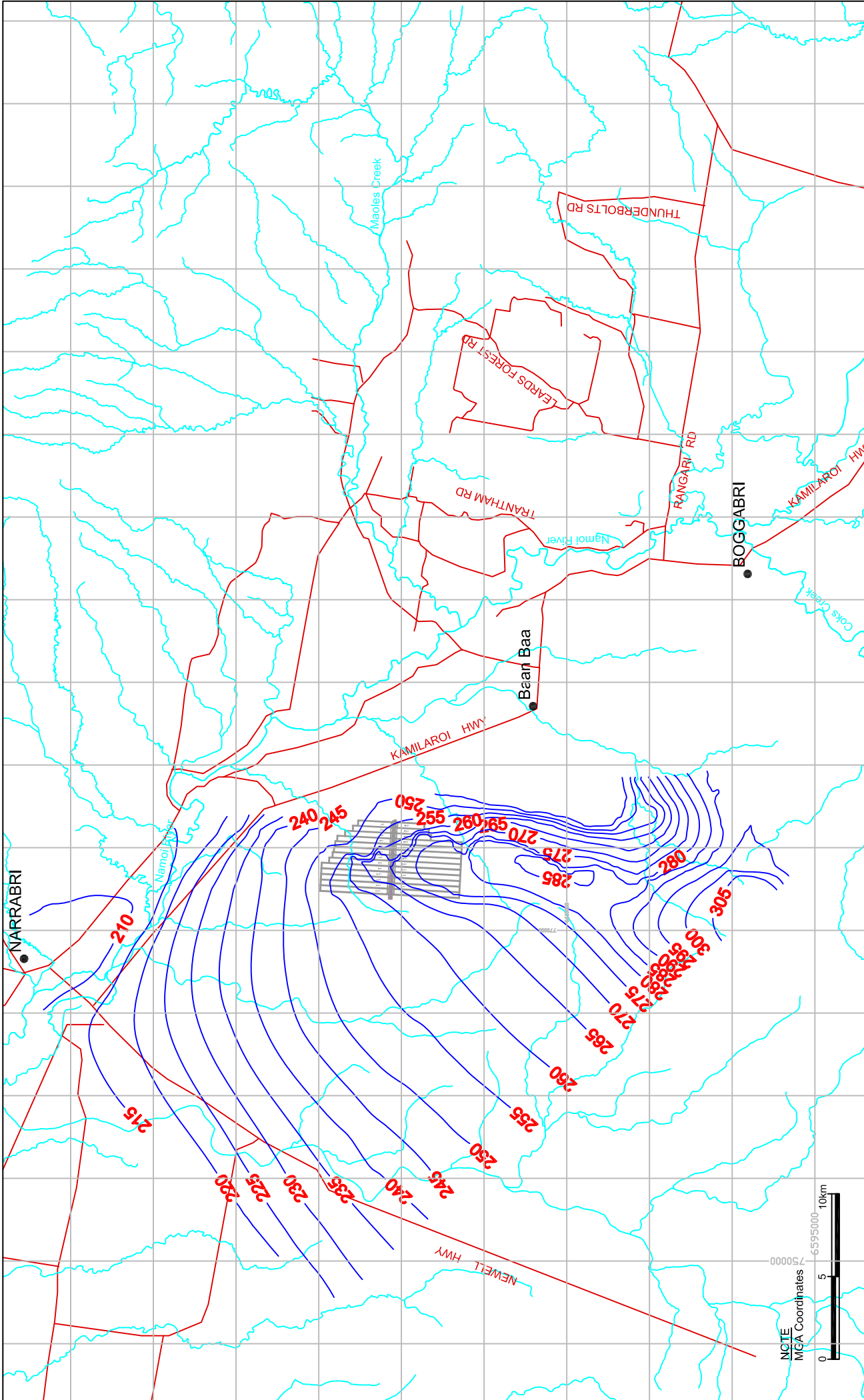
Date: 10 July 2009	Scale: As Shown	<b>Narrabri Coal Operations Pty Ltd</b>
Initials: PZ	Job No: S28	
Drawing No: S28-070a	Rev: A	
<b>aquaterra</b>		<b>Groundwater Conceptual Model and Model Domain</b>
		<b>Figure 6.1</b>



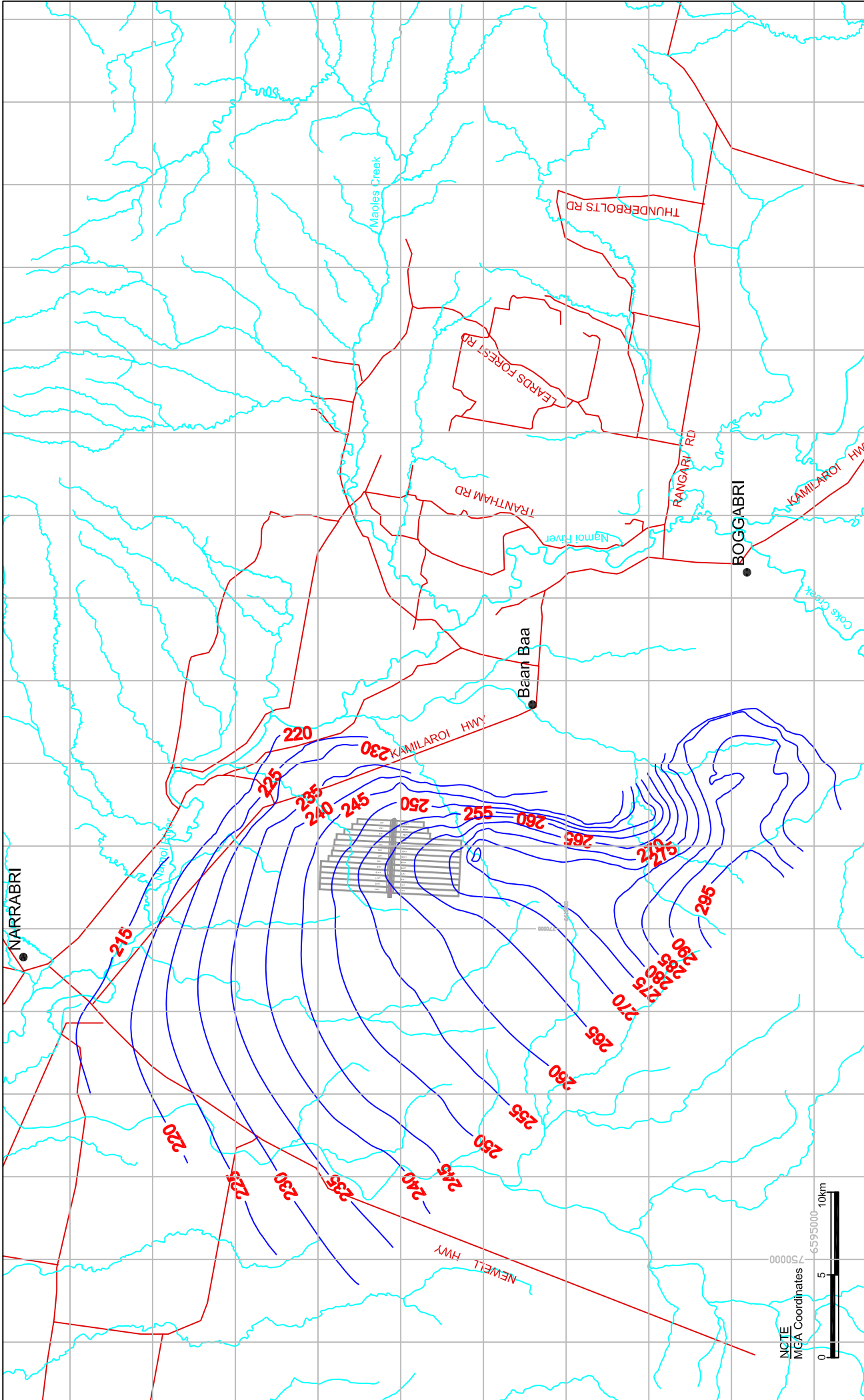
Date: 18 August 2009	Scale: as indicated	<b>Narrabri Coal Operations Pty Ltd</b>
Initials: PZ	Job No: S28	
Drawing No: S28-025c	Rev: C	
<b>aquaterra</b>		Scatter Plot for Narrabri Steady State Calibration Calibration Performance vs Hydrostatic Head Profile - NC175
		<b>Figure 6.2</b>



