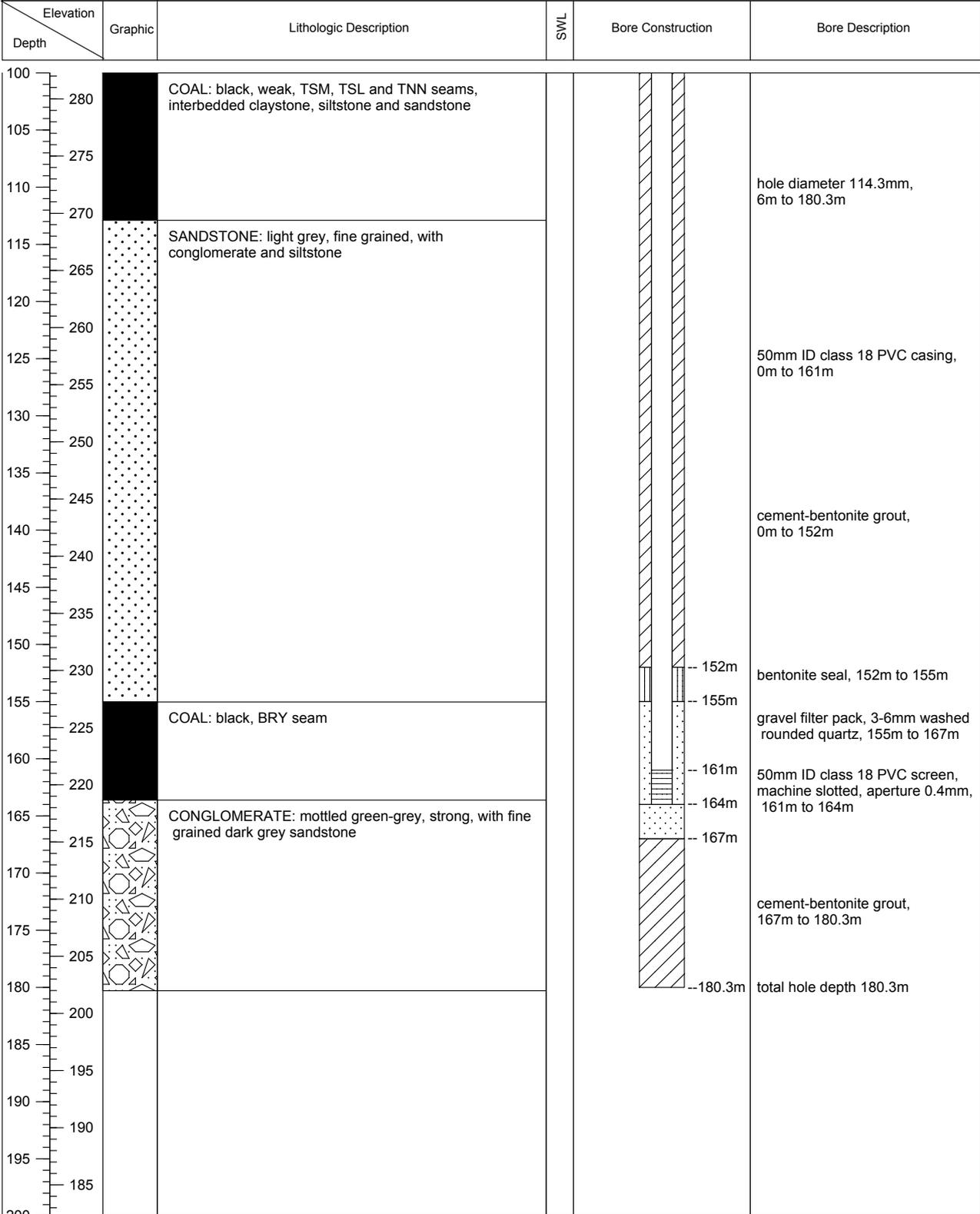




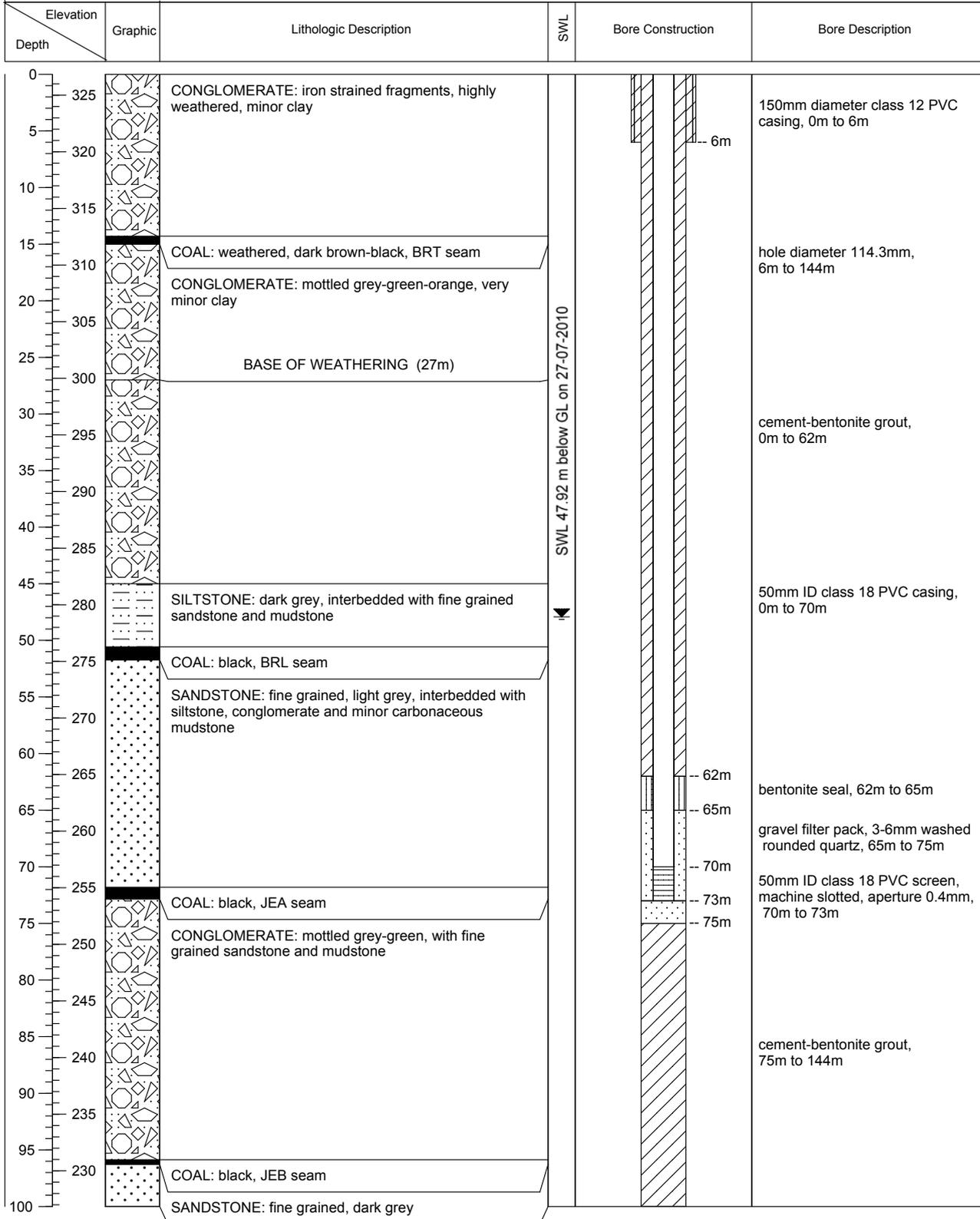
<b>Australasian Groundwater &amp; Environmental Consultants Pty Ltd</b> 36 Jeays St, Bowen Hills, Queensland 4006	<h2 style="margin: 0;">BOREHOLE LOG</h2>
	BOREHOLE ID: <b>MAC 1261</b> <span style="float: right;">Page 2 of 2</span>

PROJECT NO. <b>G1508</b>	LICENSED DRILLER: <b>Gordon Monkman</b>	DATUM: <b>MGA 1994 Z.56</b>
PROJECT NAME: <b>Maules Creek Mine</b>	DRILLING METHOD: <b>Hammer - 114.3mm</b>	GROUND LEVEL: <b>382.28 mAHD</b>
DATE: <b>16-07-2010</b>	DRILL RIG: <b>Rig 28</b>	TOP OF CASING LEVEL: <b>383.07 mAHD</b>
CONTRACTOR: <b>GOS Drilling</b>	COORDINATES: <b>226749.78 mE, 6614871.78mN</b>	LOGGED BY: <b>HJ</b>



