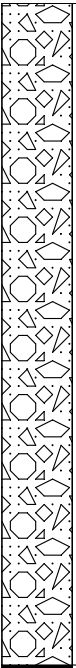
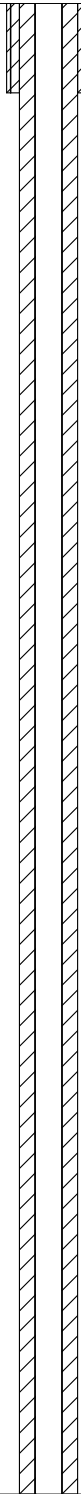


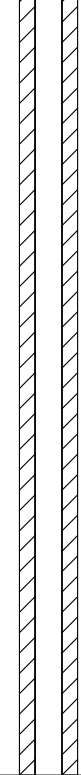

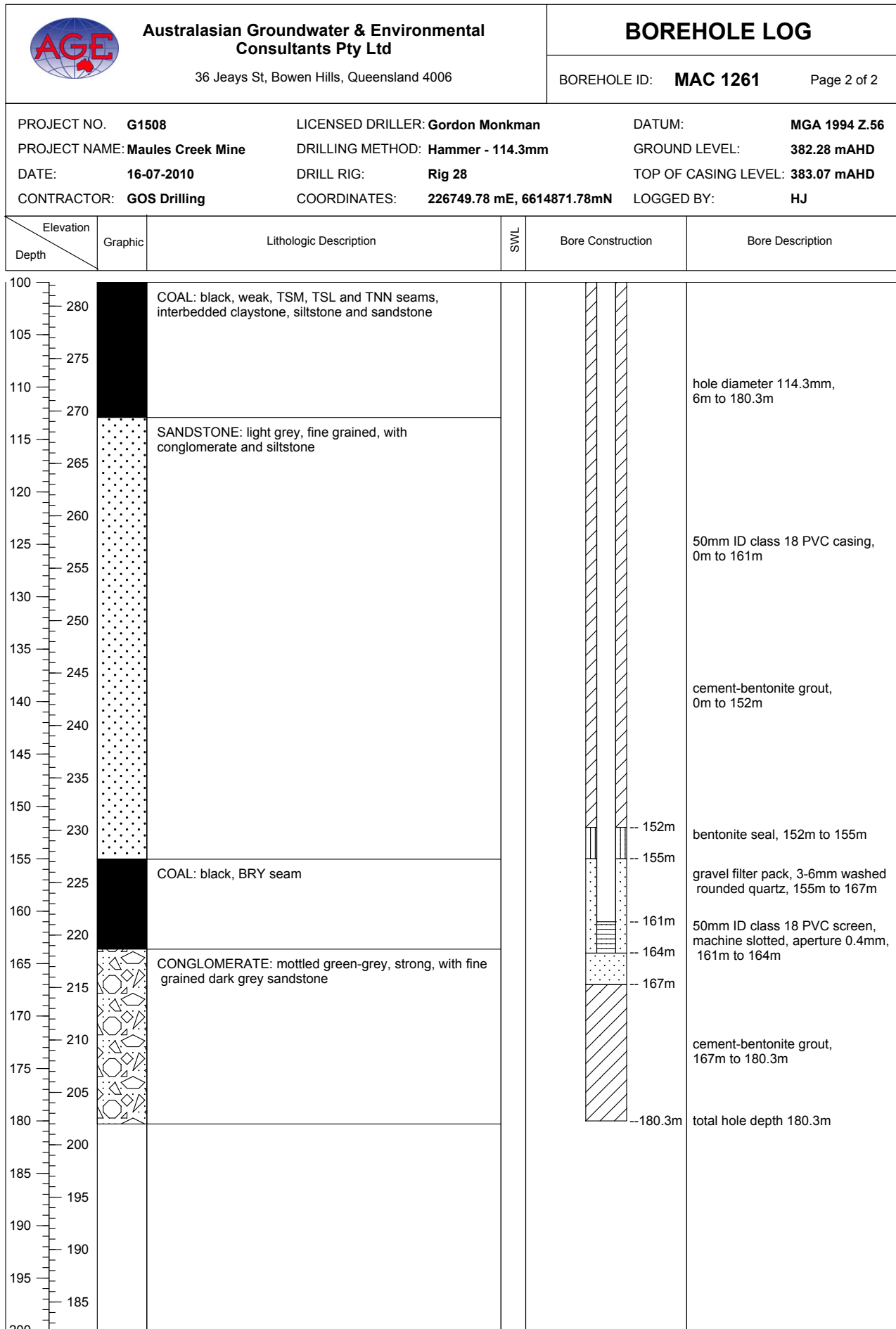
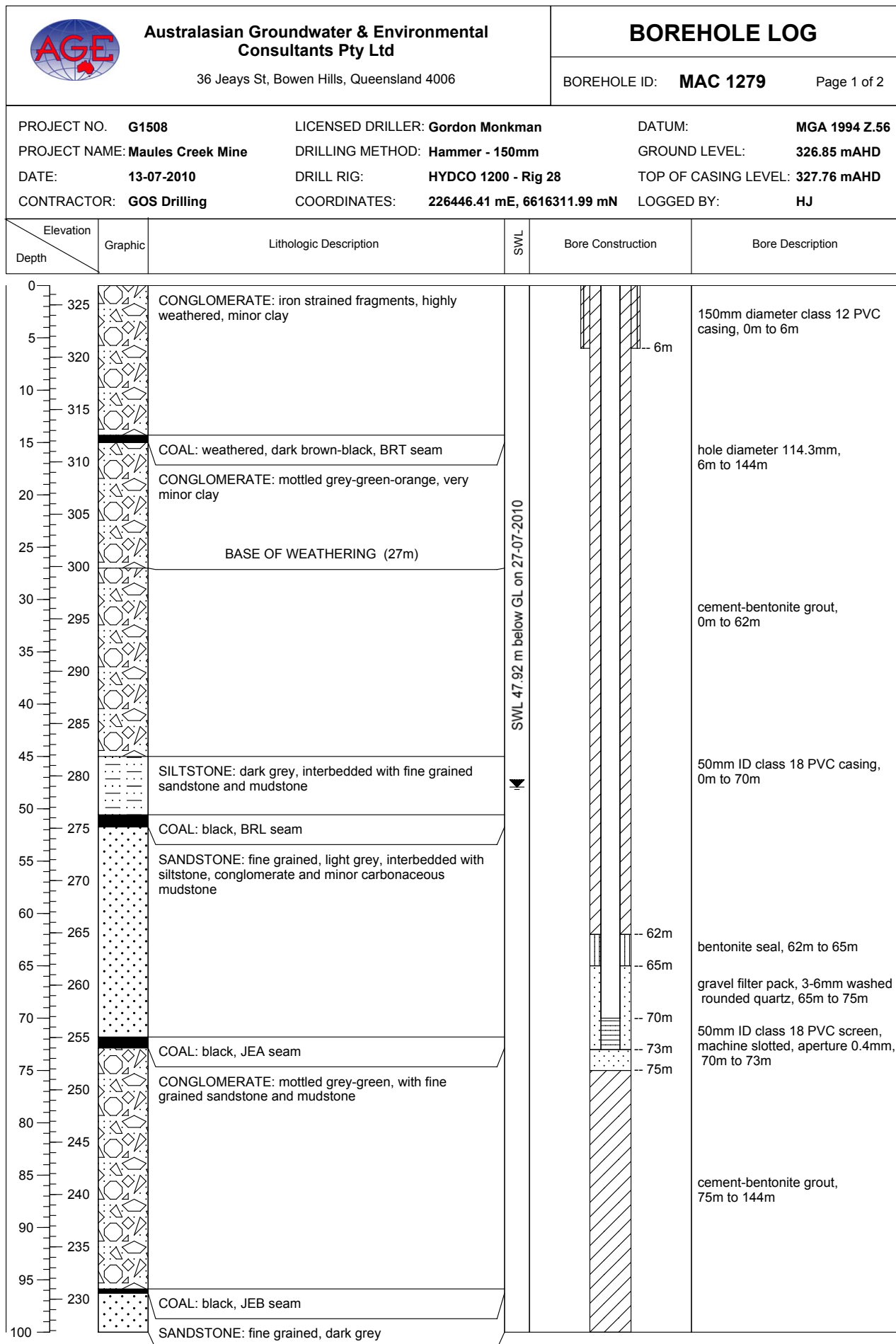