<b>Legend</b> Narrabri Underground Outline Roads or tracks Surface Water Drainage (Stream/Creek) Predicted Groundwater Levels (m AHD)	Date:	10 August 2009	Scale:	As Shown
	Initials:	PZ	Job No:	S28
	Drawing No:	S28-071a	Rev:	A
<b>Narrabri Coal Operations Pty Ltd</b>		<b>Year 0 Groundwater Levels in Alluvium / Colluvium / Regolith (Layer 1)</b>		
<b>Figure 6.3</b>				



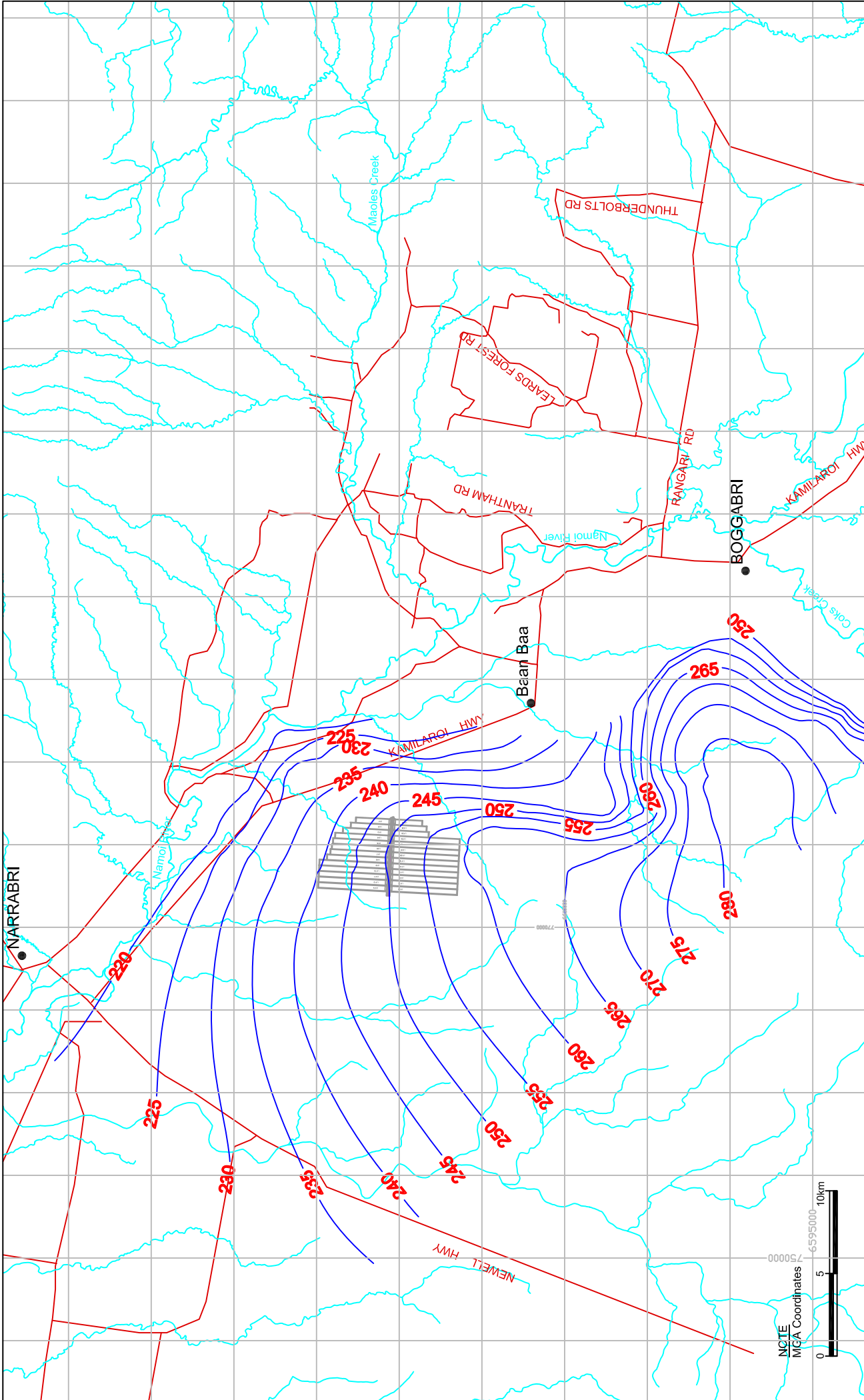
<b>Legend</b> Narrabri Underground Outline Roads or tracks Surface Water Drainage (Stream/Creek) 285 Predicted Groundwater Levels (m AHD)	Date: 10 August 2009 Scale: As Shown	<b>Narrabri Coal Operations Pty Ltd</b>	
	Initials: PZ Job No: S28	Year 0 Groundwater Levels in Garrawilla Volcanics (Layer 4)	
	Drawing No: S28-072b Rev: B		
	Figure 6.4		