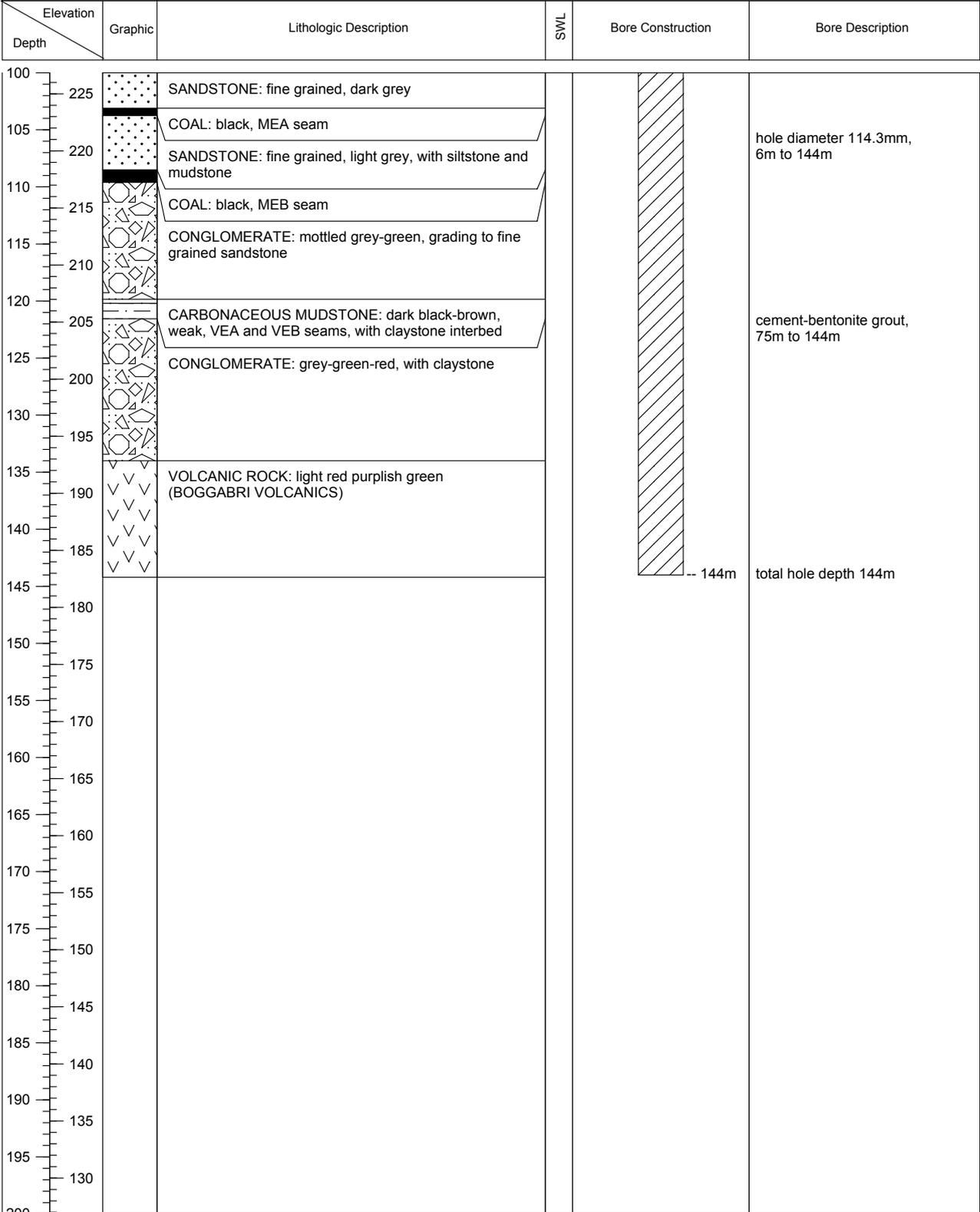
<b>Australasian Groundwater &amp; Environmental Consultants Pty Ltd</b> 36 Jeays St, Bowen Hills, Queensland 4006	BOREHOLE LOG	
	BOREHOLE ID: <b>MAC 1279</b>	Page 1 of 2

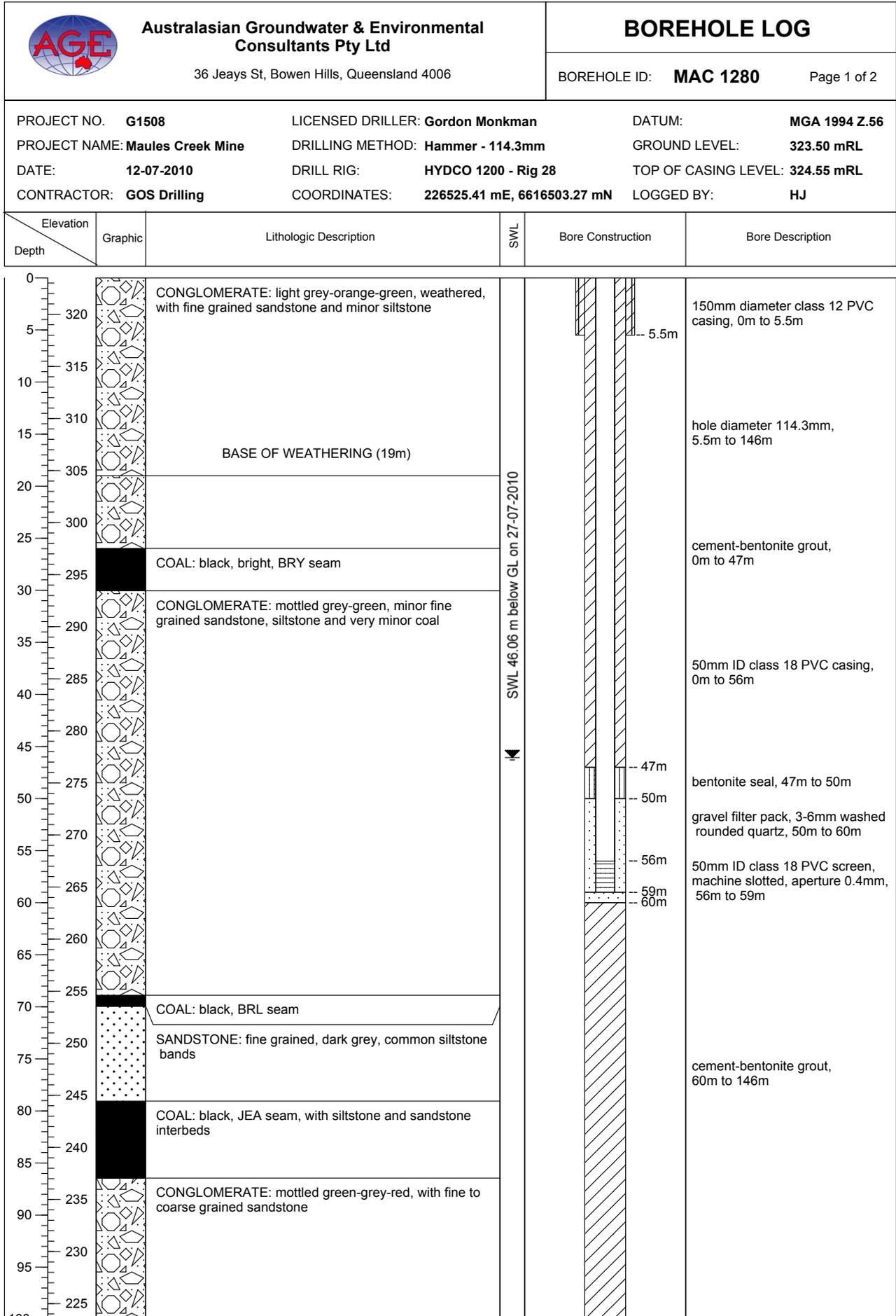
PROJECT NO. <b>G1508</b>	LICENSED DRILLER: <b>Gordon Monkman</b>	DATUM: <b>MGA 1994 Z.56</b>
PROJECT NAME: <b>Maules Creek Mine</b>	DRILLING METHOD: <b>Hammer - 150mm</b>	GROUND LEVEL: <b>326.85 mAHD</b>
DATE: <b>13-07-2010</b>	DRILL RIG: <b>HYDCO 1200 - Rig 28</b>	TOP OF CASING LEVEL: <b>327.76 mAHD</b>
CONTRACTOR: <b>GOS Drilling</b>	COORDINATES: <b>226446.41 mE, 6616311.99 mN</b>	LOGGED BY: <b>HJ</b>



<p><b>Australasian Groundwater &amp; Environmental Consultants Pty Ltd</b> 36 Jeays St, Bowen Hills, Queensland 4006</p>	<h2>BOREHOLE LOG</h2>	
	BOREHOLE ID: <b>MAC 1279</b>	Page 2 of 2

PROJECT NO. <b>G1508</b>	LICENSED DRILLER: <b>Gordon Monkman</b>	DATUM: <b>MGA 1994 Z.56</b>
PROJECT NAME: <b>Maules Creek Mine</b>	DRILLING METHOD: <b>Hammer - 150mm</b>	GROUND LEVEL: <b>326.85 mAHD</b>
DATE: <b>13-07-2010</b>	DRILL RIG: <b>HYDCO 1200 - Rig 28</b>	TOP OF CASING LEVEL: <b>327.76 mAHD</b>
CONTRACTOR: <b>GOS Drilling</b>	COORDINATES: <b>226446.41 mE, 6616311.99 mN</b>	LOGGED BY: <b>HJ</b>