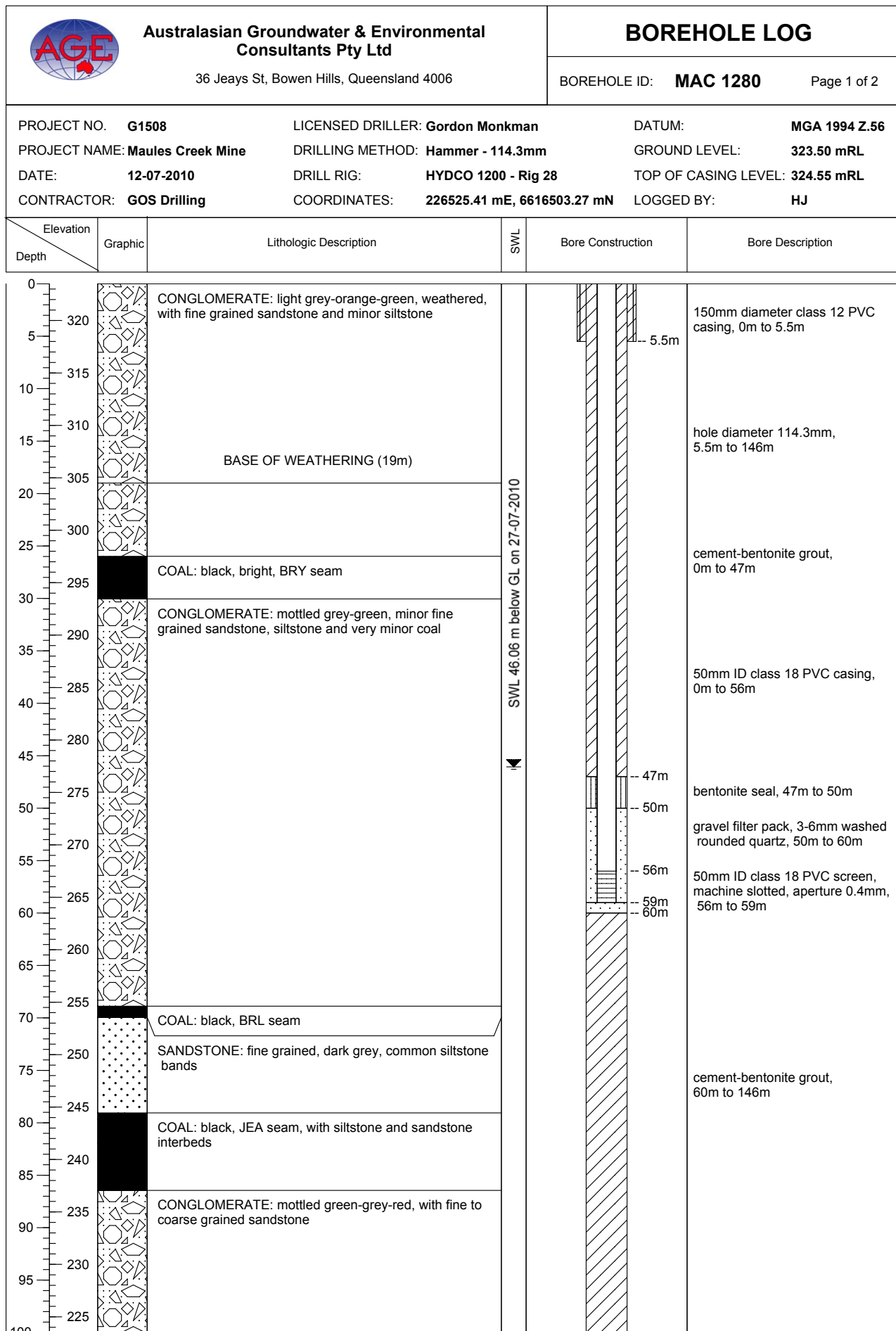
 Australasian Groundwater & Environmental Consultants Pty Ltd 36 Jeays St, Bowen Hills, Queensland 4006			BOREHOLE LOG BOREHOLE ID: MAC 1261 Page 1 of 2		
PROJECT NO. G1508	LICENSED DRILLER: Gordon Monkman	DATUM: MGA 1994 Z.56			
PROJECT NAME: Maules Creek Mine	DRILLING METHOD: Hammer - 114.3mm	GROUND LEVEL: 382.28 mAHD			
DATE: 16-07-2010	DRILL RIG: Rig 28	TOP OF CASING LEVEL: 383.07 mAHD			
CONTRACTOR: GOS Drilling	COORDINATES: 226749.78 mE, 6614871.78mN	LOGGED BY: HJ			
Elevation Depth	Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
0 380		CONGLOMERATE: mottled grey-green, minor coarse sandstone and siltstone			150mm diameter class 12 PVC casing, 0m to 6m
5 375					
10 370					
15 365					hole diameter 114.3mm, 6m to 180.3m
20 360					
25 355					
30 350					
35 345					50mm ID class 18 PVC casing, 0m to 161m
40 340					
45 335		COAL: black, weak, HRA to HRD seams			
50 330		CONGLOMERATE: mottled green-grey, strong, with fine grained sandstone, siltstone and claystone			cement-bentonite grout, 0m to 152m
55 325					
60 320					
65 315		COAL: black, ONV seam			
70 310		CONGLOMERATE: mottled grey-green, with fine to coarse grained sandstone and siltstone			
75 305					
80 300					
85 295		COAL: black, TSU seam			
90 290		SANDSTONE: light grey, fine grained			
95 285		COAL: black, weak, TSM, TSL and TNN seams, interbedded claystone, siltstone and sandstone			
100					