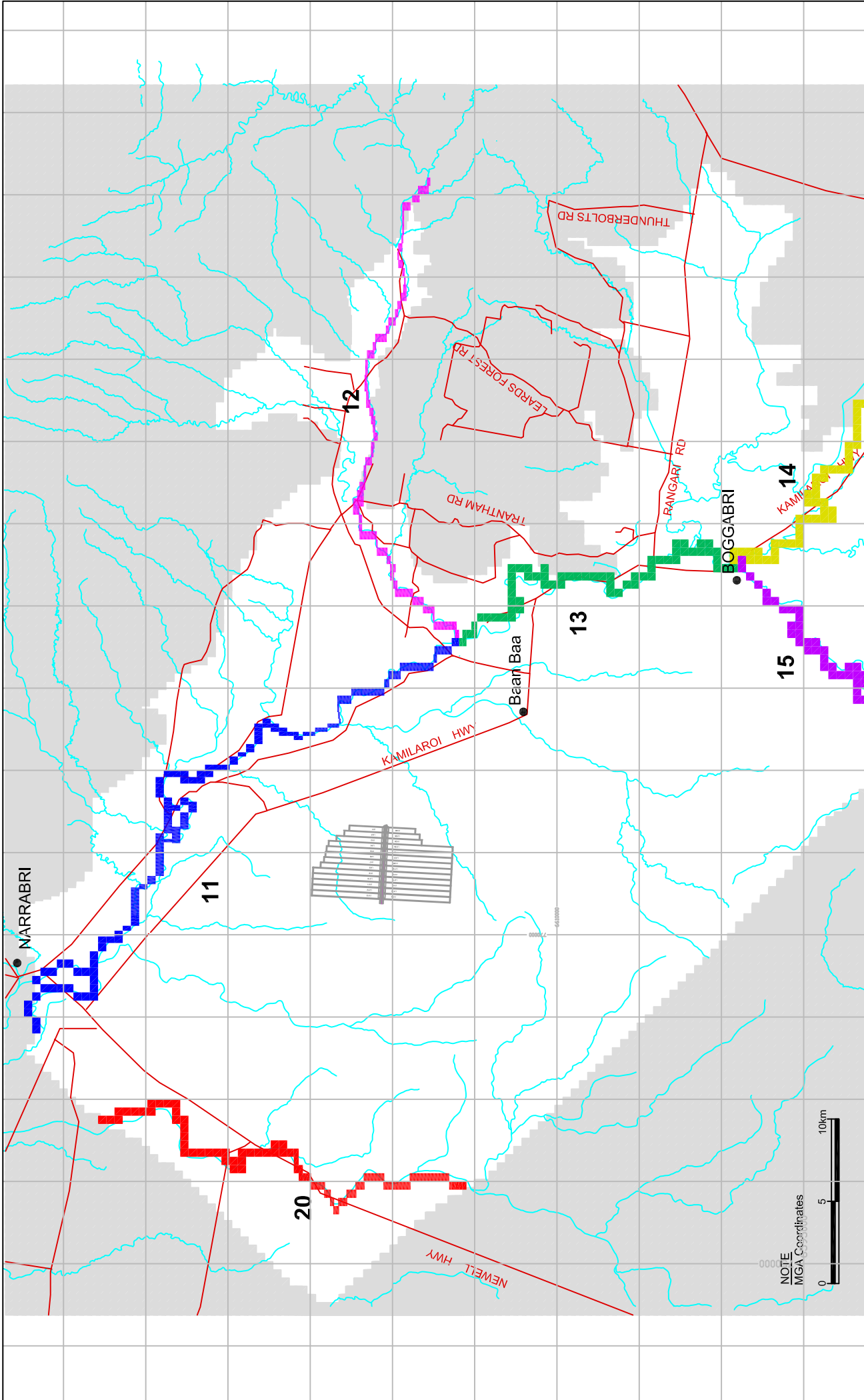
<b>Legend</b> Narrabri Underground Outline Roads or tracks Surface Water Drainage (Stream/Creek) Predicted Groundwater Levels (m AHD)	Date: 10 August 2009 Scale: As Shown	<b>Narrabri Coal Operations Pty Ltd</b>	
	Initials: PZ Job No: S28	Year 0 Groundwater Levels in Napperby Formation (Layer 5)	
	Drawing No: S28-073a Rev: A		

Figure 6.5



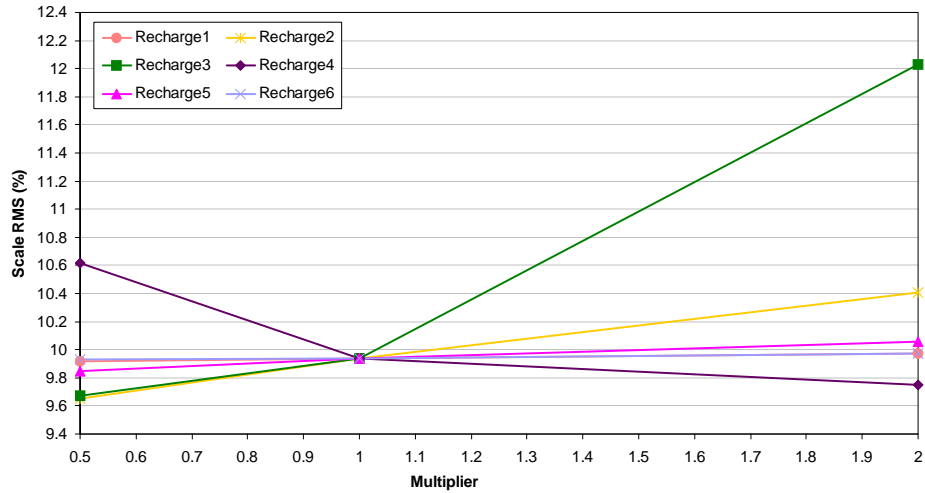


<b>Legend</b> Narrabri Underground Outline Roads or tracks Surface Water Drainage (Stream/Creek) Predicted Groundwater Levels (m AHD)	Date: 10 August 2009 Scale: As Shown Initials: PZ Job No: S28 Drawing No: S28-074a Rev: A	Narrabri Coal Operations Pty Ltd Year 0 Groundwater Levels in Hoskissons Seam (Layer 9)
	aquaterra Figure 6.6	