 <b>Australasian Groundwater &amp; Environmental Consultants Pty Ltd</b> 36 Jeays St, Bowen Hills, Queensland 4006	<b>BOREHOLE LOG</b>	
	BOREHOLE ID: <b>MAC 1280</b>	Page 2 of 2

PROJECT NO. <b>G1508</b>	LICENSED DRILLER: <b>Gordon Monkman</b>	DATUM: <b>MGA 1994 Z.56</b>
PROJECT NAME: <b>Maules Creek Mine</b>	DRILLING METHOD: <b>Hammer - 114.3mm</b>	GROUND LEVEL: <b>323.50 mRL</b>
DATE: <b>12-07-2010</b>	DRILL RIG: <b>HYDCO 1200 - Rig 28</b>	TOP OF CASING LEVEL: <b>324.55 mRL</b>
CONTRACTOR: <b>GOS Drilling</b>	COORDINATES: <b>226525.41 mE, 6616503.27 mN</b>	LOGGED BY: <b>HJ</b>

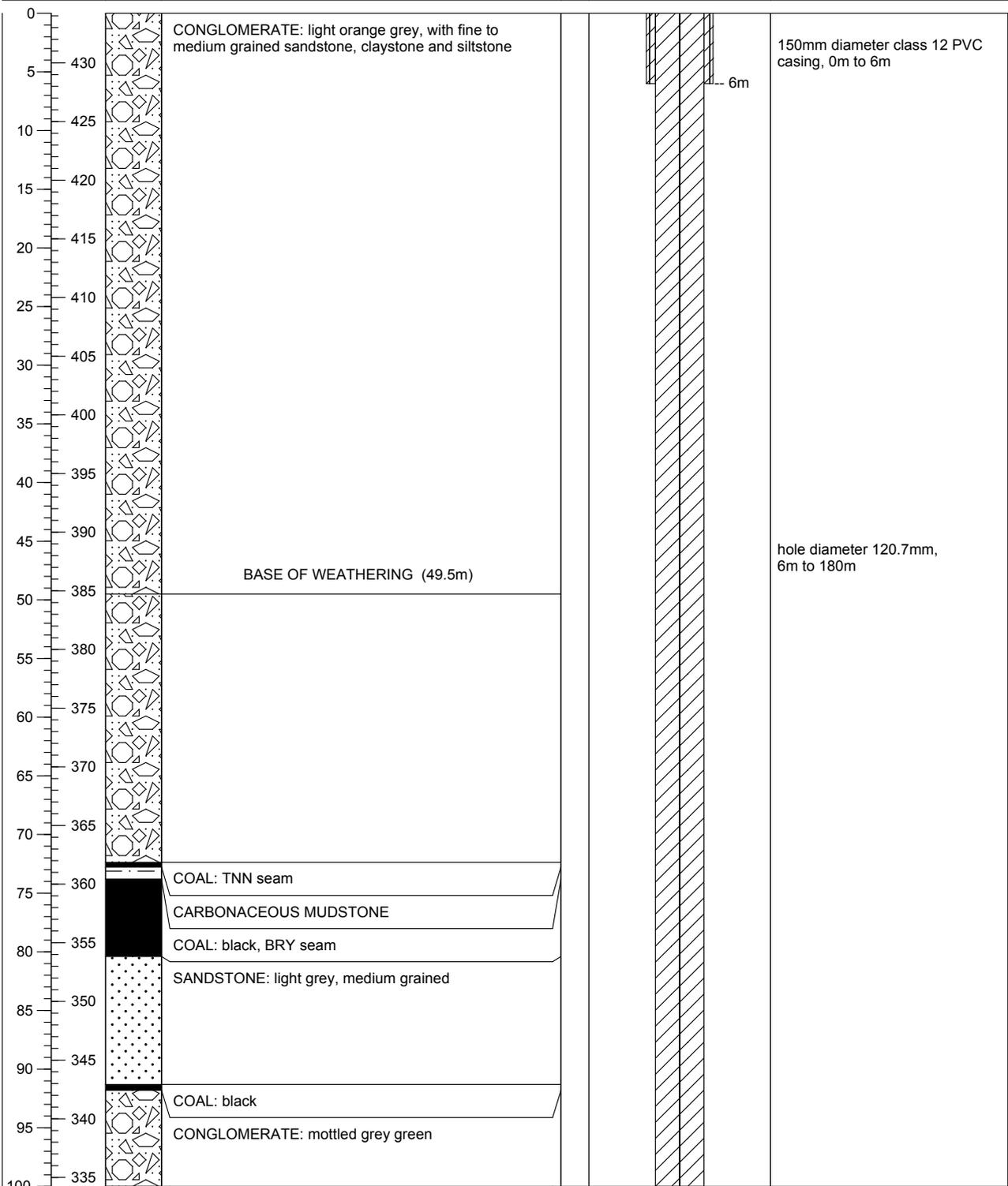
Elevation Depth	Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
100 220		CONGLOMERATE: mottled green-grey-red, with fine to coarse grained sandstone			hole diameter 114.3mm, 5.5m to 146m
105 215		COAL: black, JEA and MEA seams, with siltstone interbed			
110 210		SANDSTONE: coarse grained, light grey, minor carbonaceous siltstone			
115 205		COAL: black, MEB seam			
120 200		CONGLOMERATE: mottled green-grey-red, with siltstone			
125 195		COAL: black, VEA, VEB and NAG seams, interbeds of fine grained sandstone and siltstone			
130 190		SANDSTONE: mottled grey-white, with conglomerate			
135 185					
140 180		VOLCANIC ROCK: light red-purple (BOGGABRI VOLCANICS)			
145 175					
150 170					
155 165					
160 160					
165 155					
170 150					
175 145					
180 140					
185 135					
190 130					
195 125					
200					

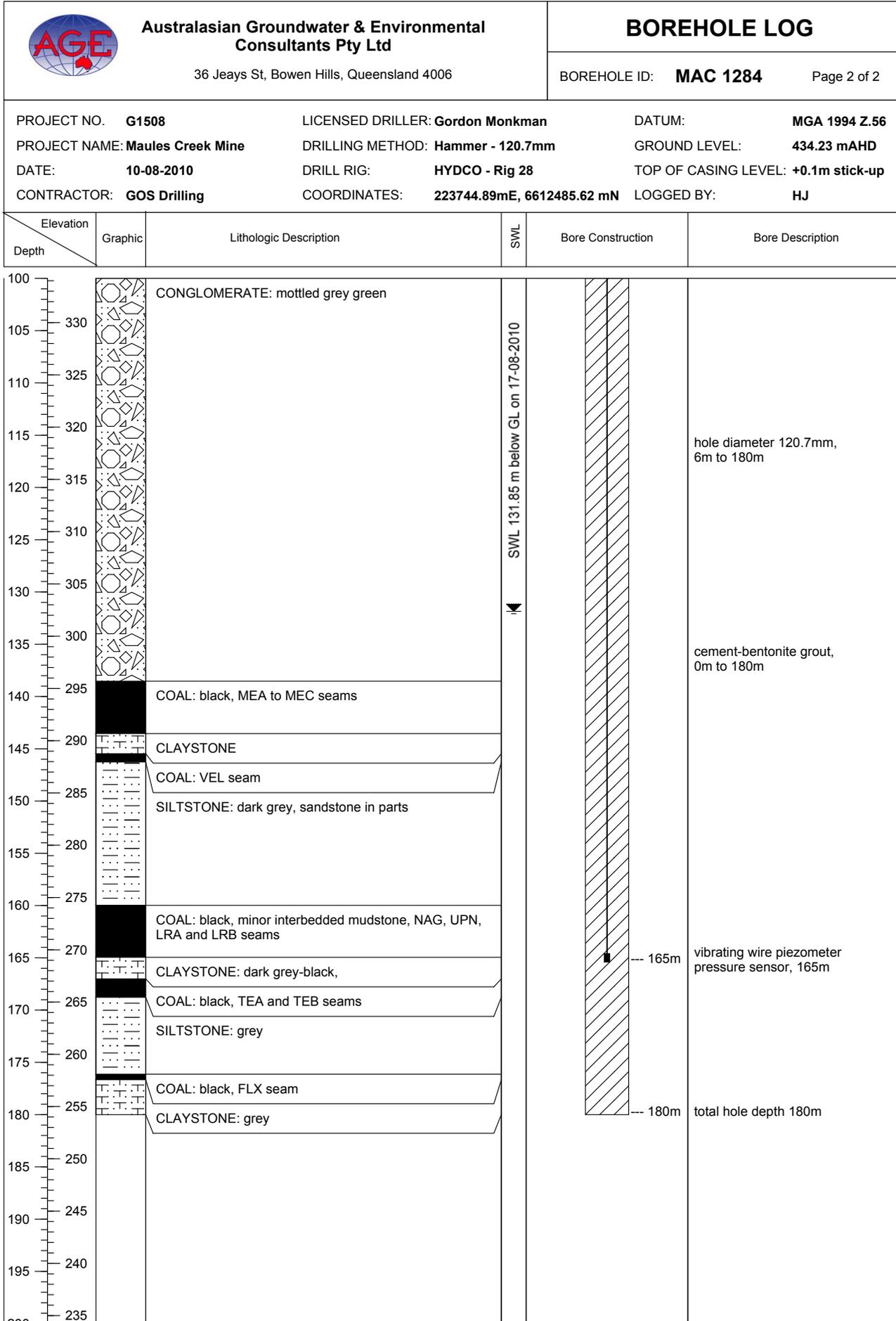
Elevation		Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
Depth						
0	315		CONGLOMERATE: light greyish brownish, weathered, minor sandstone	SWL 40.18 m below GL on 27-07-2010		150mm diameter class 12 PVC casing, 0m to 6m  hole diameter 114.3mm, 6m to 91m  50mm ID class 18 PVC casing, 0m to 64m  cement-bentonite grout, 0m to 55m  bentonite seal, 55m to 58m  gravel filter pack, 3-6mm washed rounded quartz, 58m to 66m  50mm ID class 18 PVC screen, machine slotted, aperture 0.4mm, 61m to 64m  cement-bentonite grout, 66m to 91m  total hole depth 91m
5	310		COAL: black, moderately weathered, weak, BRT seam			
10	305		BASE OF WEATHERING (12.28m)			
15	300		SANDSTONE: fine grained, light grey, minor siltstone			
20	295		COAL: black, weak, BRL seam			
25	290		CONGLOMERATE: light grey green, with fine to coarse sandstone			
30	285		COAL: black, weak, JEB seam			
35	280		CONGLOMERATE: light grey green, with fine grained sandstone and very minor claystone			
40	275		CARBONACEOUS CLAYSTONE: dark grey, with sandstone and conglomerate interbeds between seams			
45	270					
50	265					
55	260		SANDSTONE: light grey, fine to medium grained, minor siltstone or claystone			
60	255		COAL: black, weak, VEA to VEC seams, with claystone and siltstone interbeds			
65	250					
70	245		SANDSTONE: light grey, fine to medium grained, with claystone and siltstone			
75	240					
80	235		VOLCANIC ROCK: light purple/green greyish (BOGGABRI VOLCANICS)			
85	230					
90	225					
95	220					