SWL 81.59 m below GL on 27-07-2010



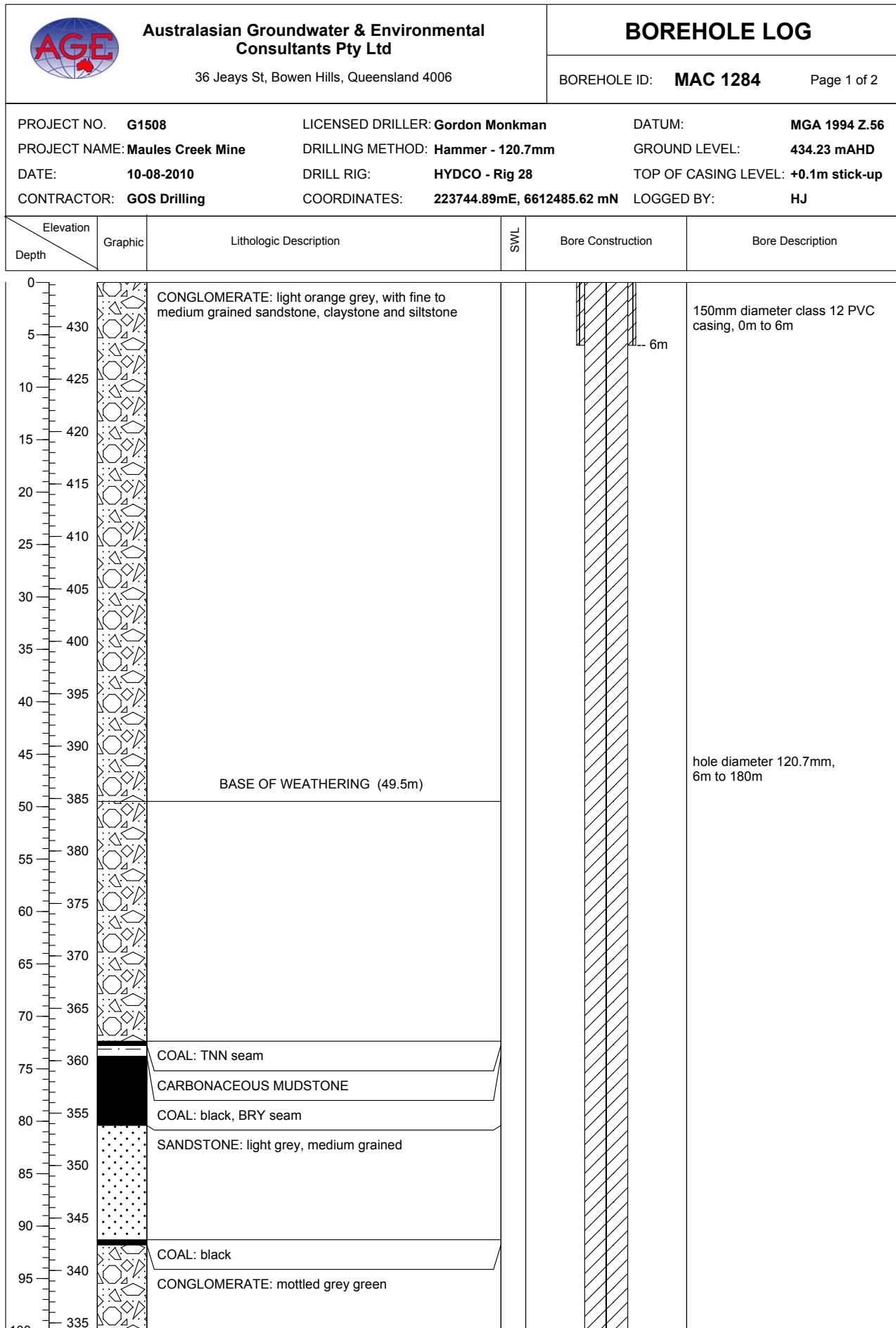



 Australasian Groundwater & Environmental Consultants Pty Ltd 36 Jeays St, Bowen Hills, Queensland 4006				BOREHOLE LOG	
				BOREHOLE ID: MAC 1279	Page 2 of 2
PROJECT NO. G1508	LICENSED DRILLER: Gordon Monkman		DATUM: MGA 1994 Z.56		
PROJECT NAME: Maules Creek Mine	DRILLING METHOD: Hammer - 150mm		GROUND LEVEL: 326.85 mAHD		
DATE: 13-07-2010	DRILL RIG: HYDCO 1200 - Rig 28		TOP OF CASING LEVEL: 327.76 mAHD		
CONTRACTOR: GOS Drilling	COORDINATES: 226446.41 mE, 6616311.99 mN		LOGGED BY: HJ		
Elevation Depth	Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
100 225		SANDSTONE: fine grained, dark grey			hole diameter 114.3mm, 6m to 144m
105 220		COAL: black, MEA seam			
110 215		SANDSTONE: fine grained, light grey, with siltstone and mudstone			
115 210		COAL: black, MEB seam			
120 205		CONGLOMERATE: mottled grey-green, grading to fine grained sandstone			cement-bentonite grout, 75m to 144m
125 200		CARBONACEOUS MUDSTONE: dark black-brown, weak, VEA and VEB seams, with claystone interbed			
130 195		CONGLOMERATE: grey-green-red, with claystone			
135 190		VOLCANIC ROCK: light red purplish green (BOGGABRI VOLCANICS)			
140 185					total hole depth 144m
145 180					
150 175					
155 170					
160 165					
165 160					
170 155					
175 150					
180 145					
185 140					
190 135					
195 130					
200					