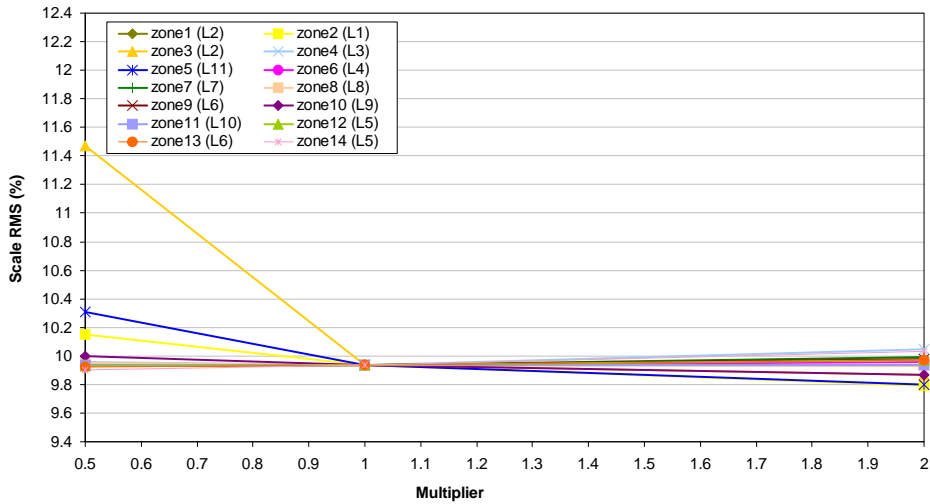


<b>Legend</b> Narrabri Underground Outline Roads or tracks Surface Water Drainage (Stream/Creek)	Date: 11 May 2009 Scale: As Shown	<b>Narrabri Coal Operations Pty Ltd</b>	
	Initials: PZ Job No: S28	<b>Model River Reach Location Map</b>	
	Drawing No: S28-023c Rev: C		
<b>Figure 6.7</b>			