<p><b>Australasian Groundwater &amp; Environmental Consultants Pty Ltd</b> 36 Jeays St, Bowen Hills, Queensland 4006</p>	<h2>BOREHOLE LOG</h2>	
	BOREHOLE ID: <b>MAC 1284</b>	Page 1 of 2

PROJECT NO. <b>G1508</b>	LICENSED DRILLER: <b>Gordon Monkman</b>	DATUM: <b>MGA 1994 Z.56</b>
PROJECT NAME: <b>Maules Creek Mine</b>	DRILLING METHOD: <b>Hammer - 120.7mm</b>	GROUND LEVEL: <b>434.23 mAHD</b>
DATE: <b>10-08-2010</b>	DRILL RIG: <b>HYDCO - Rig 28</b>	TOP OF CASING LEVEL: <b>+0.1m stick-up</b>
CONTRACTOR: <b>GOS Drilling</b>	COORDINATES: <b>223744.89mE, 6612485.62 mN</b>	LOGGED BY: <b>HJ</b>

Elevation Depth	Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
--------------------	---------	------------------------	-----	-------------------	------------------







---

## **APPENDIX 3**

### **Bore Census Details**

---



**BORE CENSUS SUMMARY**

<b>PROPERTY NAME</b>	<b>Tralee</b>	<b>Tralee</b>					
<b>Land Owner</b>	<b>Watson</b>	<b>Watson</b>	<b>Aston</b>	<b>Aston</b>	<b>Aston</b>	<b>Aston</b>	<b>Morse</b>
Registered Bore Works Number	<b>GW003483</b>	<b>GW003478</b>	<b>GW008221</b>	<b>GW002748</b>	<b>GW0028894</b>	<b>GW028893</b>	<b>GW001869</b>
Easting		224075					
Northing		6618523					
<b>WATER LEVEL</b>							
Water Depth Below Ref.	23.6m	25.39m		21.4m	20.74m	Hole closed off	
Date of Measurement	6/01/2011	6/01/2011		5/01/2011	5/01/2011	5/01/2011	
Description of Ref. eg top casing							
Height of Ref. aGL	75cm	10cm		50cm	50cm	80cm	
<b>PUMPING DETAILS</b>							
Bore in Use	Not in use	Yes	Not in use		Yes	Yes	
Pumping Equipment / Type / Model	Windmill	Small electric			Windmill	Windmill	
Power Supply		Mains					
Pump Suction Setting							
Pumping Rate / Duration							
Daily Pumping Period		Anytime					
<b>WATER USAGE</b>							
Primary Use of Bore	Stock if used	Domestic and stock		Stock	Stock	Stock water	
No. Stock on Bore		80 Breeders		Approx 80	100 cows		
<b>DISTRIBUTION</b>							
Storage Type / Volume	Tanks and troughs	Various tanks		Tank 15,000ltrs	15,000ltrs	25,000ltr tank	
No. Of Troughs		8 plus			2 troughs	Currently one	
Trough Description / Size		4 metres, 25cm deep			4mts long	6mts long	
<b>COMMENTS</b>							
Comments	has not been used over past eight years		Currently can not locate - not in use, never been used (M. Nott)	Currently not used			No access, passing comment made to others by Mr. Morse that there is no water there



**BORE CENSUS SUMMARY**

<b>PROPERTY NAME</b>							
<b>Land Owner</b>	<b>Younger</b>	<b>Finlay</b>	<b>Morris</b>	<b>Morris</b>	<b>Nott</b>	<b>Nott</b>	<b>Murphy</b>
Registered Bore Works Number	<b>GW003466</b>	<b>GW003496</b>	<b>GW020607</b>	<b>GW900043</b>	<b>GW003489</b>	<b>GW002799</b>	<b>GW006567</b>
Easting	226320				222561		221452
Northing	6618441				6619070		6618716
<b>WATER LEVEL</b>							
Water Depth Below Ref.	9.81m				21.21m		19.38m
Date of Measurement	6/01/2011				6/01/2011		6/01/2011
Description of Ref. eg top casing							
Height of Ref. aGL	45cm				5cm		75cm
<b>PUMPING DETAILS</b>							
Bore in Use	No				Domestic and stock		No longer in use
Pumping Equipment / Type / Model	Windmill				Small electric		
Power Supply					Mains		
Pump Suction Setting							
Pumping Rate / Duration							
Daily Pumping Period					Anytime		
<b>WATER USAGE</b>							
Primary Use of Bore	Stock if used				Domestic and stock		Stock if used
No. Stock on Bore					200 head		
<b>DISTRIBUTION</b>							
Storage Type / Volume					Tanks and troughs		Dam and troughs
No. Of Troughs							
Trough Description / Size							
<b>COMMENTS</b>							
Comments	Have never been required to hook it up	No longer there - Bore has been backfilled	To wet to get to, currently not in use	To wet to get to, currently not used	Supply the whole farm through drought	Michael Nott said bore was no longer there	

**BORE CENSUS SUMMARY**

<b>PROPERTY NAME</b>			<b>Onavale</b>	<b>Oakleigh</b>	
<b>Land Owner</b>	<b>Murphy</b>	<b>Murphy</b>	<b>Brennan</b>	<b>Brennan</b>	<b>NSW State Forest</b>
<i>Registered Bore Works Number</i>	<b>GW002789</b>	<b>GW002831</b>	<b>GW000583</b>	<b>GW008255</b>	<b>GW053825</b>
<i>Easting</i>		221313	234485	233431	
<i>Northing</i>		6620124	6616583	6617752	
<b>WATER LEVEL</b>					
<i>Water Depth Below Ref.</i>		19.46m	21.21m	7.8m	13.46m
<i>Date of Measurement</i>		6/01/2011	5/01/2011	5/01/2011	5/01/2011
<i>Description of Ref. eg top casing</i>					
<i>Height of Ref. aGL</i>		80cm	90cm	30cm	25cm
<b>PUMPING DETAILS</b>					
<i>Bore in Use</i>		Yes/no	Not at the moment	Not in use	Currently not in use
<i>Pumping Equipment / Type / Model</i>		Windmill	Windmill		
<i>Power Supply</i>					
<i>Pump Suction Setting</i>					
<i>Pumping Rate / Duration</i>					
<i>Daily Pumping Period</i>					
<b>WATER USAGE</b>				Not in use	
<i>Primary Use of Bore</i>		Stock	Stock		Currently not in use
<i>No. Stock on Bore</i>		No stock at property			
<b>DISTRIBUTION</b>				Not in use	
<i>Storage Type / Volume</i>		Tank and dam level	Farm dam, not sure on		
<i>No. Of Troughs</i>					
<i>Trough Description / Size</i>					
<b>COMMENTS</b>					
<i>Comments</i>	No longer exists		Will look to use in future for stock and farming	Thought about setting it up for stock	GW00018 is next to bore