 Australasian Groundwater & Environmental Consultants Pty Ltd 36 Jeays St, Bowen Hills, Queensland 4006				BOREHOLE LOG	
				BOREHOLE ID: MAC 1280	Page 2 of 2
PROJECT NO. G1508	LICENSED DRILLER: Gordon Monkman		DATUM: MGA 1994 Z.56		
PROJECT NAME: Maules Creek Mine	DRILLING METHOD: Hammer - 114.3mm		GROUND LEVEL: 323.50 mRL		
DATE: 12-07-2010	DRILL RIG: HYDCO 1200 - Rig 28		TOP OF CASING LEVEL: 324.55 mRL		
CONTRACTOR: GOS Drilling	COORDINATES: 226525.41 mE, 6616503.27 mN		LOGGED BY: HJ		
Elevation Depth	Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
100		CONGLOMERATE: mottled green-grey-red, with fine to coarse grained sandstone			
105					
110		COAL: black, JEA and MEA seams, with siltstone interbed			hole diameter 114.3mm, 5.5m to 146m
115		SANDSTONE: coarse grained, light grey, minor carbonaceous siltstone			
120		COAL: black, MEB seam			
125		CONGLOMERATE: mottled green-grey-red, with siltstone			cement-bentonite grout, 60m to 146m
130		COAL: black, VEA, VEB and NAG seams, interbeds of fine grained sandstone and siltstone			
135		SANDSTONE: mottled grey-white, with conglomerate			
140					
145		VOLCANIC ROCK: light red-purple (BOGGABRI VOLCANICS)			
150					
155					
160					
165					
170					
175					
180					
185					
190					
195					
200					
					total hole depth 146m

Australasian Groundwater & Environmental Consultants Pty Ltd 36 Jeays St, Bowen Hills, Queensland 4006			BOREHOLE LOG BOREHOLE ID: MAC 1283 Page 1 of 1		
PROJECT NO. G1508	LICENSED DRILLER: Gordon Monkman	DATUM: MGA 1994 Z,56			
PROJECT NAME: Maules Creek Mine	DRILLING METHOD: Hammer - 114.3mm	GROUND LEVEL: 318.22 mAHD			
DATE: 05-07-2010	DRILL RIG: Atlas Copco - Rig 28	TOP OF CASING LEVEL: 318.98 mAHD			
CONTRACTOR: GOS Drilling	COORDINATES: 224988.88 mE, 6615290.77 mN	LOGGED BY: OC			
Elevation Depth	Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
0		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
315				6m	
5					
310		COAL: black, moderately weathered, weak, BRT seam			
10		BASE OF WEATHERING (12.28m)			
305		SANDSTONE: fine grained, light grey, minor siltstone			hole diameter 114.3mm, 6m to 91m
15					
300		COAL: black, weak, BRL seam			50mm ID class 18 PVC casing, 0m to 64m
20		CONGLOMERATE: light grey green, with fine to coarse sandstone			
295					
25					
290		COAL: black, weak, JEB seam			
35		CONGLOMERATE: light grey green, with fine grained sandstone and very minor claystone			cement-bentonite grout, 0m to 55m
285					
40		CARBONACEOUS CLAYSTONE: dark grey, with sandstone and conglomerate interbeds between seams			
275					
45		SANDSTONE: light grey, fine to medium grained, minor siltstone or claystone		55m	bentonite seal, 55m to 58m
50				58m	gravel filter pack, 3-6mm washed rounded quartz, 58m to 66m
265		COAL: black, weak, VEA to VEC seams, with claystone and siltstone interbeds		61m	50mm ID class 18 PVC screen, machine slotted, aperture 0.4mm, 61m to 64m
55				64m	
260		SANDSTONE: light grey, fine to medium grained, with claystone and siltstone		66m	
60					cement-bentonite grout, 66m to 91m
255		VOLCANIC ROCK: light purple/green greyish (BOGGABRI VOLCANICS)			
65					
250					
70					
245					
75					
240					
80					
235					
85					
230					
90					
225					
95					
220					
100					total hole depth 91m



 Australasian Groundwater & Environmental Consultants Pty Ltd 36 Jeays St, Bowen Hills, Queensland 4006		BOREHOLE LOG	
		BOREHOLE ID: MAC 1284	Page 2 of 2

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

Elevation / Depth	Graphic	Lithologic Description	SWL	Bore Construction	Bore Description
100		CONGLOMERATE: mottled grey green			
105					
110					
115					hole diameter 120.7mm, 6m to 180m
120					
125					
130					
135					cement-bentonite grout, 0m to 180m
140		COAL: black, MEA to MEC seams			
145		CLAYSTONE			
150		COAL: VEL seam			
155		SILTSTONE: dark grey, sandstone in parts			
160		COAL: black, minor interbedded mudstone, NAG, UPN, LRA and LRB seams			
165		CLAYSTONE: dark grey-black,			vibrating wire piezometer pressure sensor, 165m
170		COAL: black, TEA and TEB seams			
175		SILTSTONE: grey			
180		COAL: black, FLX seam			
185		CLAYSTONE: grey			
190					
195					
200					total hole depth 180m



APPENDIX 3

Bore Census Details

BORE CENSUS SUMMARY

PROPERTY NAME	Tralee	Tralee					
Land Owner	Watson	Watson	Aston	Aston	Aston	Aston	Morse
Registered Bore Works Number	GW003483	GW003478	GW008221	GW002748	GW0028894	GW028893	GW001869
Easting		224075					
Northing		6618523					
WATER LEVEL							
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	
PUMPING DETAILS							
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					
WATER USAGE							
Primary Use of Bore	Stock if used	Domestic and stock		Stock	Stock	Stock water	
No. Stock on Bore		80 Breeders		Approx 80	100 cows		
DISTRIBUTION							
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	
COMMENTS							
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