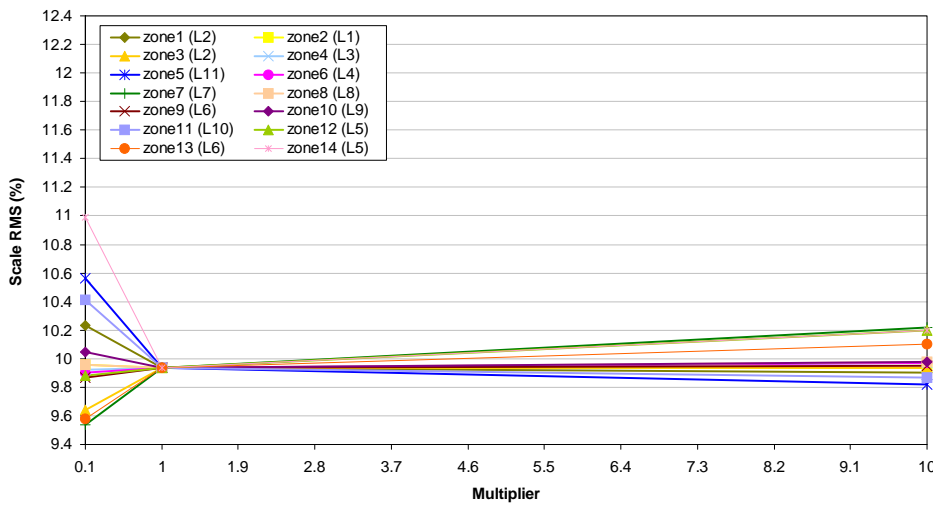
### Sensitivity Analysis for Recharge



### Sensitivity Analysis for Horizontal Conductivity



### Sensitivity Analysis for Vertical Conductivity



Date: 12 August 2009

Scale: as indicated

**Narrabri Coal Operations Pty Ltd**

Initials: PZ

Job No: S28

Drawing No: S28-024d

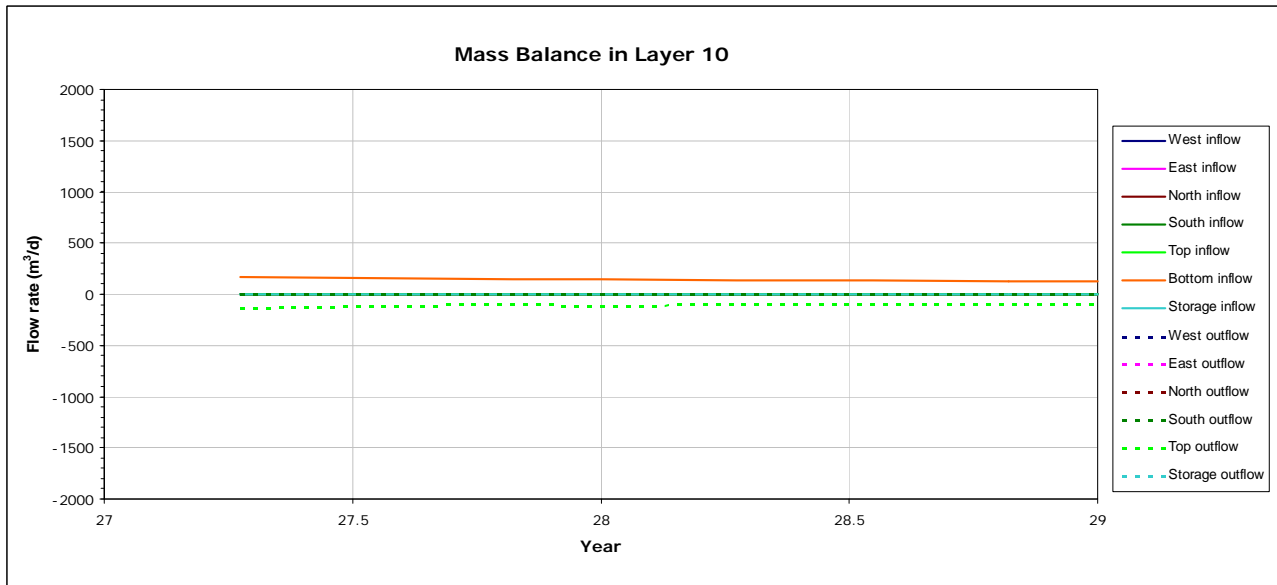
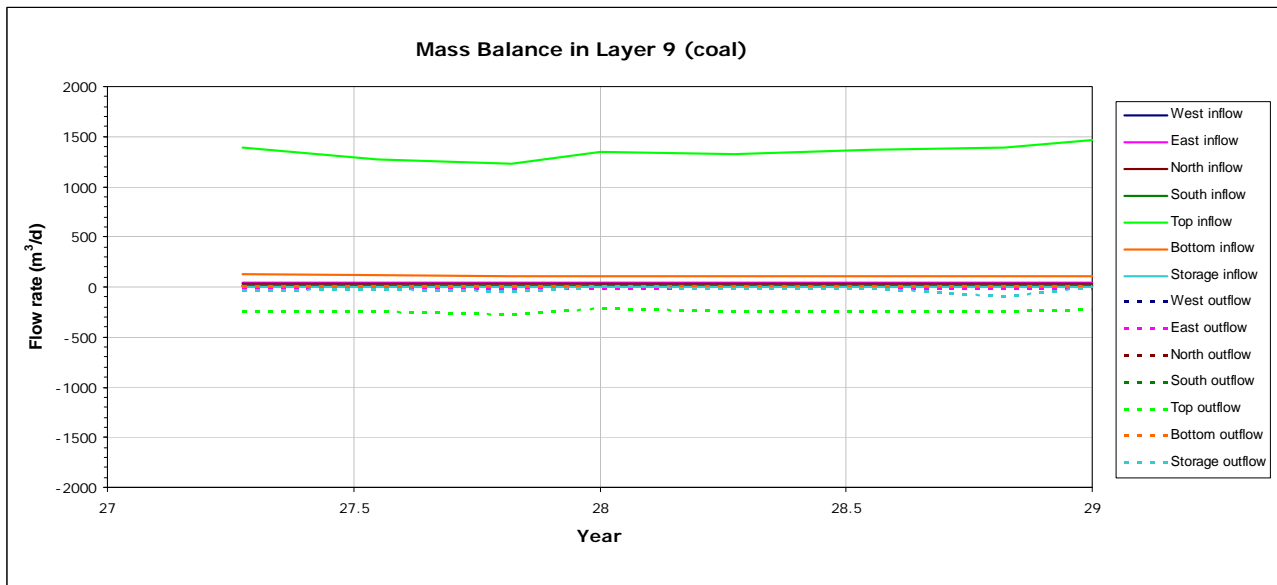
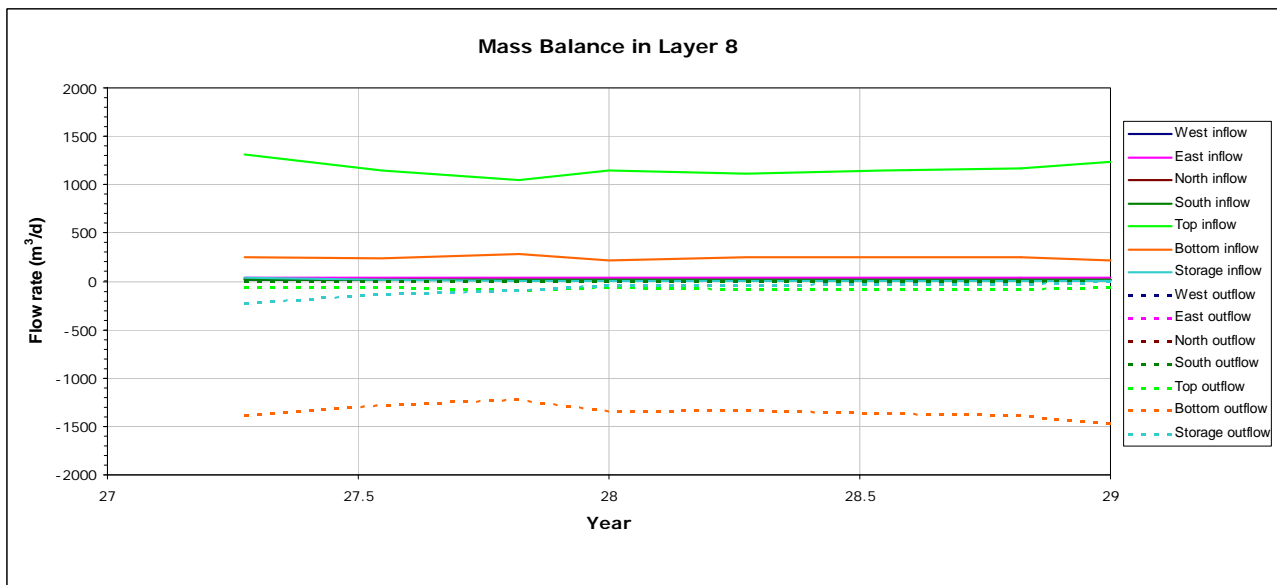
Rev: D