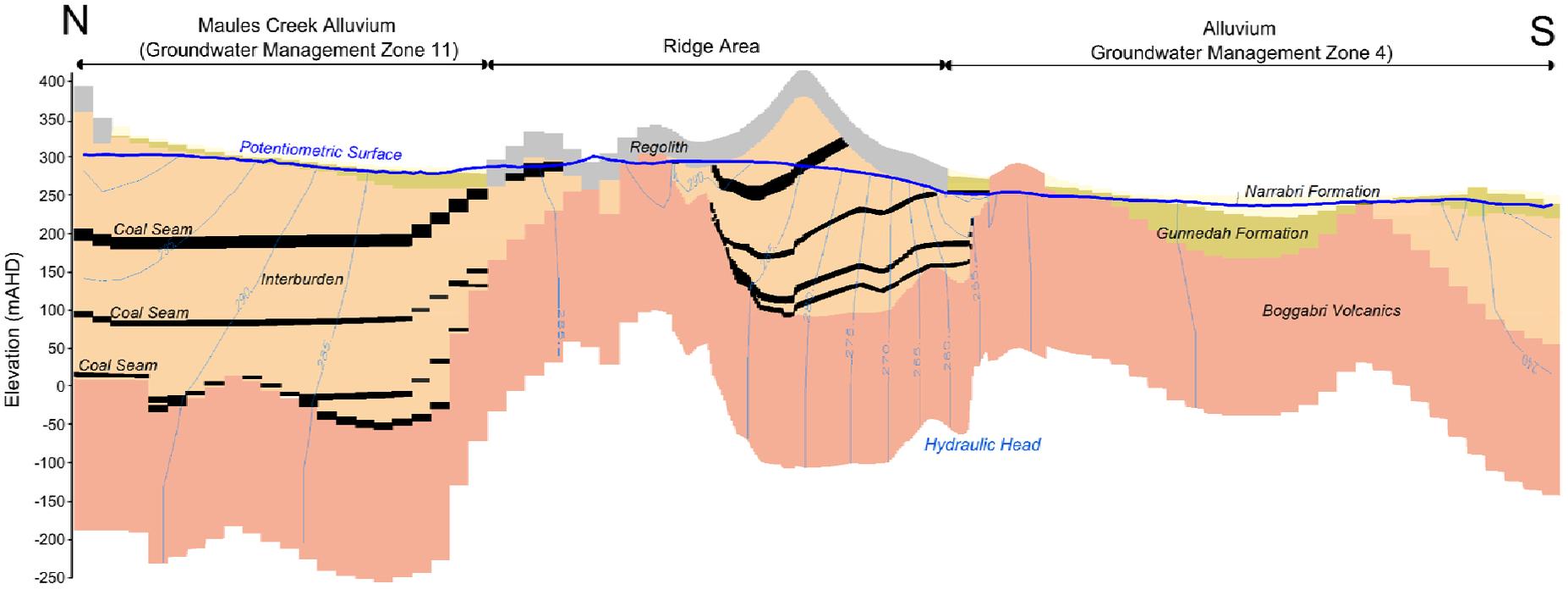


---

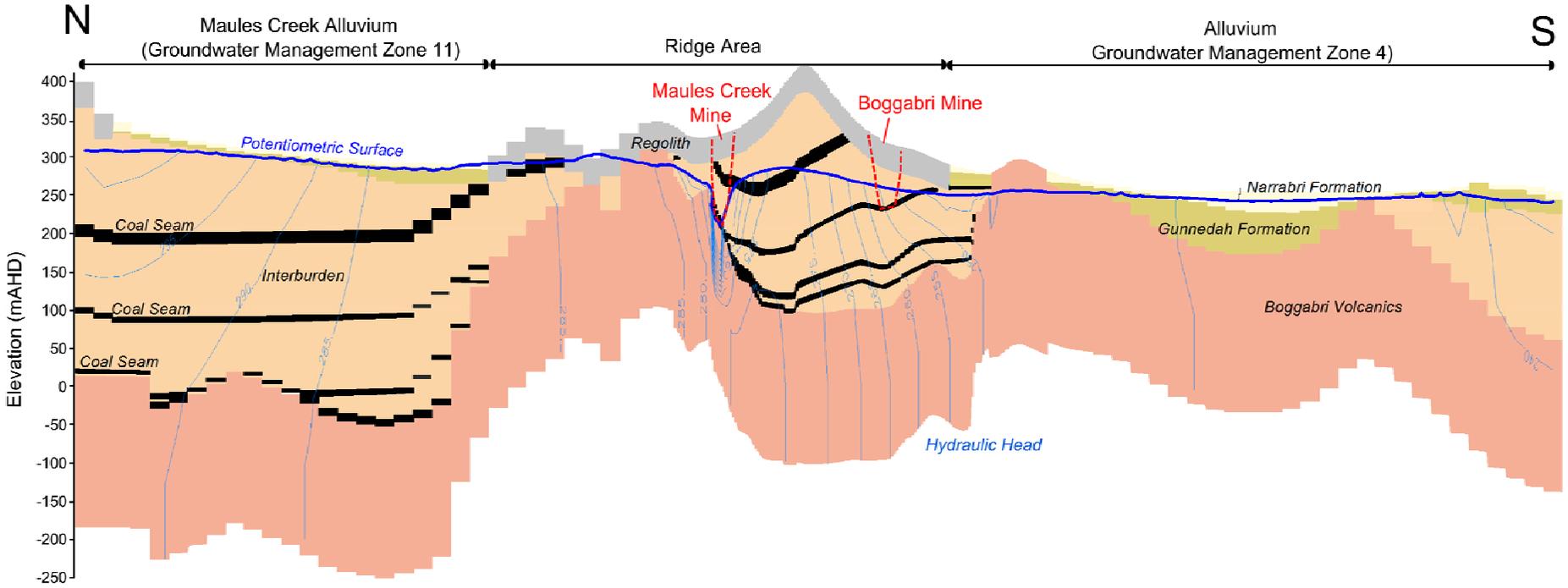
## **APPENDIX 4**

### **Model Cross Sections**

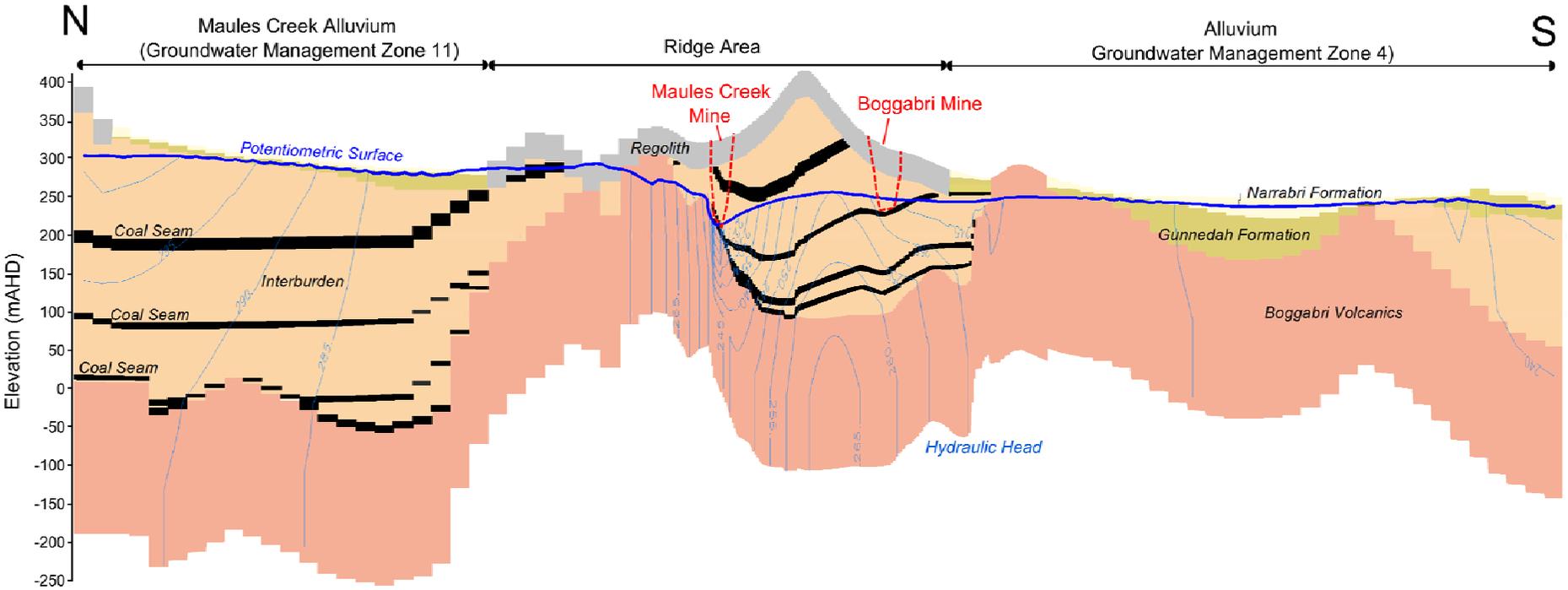
---



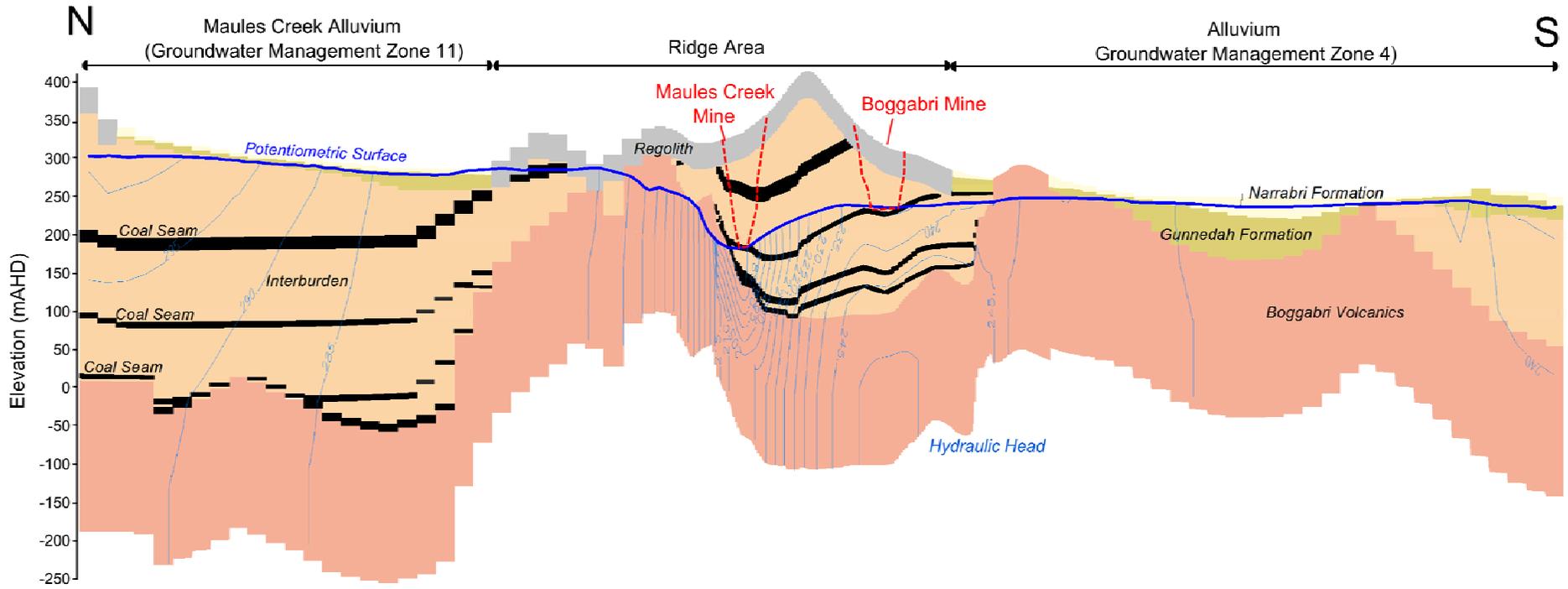
Cross Section A4.1 - N-S - Groundwater Levels - Steady State