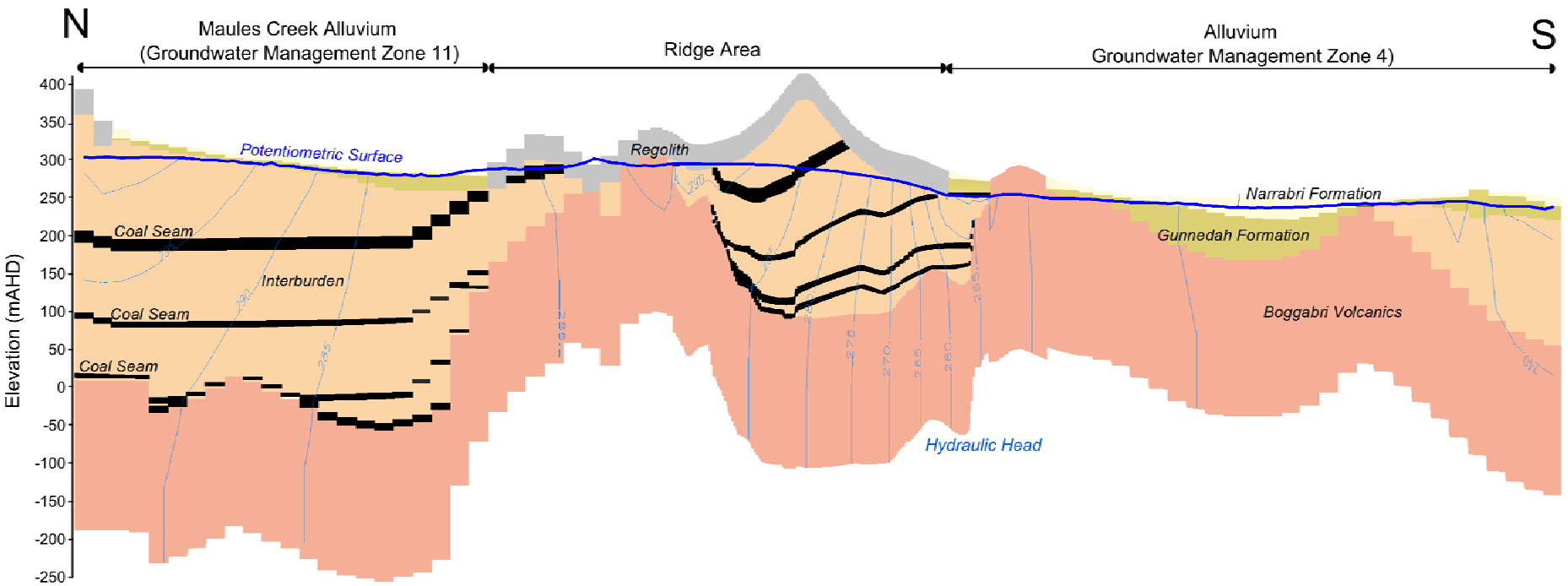
PROPERTY NAME							
Land Owner	Younger	Finlay	Morris	Morris	Nott	Nott	Murphy
Registered Bore Works Number	GW003466	GW003496	GW020607	GW900043	GW003489	GW002799	GW006567
Easting	226320				222561		221452
Northing	6618441				6619070		6618716
WATER LEVEL							
Water Depth Below Ref.	9.81m				21.21m		19.38m
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
PUMPING DETAILS							
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		
WATER USAGE							
Primary Use of Bore	Stock if used				Domestic and stock		Stock if used
No. Stock on Bore					200 head		
DISTRIBUTION							
Storage Type / Volume					Tanks and troughs		Dam and troughs
No. Of Troughs							
Trough Description / Size							
COMMENTS							
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

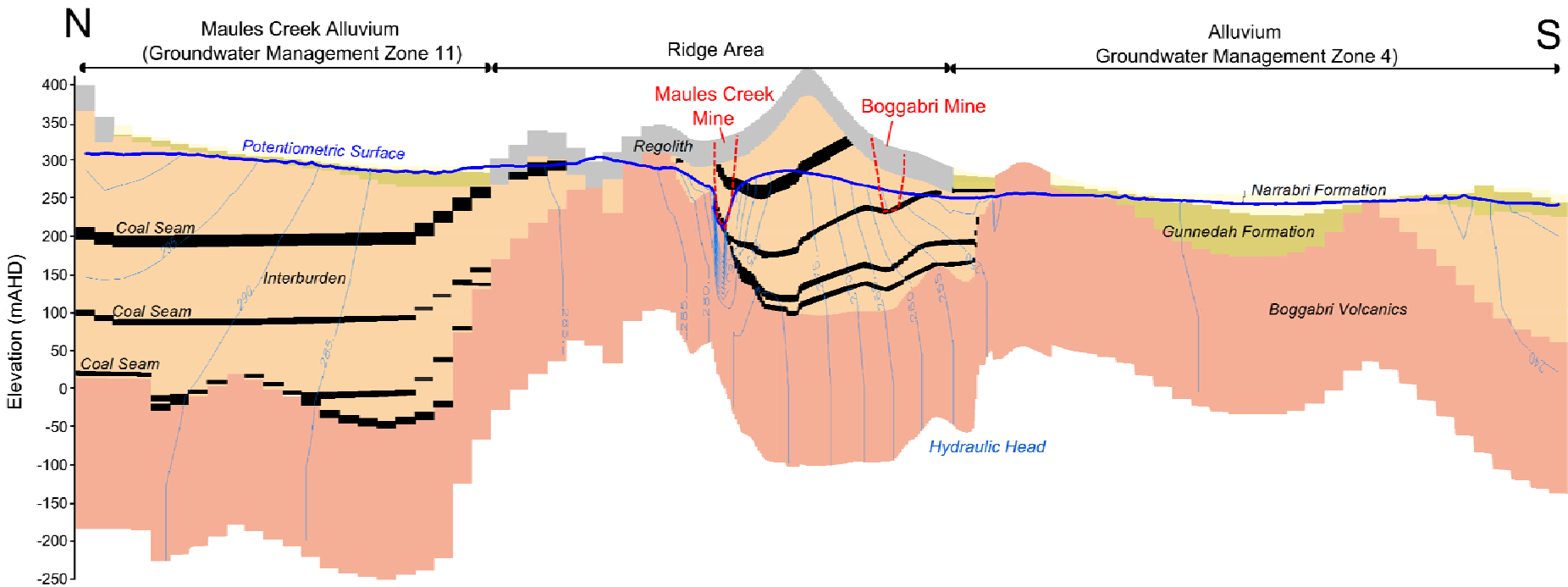
PROPERTY NAME			Onavale	Oakleigh	
Land Owner	Murphy	Murphy	Brennan	Brennan	NSW State Forest
Registered Bore Works Number	GW002789	GW002831	GW000583	GW008255	GW053825
Easting		221313	234485	233431	
Northing		6620124	6616583	6617752	
WATER LEVEL					
Water Depth Below Ref.		19.46m	21.21m	7.8m	13.46m
Date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