**Sensitivity Analysis**

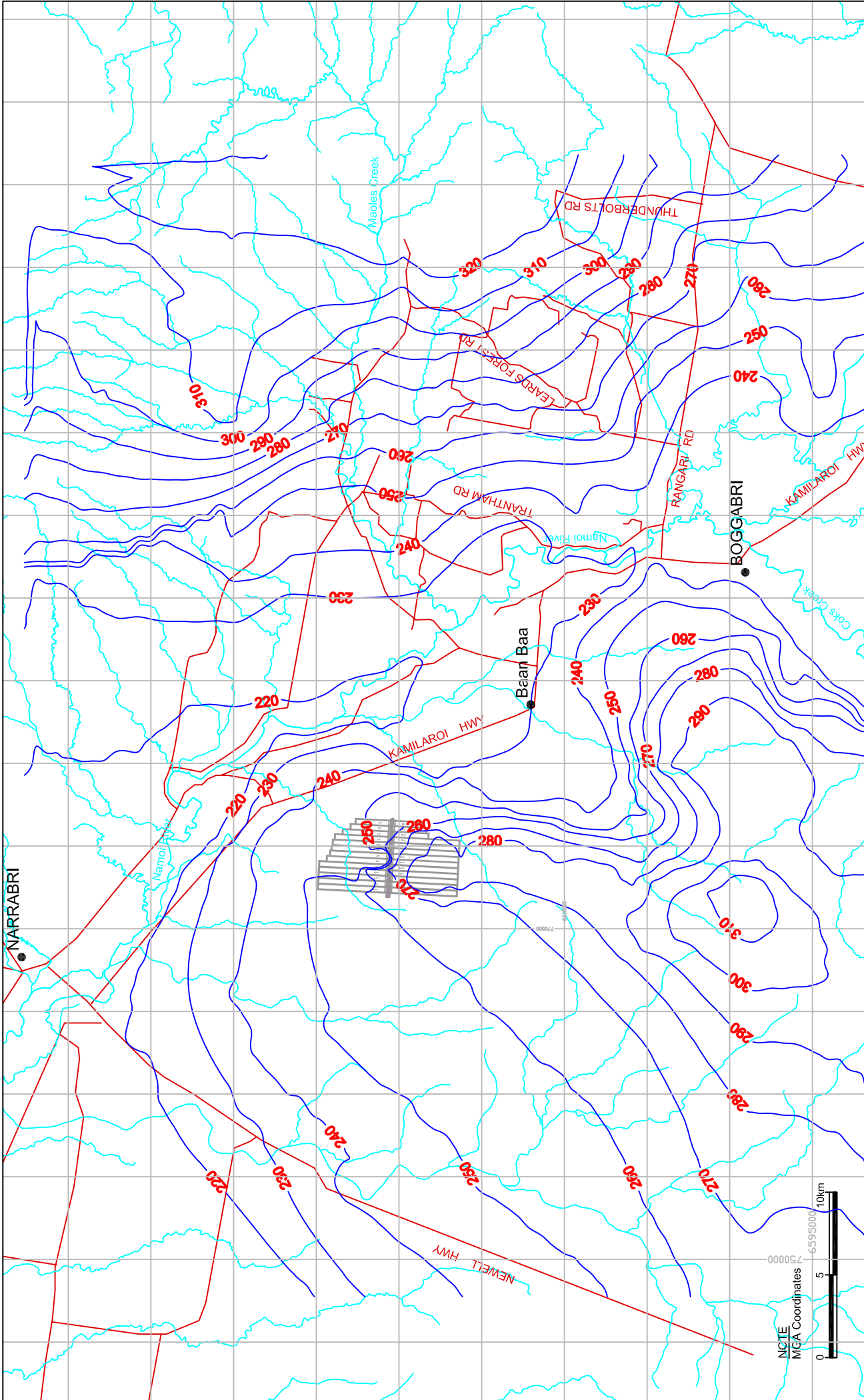




Date: 14 August 2009		Scale: As Shown		Narrabri Coal Operations Pty Ltd	
Initials: PZ		Job No: S28		Underground Mine Inflow Rate	
Drawing No: S28-021n		Rev: N			
aquaterra				Figure 6.9	



Date: 14 August 2009	Scale: As Shown	<b>Narrabri Coal Operations Pty Ltd</b>  <b>Mass Balance from Mine Footprint in Digby Formation (Layer8), Hoskissons Seam (Layer9) and Arkarula Formation (Layer10)</b>
Initials: PZ	Job No: S28	
Drawing No: S28-022d	Rev: D	
		<b>Figure 6.10</b>



**Legend**

- Narrabri Underground Outline (Alluvial to Jurassic)
- Roads or tracks
- Surface Water Drainage (Stream/Creek)
- Predicted Groundwater Levels (m AHD)