**Cross Section A4.2 - N-S - Groundwater Levels - Year 1**

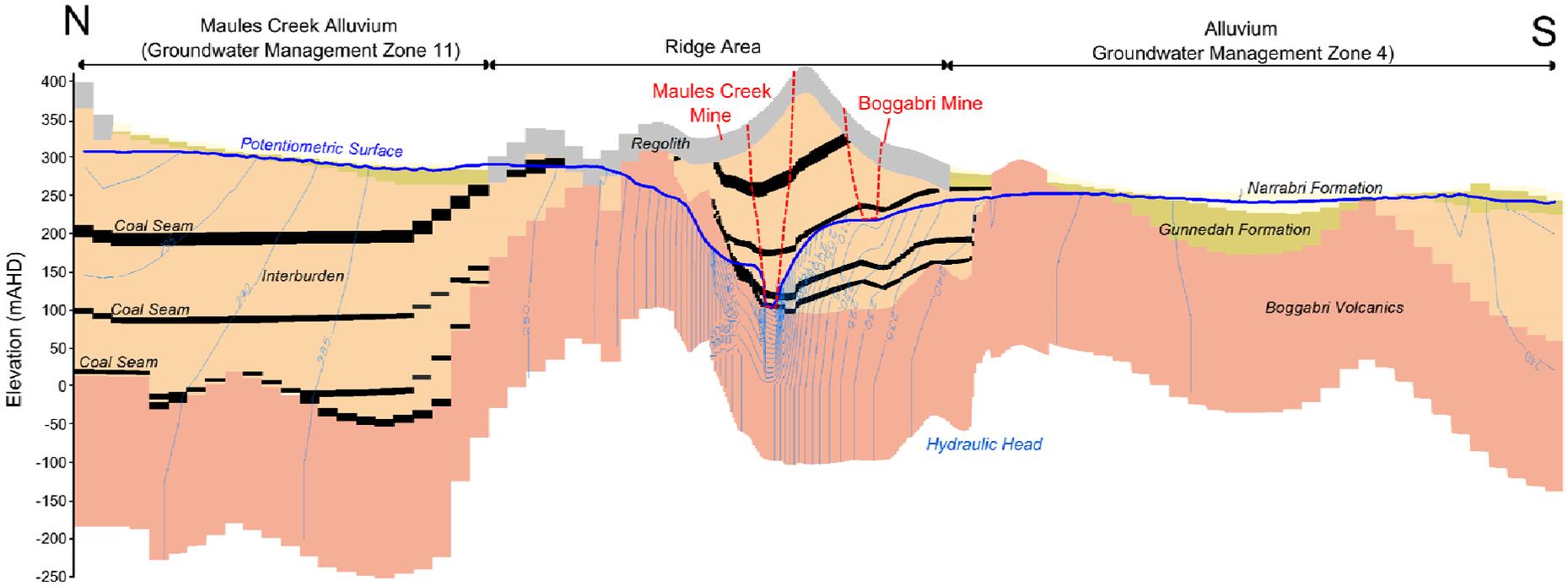


Cross Section A4.3 - N-S - Groundwater Levels - Year 5

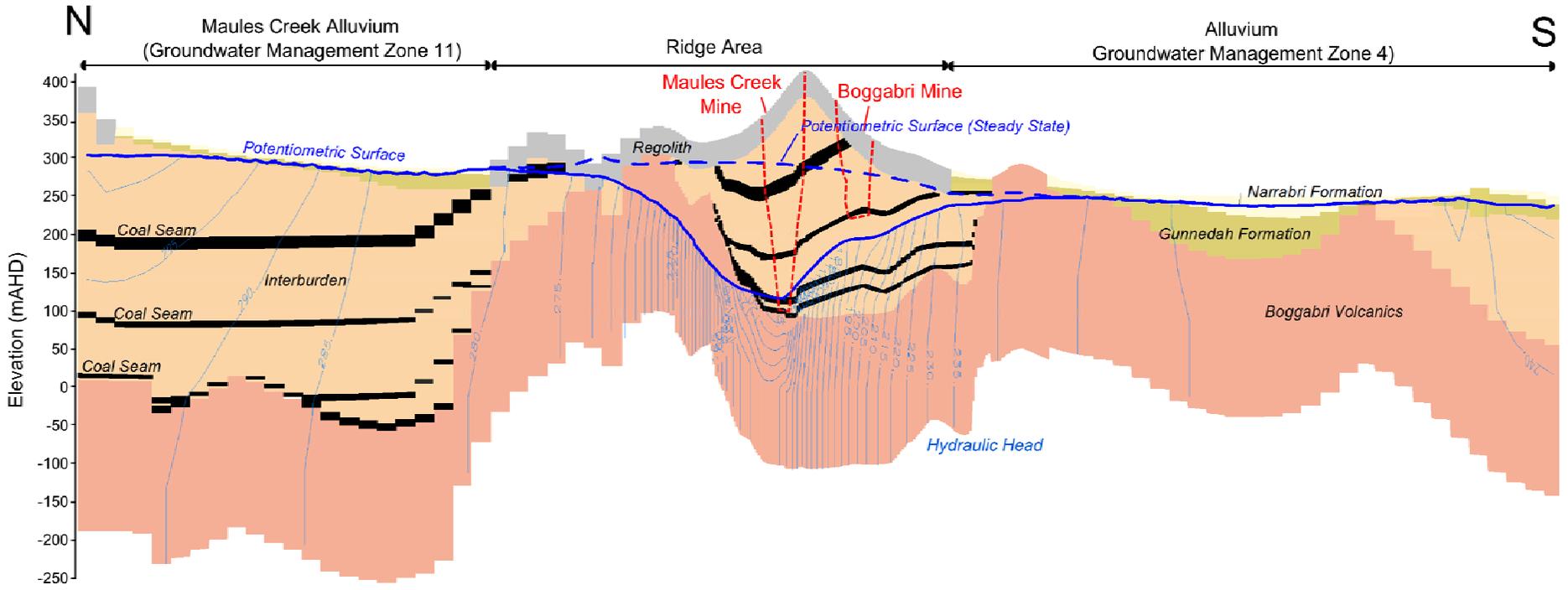


Cross Section A4.4 - N-S - Groundwater Levels - Year 10