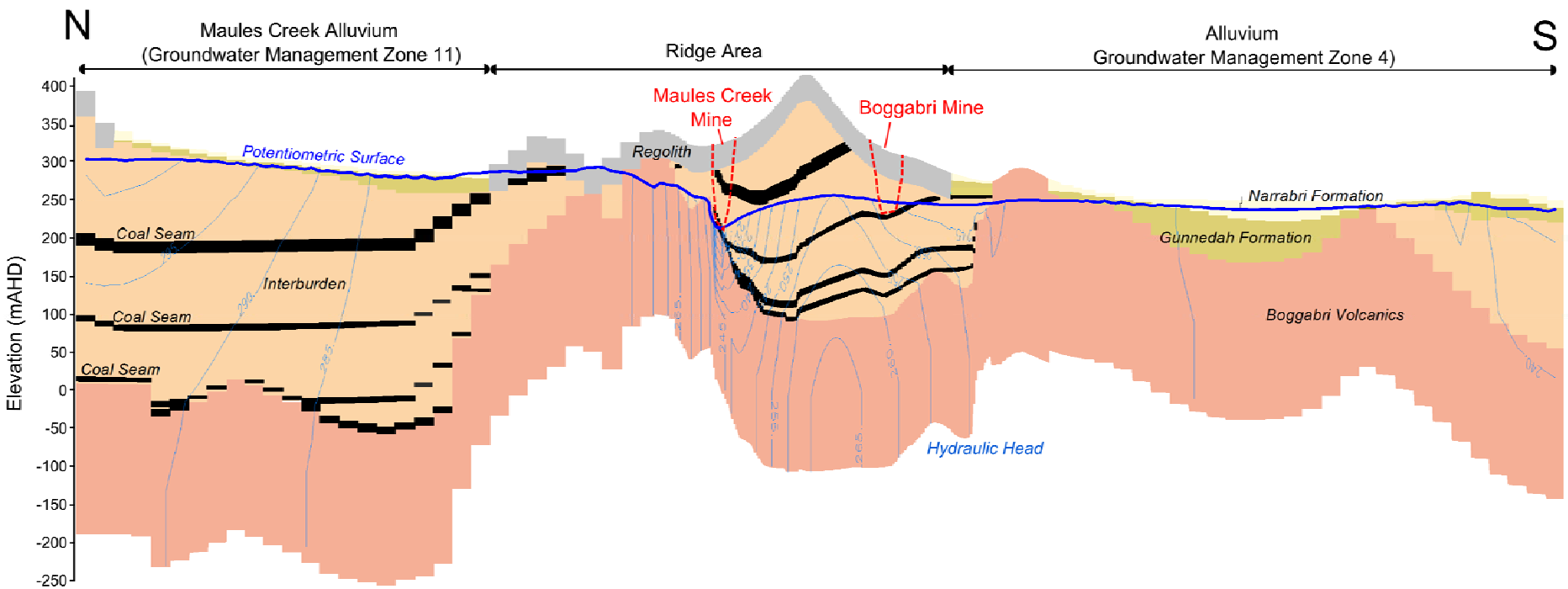
Model Cross Sections



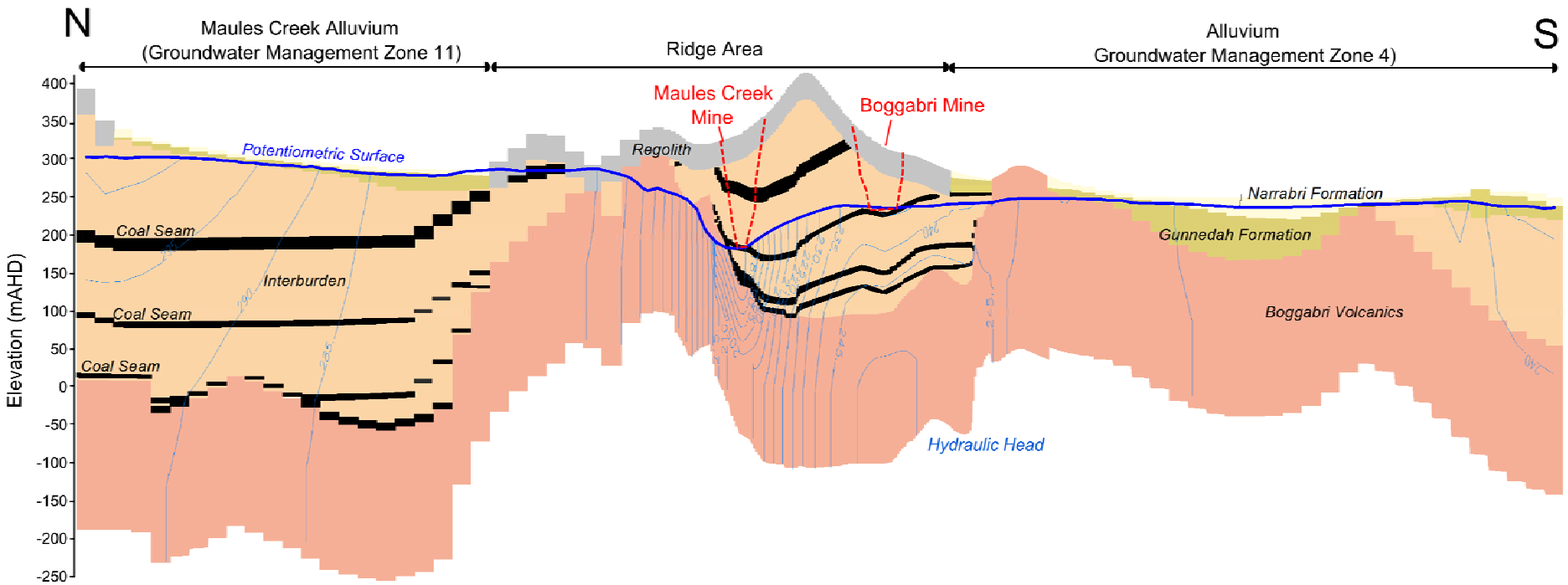
Cross Section A4.1 - N-S - Groundwater Levels - Steady State



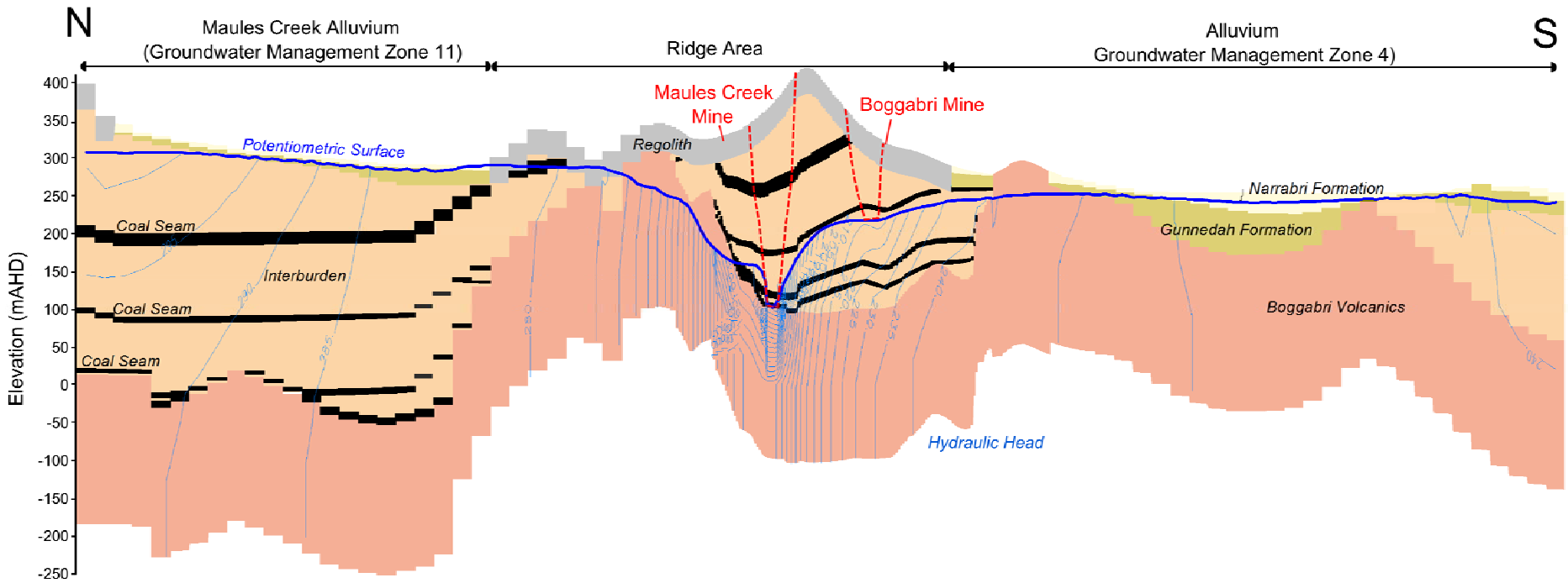
Cross Section A4.2 - N-S - Groundwater Levels - Year 1