**Date:** 10 August 2009    **Scale:** As Shown

**Initials:** PZ    **Job No:** S28

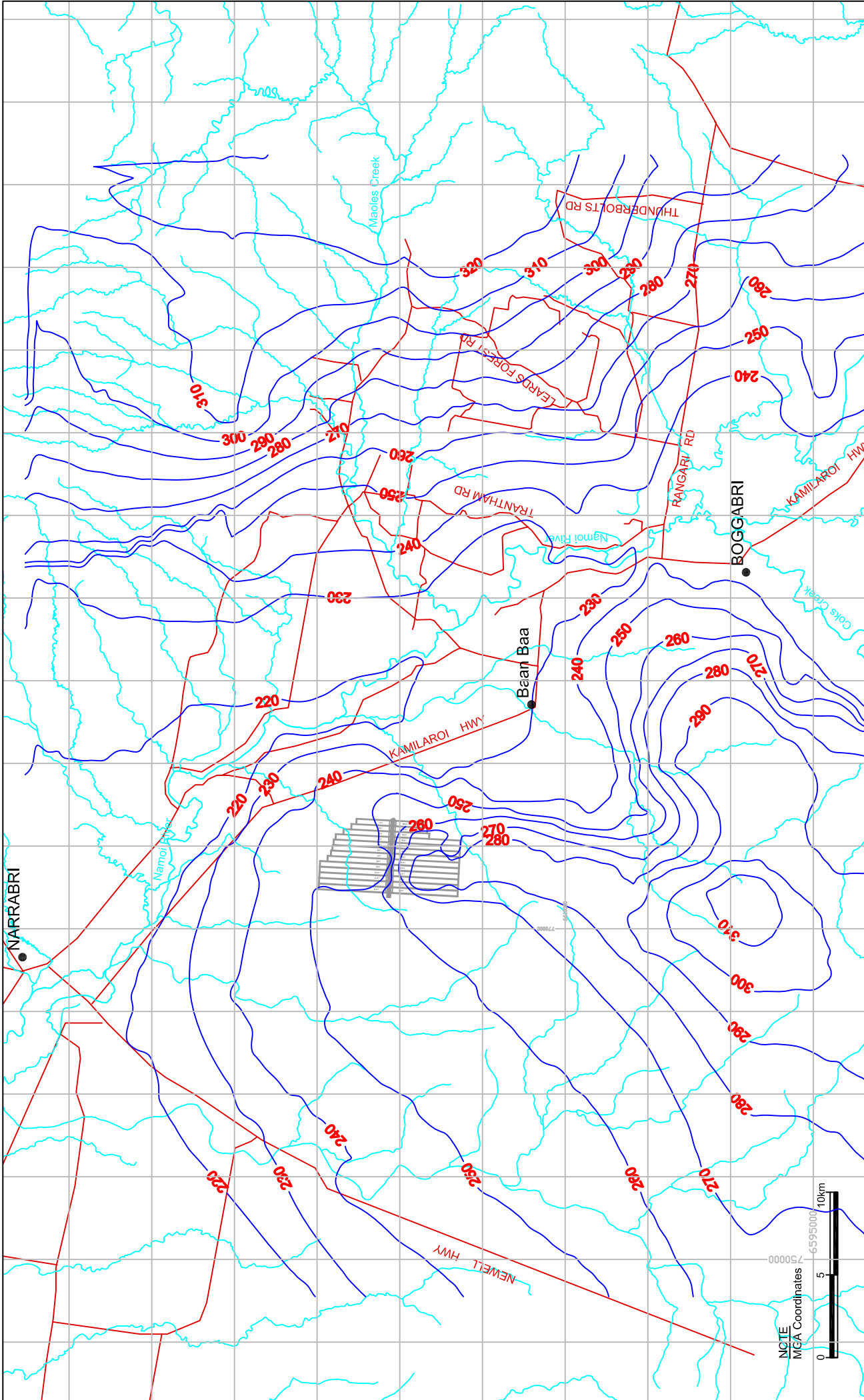
**Drawing No:** S28-032c    **Rev:** C

**Narrabri Coal Operations Pty Ltd**

**Year 15 Groundwater Levels in Alluvium / Colluvium / Regolith (Layer 1)**

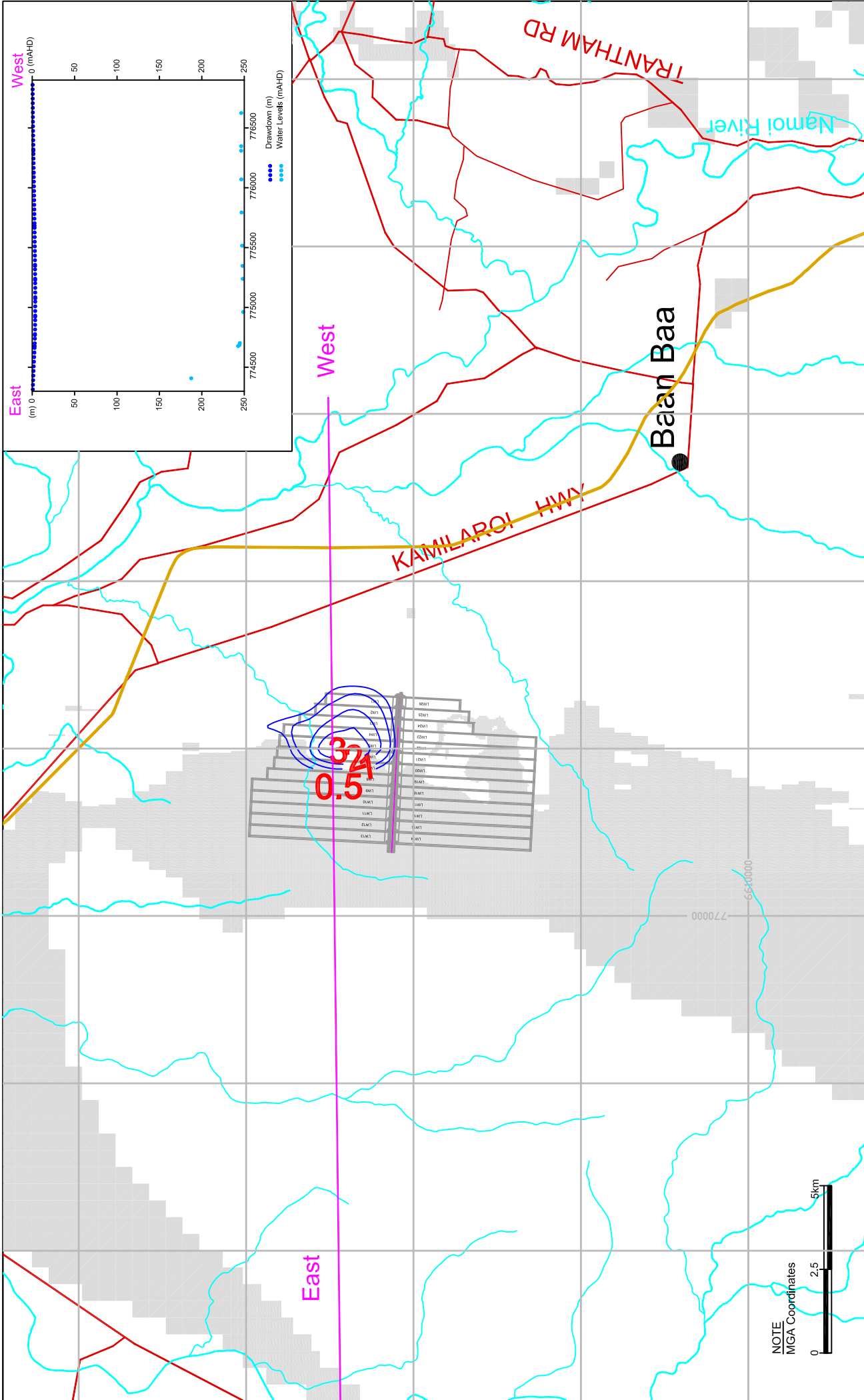
**Figure 6.11**

**aquaterro**



<b>Legend</b> Narrabri Underground Outline Roads or tracks Surface Water Drainage (Stream/Creek) 285 Predicted Groundwater Levels (m AHD)	Date: 10 August 2009 Scale: As Shown Initials: PZ Job No: S28 Drawing No: S28-033c Rev: C	Narrabri Coal Operations Pty Ltd Year 29 Groundwater Levels in Alluvium / Colluvium / Regolith (Layer 1)