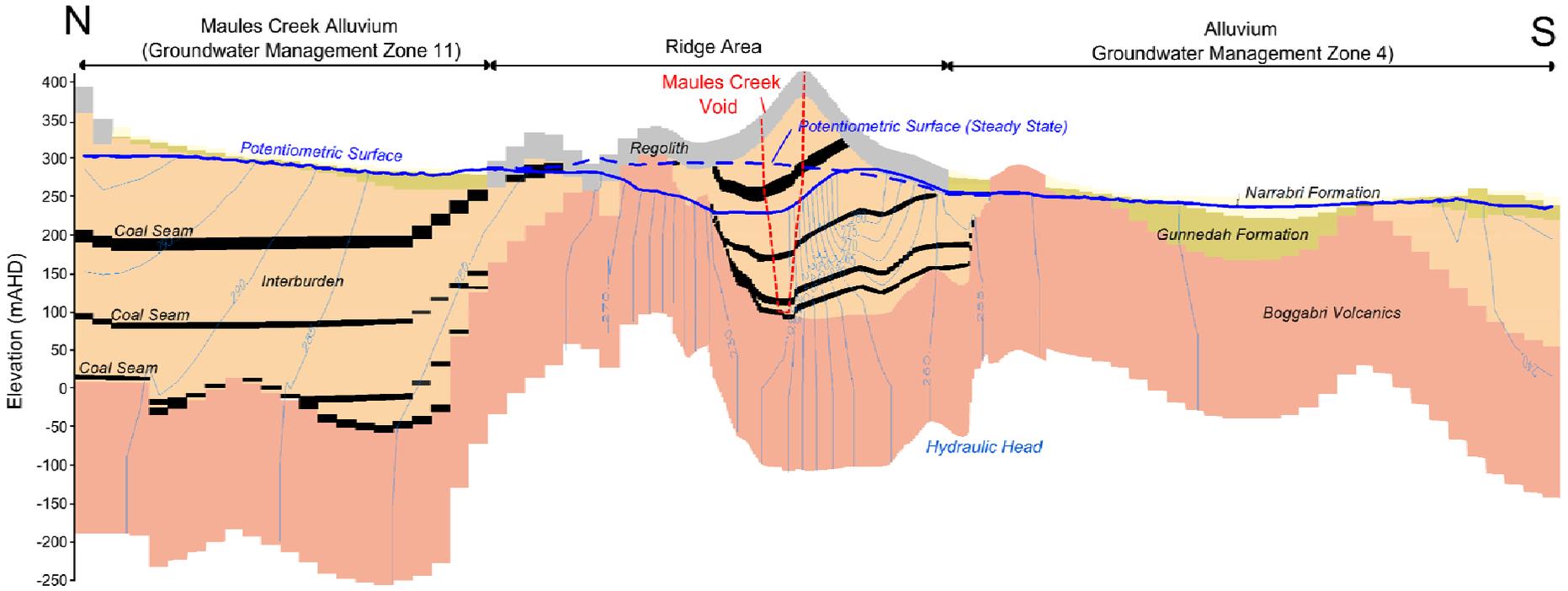




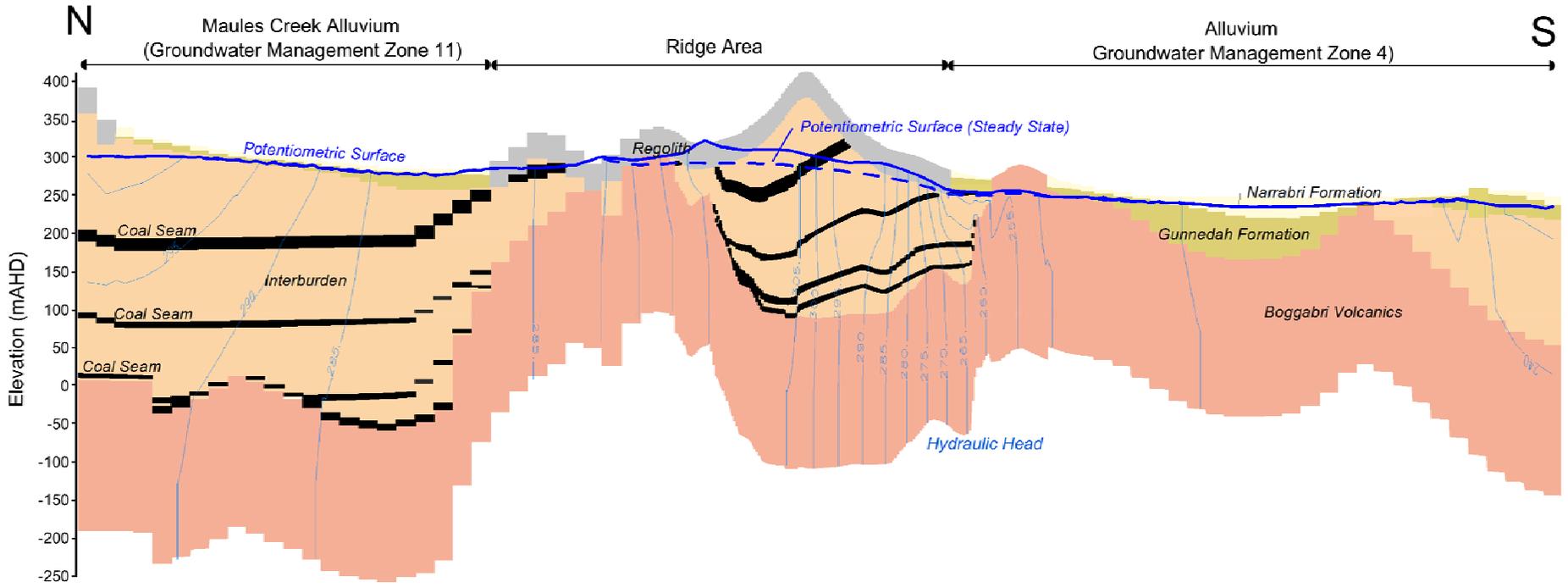
Cross Section A4.5 - N-S - Groundwater Levels - Year 15



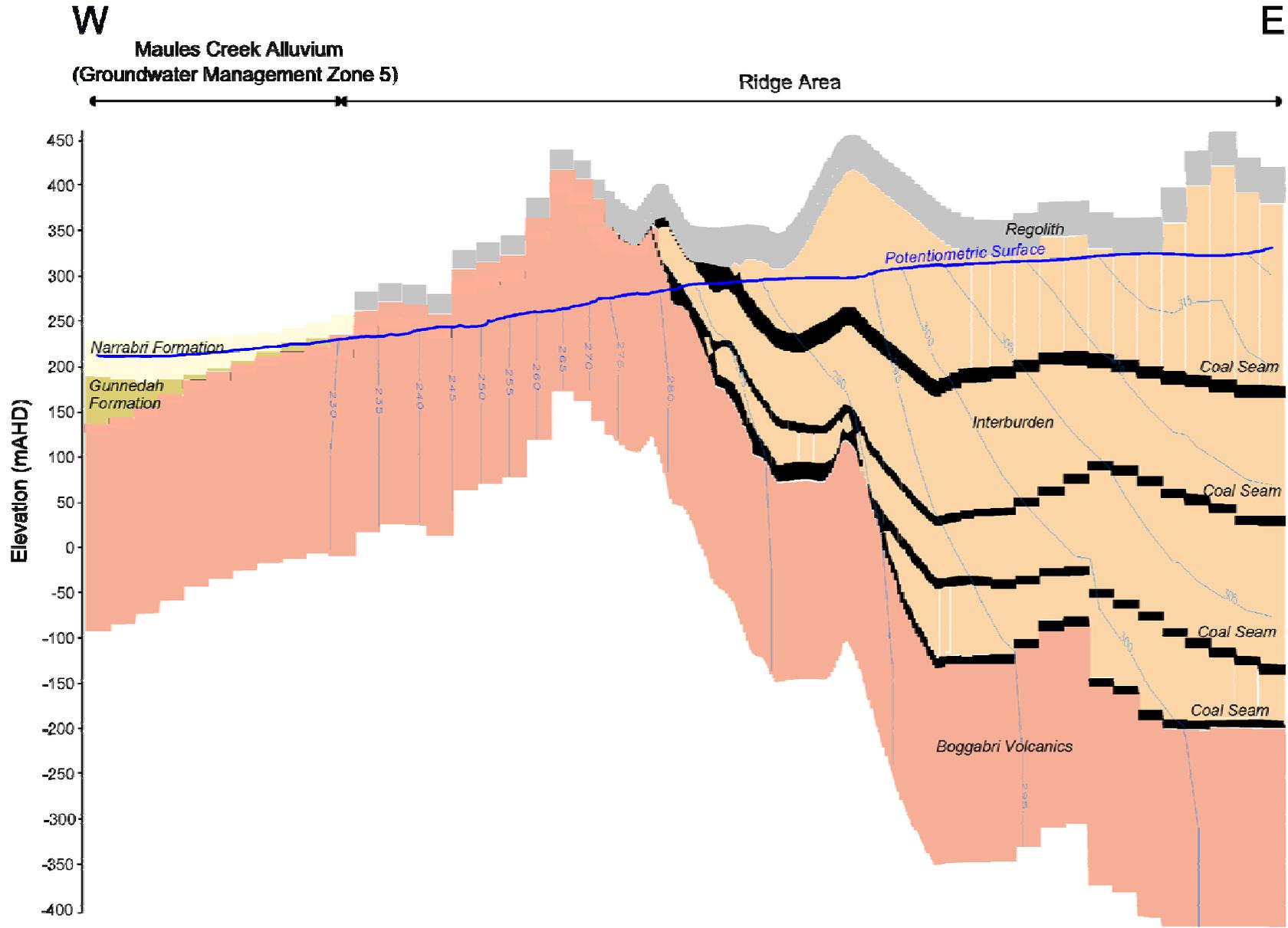
**Cross Section A4.6 - N-S - Groundwater Levels - Year 21**