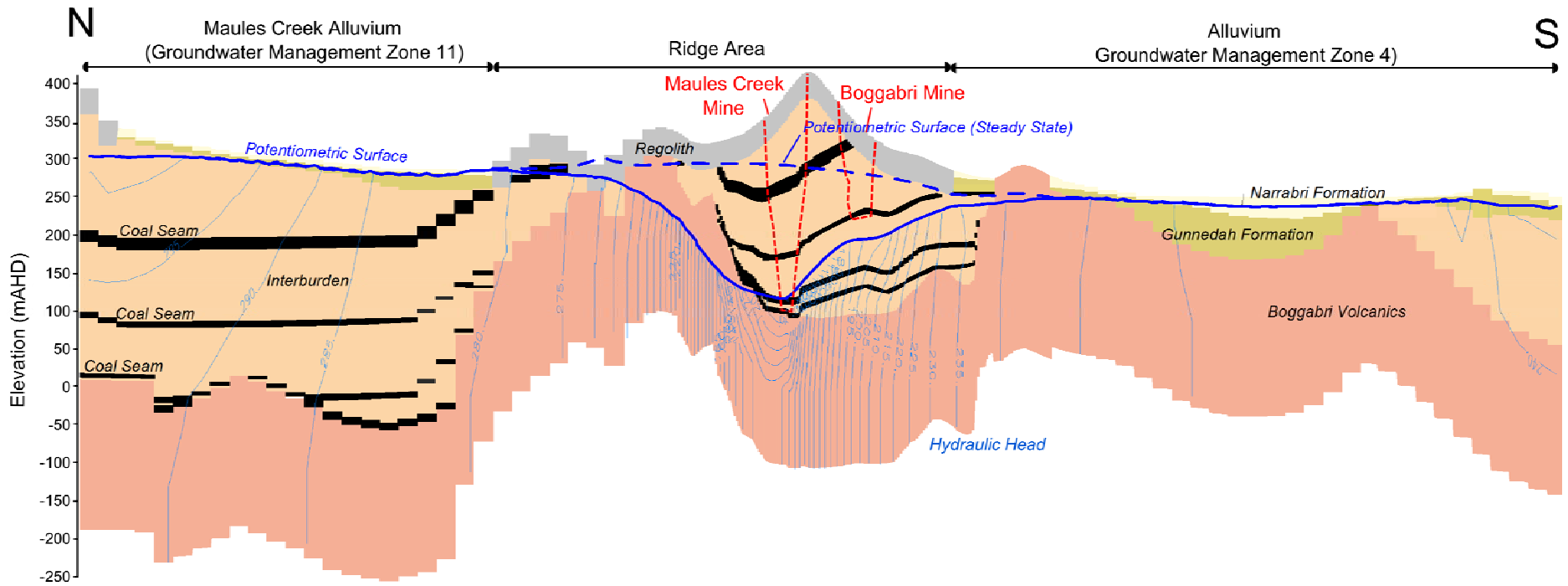
Cross Section A4.3 - N-S - Groundwater Levels - Year 5



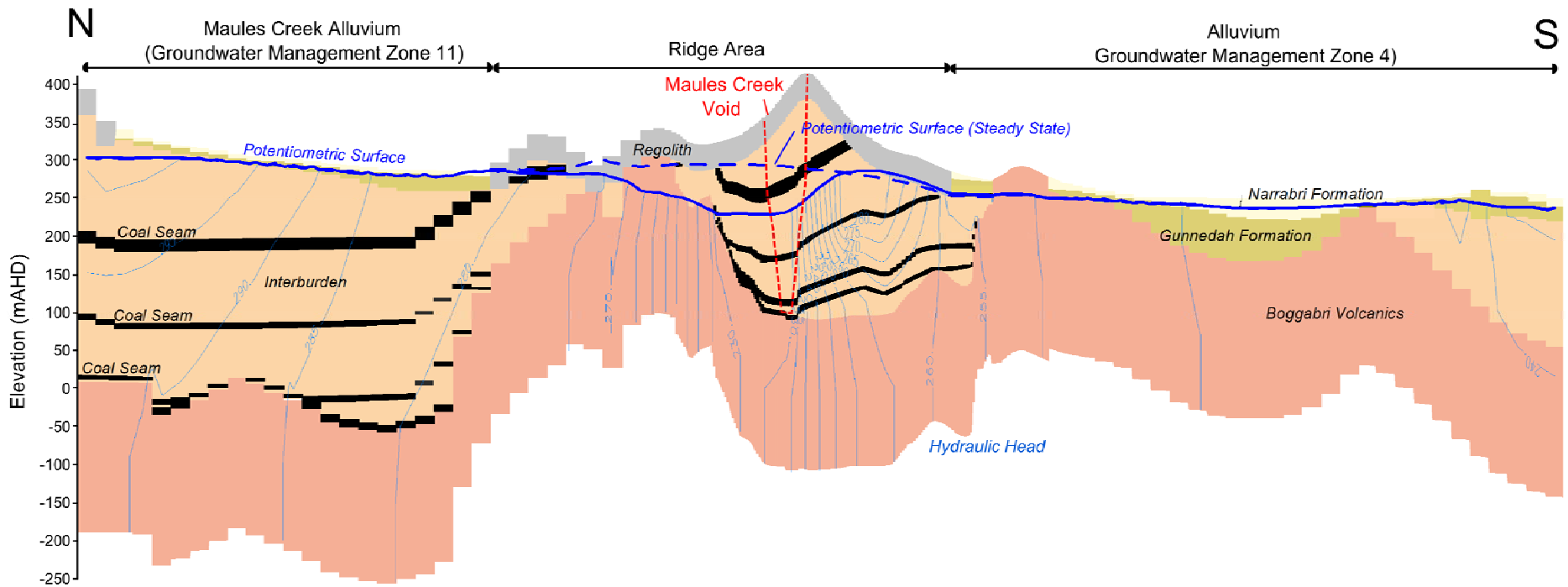
Cross Section A4.4 - N-S - Groundwater Levels - Year 10