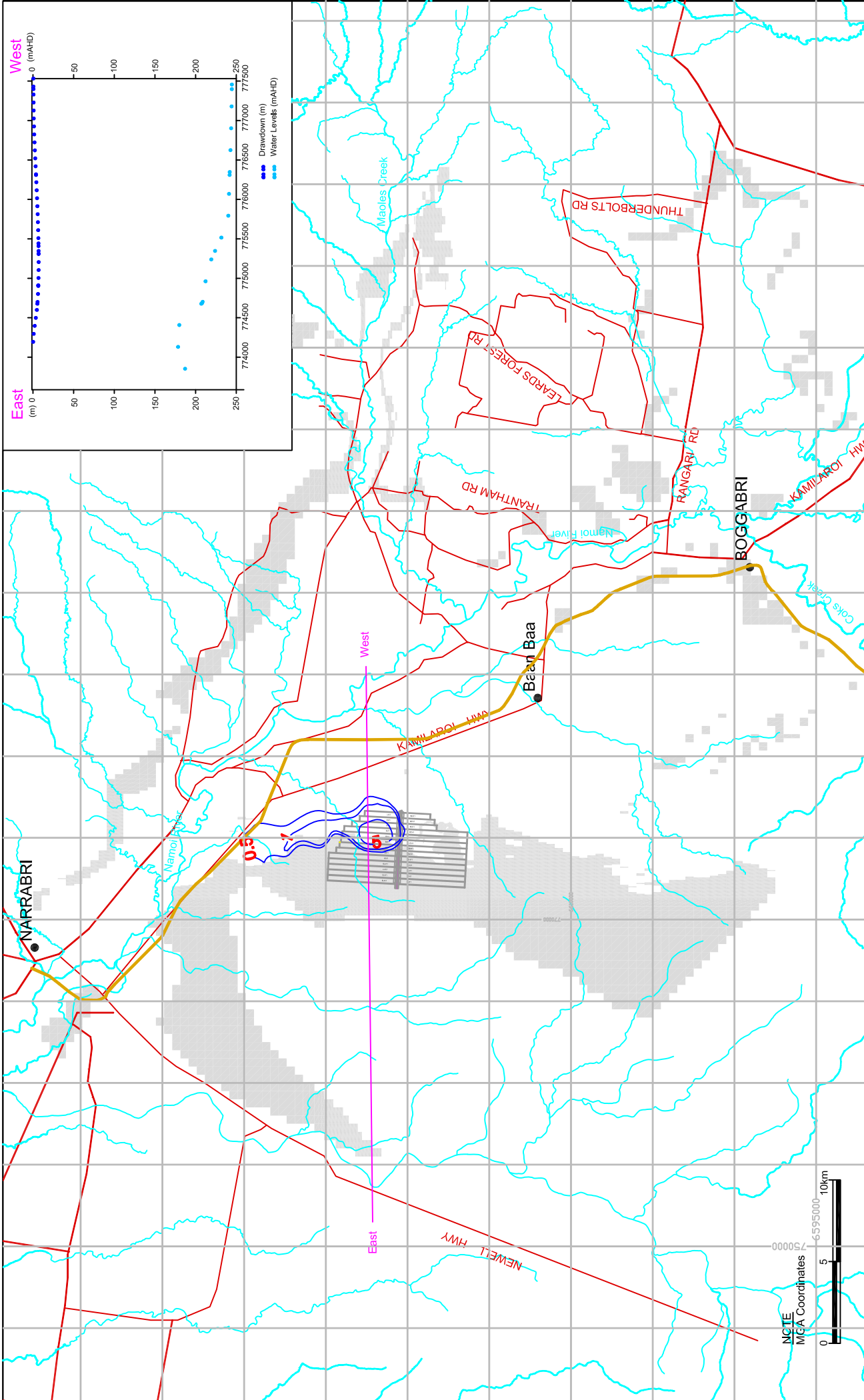
Figure 6.12



<b>Legend</b> Narrabri Underground Outline Roads or tracks Surface Water Drainage (Stream/Creek) Predicted Groundwater Drawdowns (m) Unsaturated area	Alluvium Margin Drawdown Cross Section Line	Date: 10 November 2009	Scale: As Shown	<b>Narrabri Coal Operations Pty Ltd</b>	
		Initials: TL	Job No: S28	Drawdown after 15 Year in Alluvium / Colluvium / Regolith (Layer 1)	
		Drawing No: S28-035d	Rev: D		

Figure 6.13





**Legend**

- Narrabri Underground Outline
- Roads or tracks
- Surface Water Drainage (Stream/Creek)
- 0.5
- 1
- Unsaturated area
- Alluvium Margin
- Drawdown Cross Section Line

**Date:** 10 November 2009 **Scale:** As Shown

**Initials:** TL **Job No:** S28

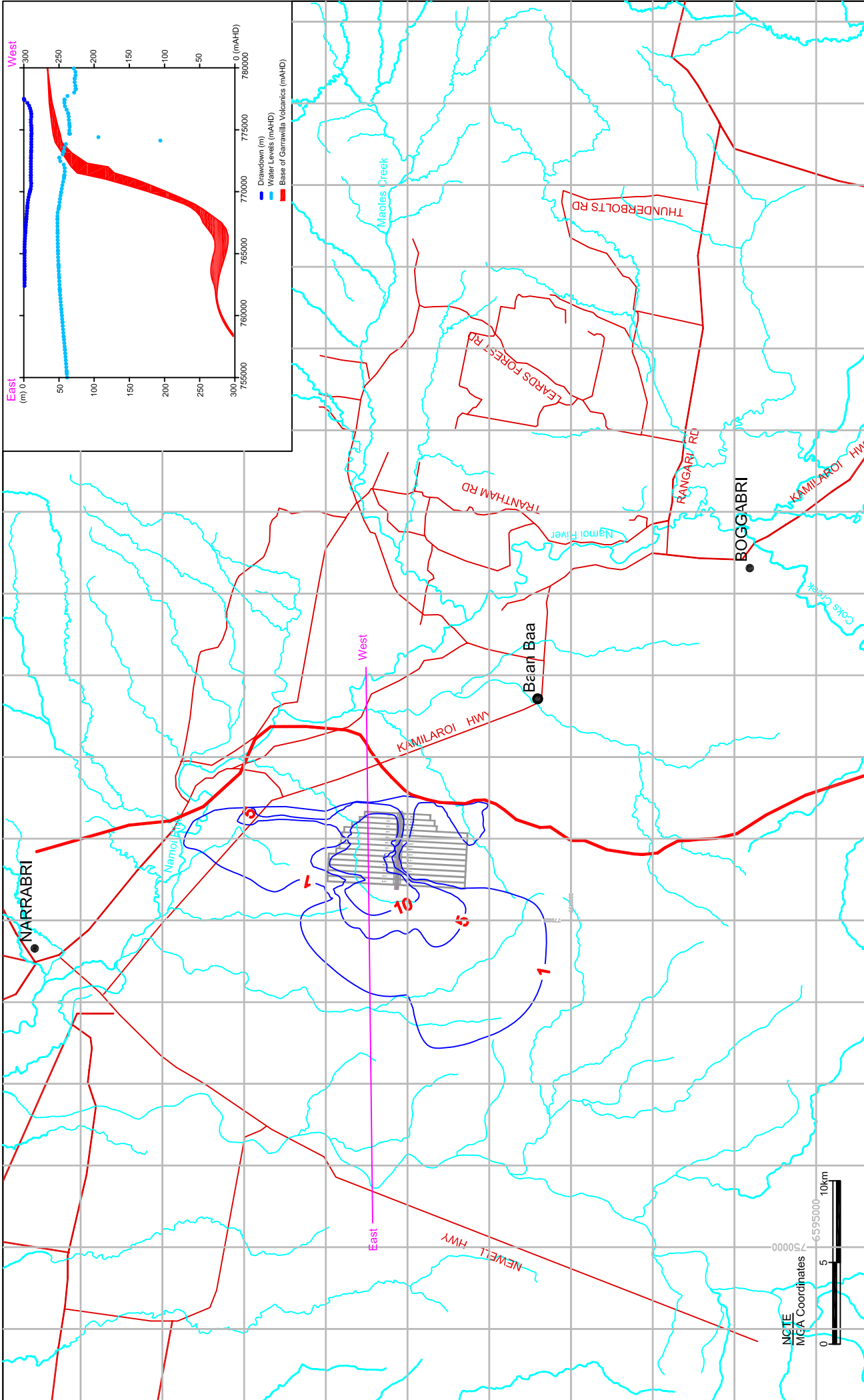
**Drawing No:** S28-036d **Rev:** D

**Narrabri Coal Operations Pty Ltd**

**Drawdown after 29 Year in Alluvium / Colluvium / Regolith (Layer 1)**

**Figure 6.14**

**aquaterra**



**Legend**

- Narrabri Underground Outline
- Roads or tracks
- Surface Water Drainage (Stream/Creek)
- 0.5 Predicted Groundwater Drawdowns (m)
- Garrawilla Volcanics Sub Crop Margin
- Drawdown Cross Section Line

**Date:** 10 November 2009 **Scale:** As Shown

**Initials:** TL **Job No:** S28

**Drawing No:** S28-044i **Rev:** 1

**Narrabri Coal Operations Pty Ltd**

**Drawdown after 15 Year in Garrawilla Volcanics (Layer 4)**

**Figure 6.15**

**aquaterra**