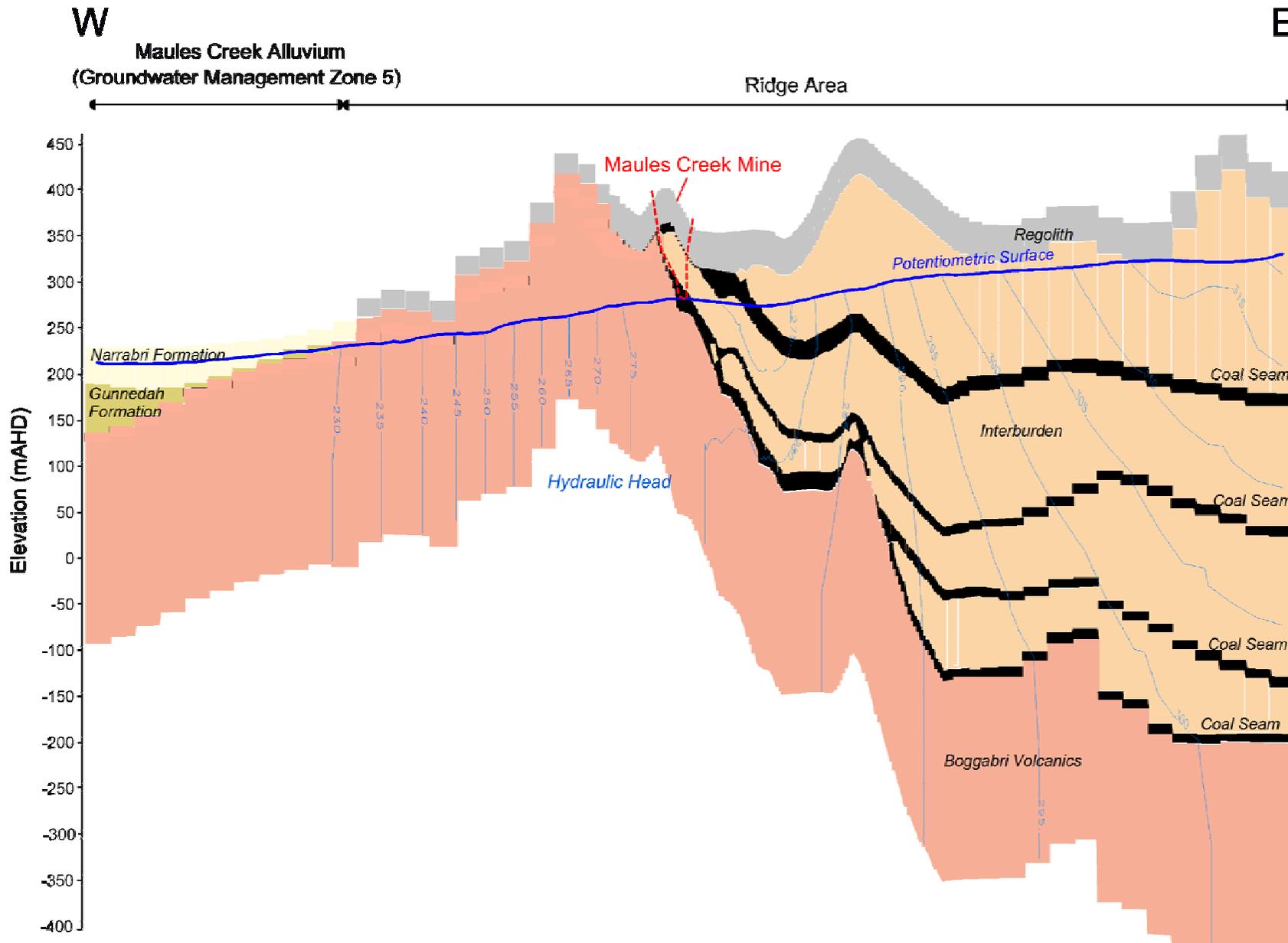
Cross Section A4.7 - N-S - Groundwater Levels - Recovered Heads with Void



**Cross Section A4.8 - N-S - Groundwater Levels - Recovered Heads with Backfill**

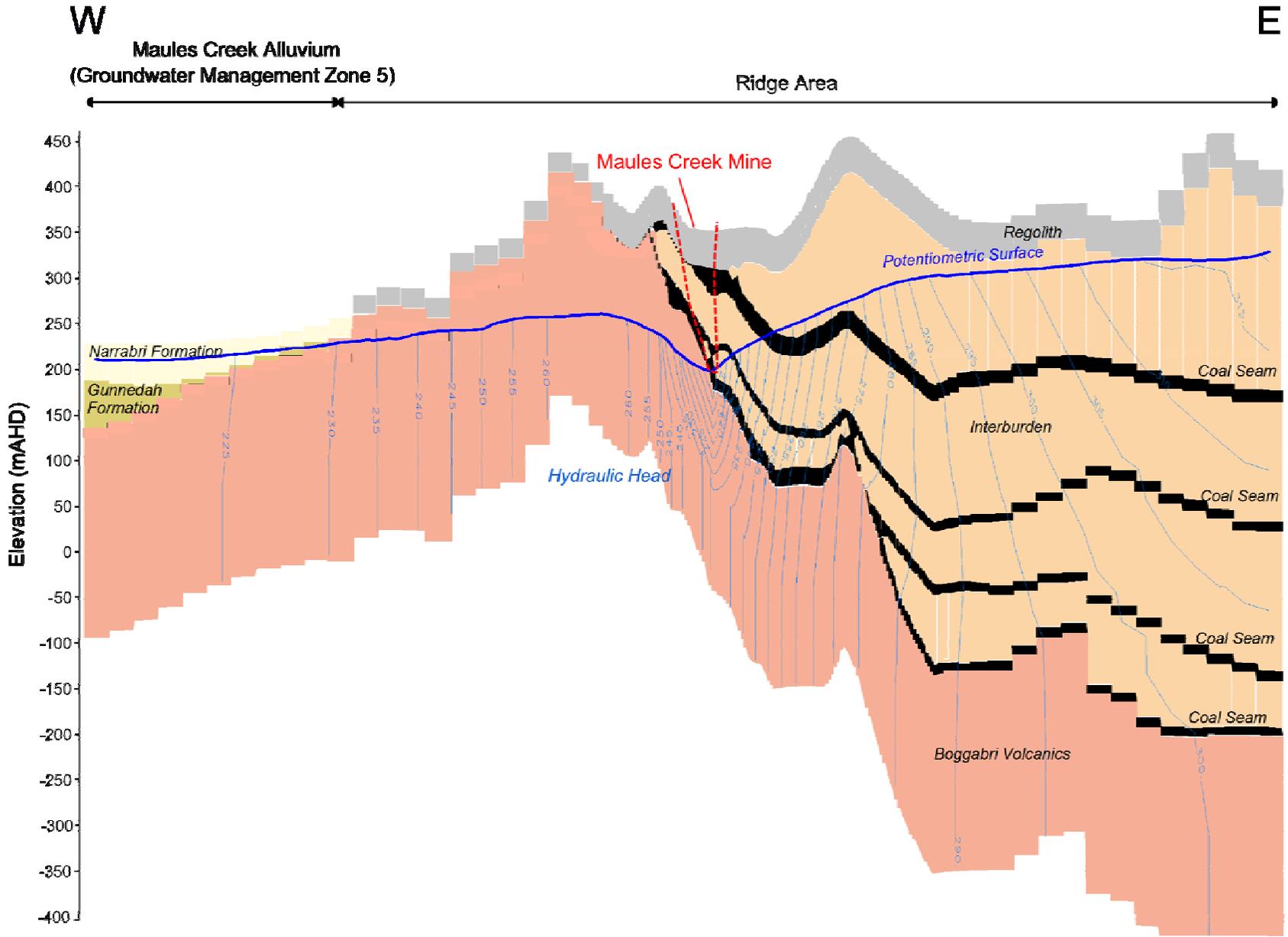


Cross Section A4.9 - W-E - Groundwater Levels - Steady State



Cross Section A4.10 - W-E - Groundwater Levels - Year 1





Cross Section A4.11 - W-E - Groundwater Levels - Year 5