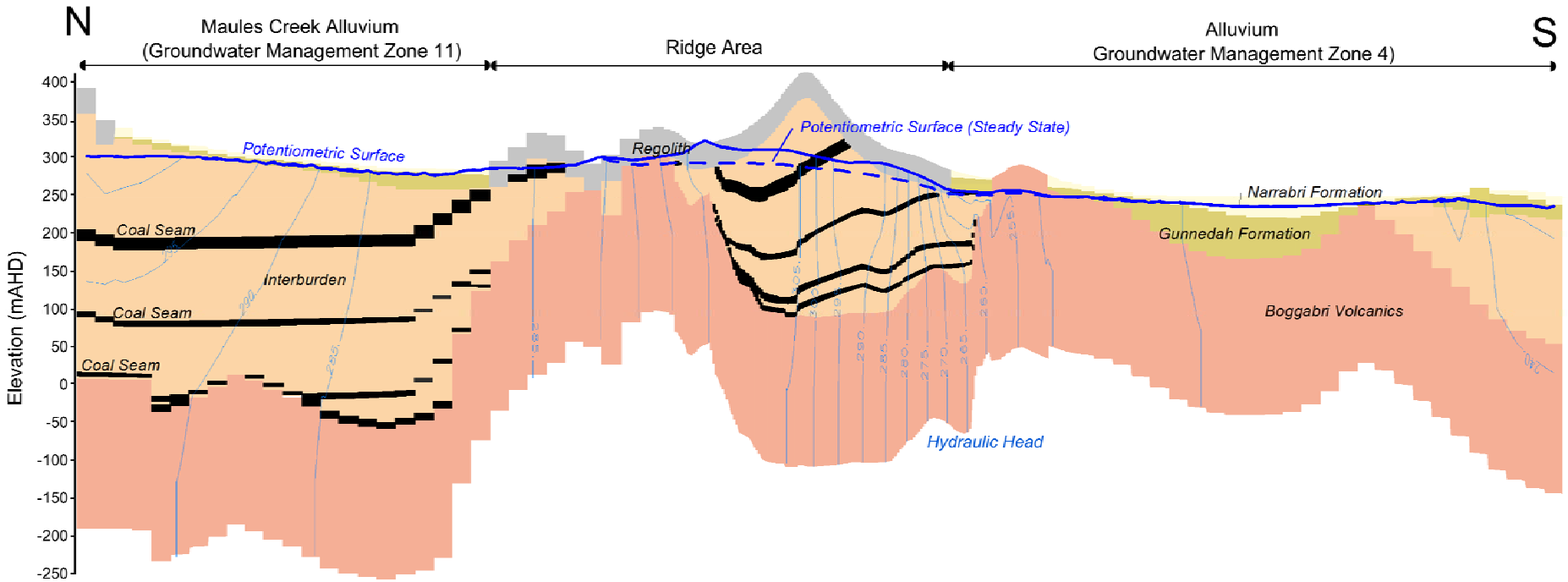
Cross Section A4.5 - N-S - Groundwater Levels - Year 15



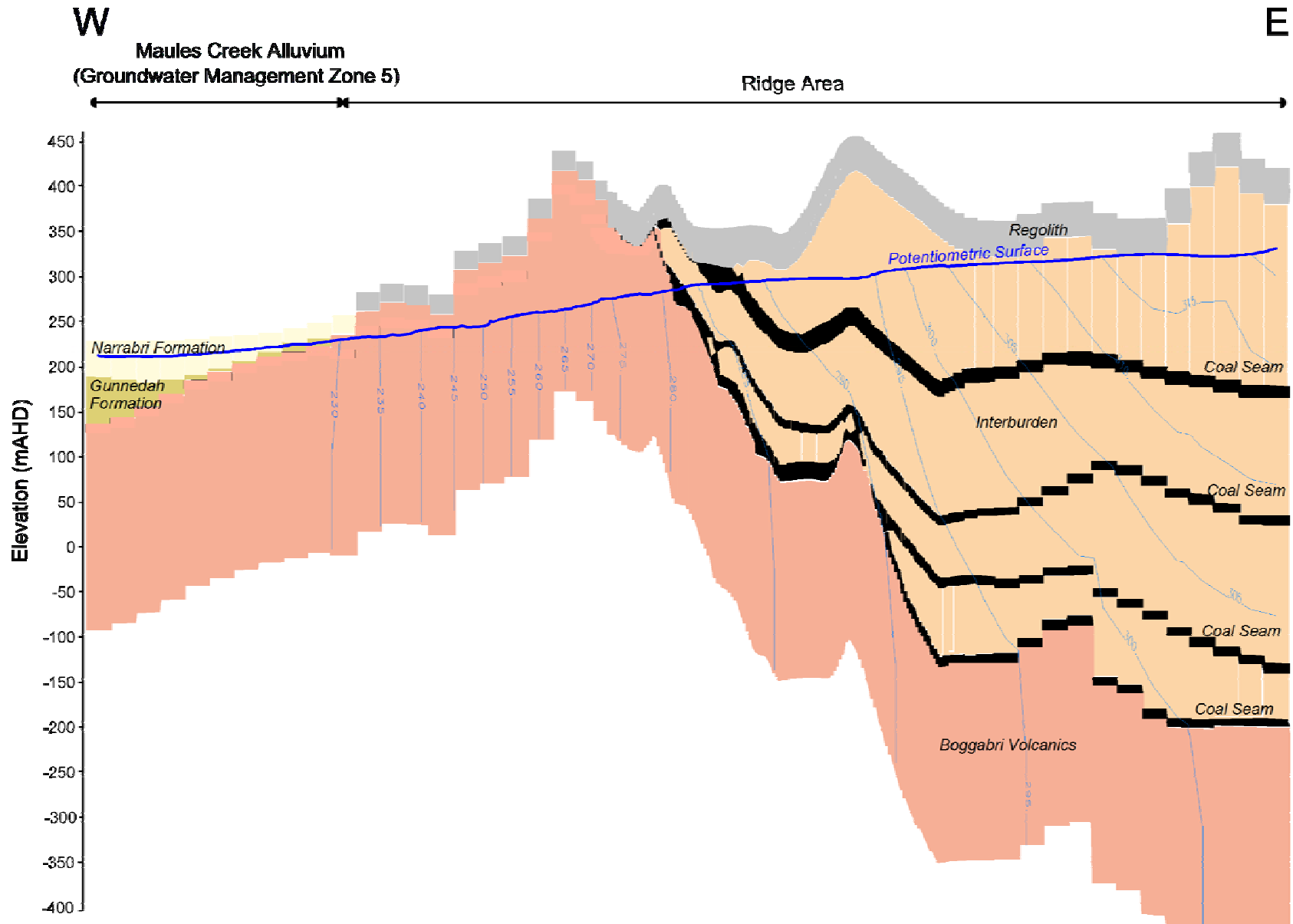
Cross Section A4.6 - N-S - Groundwater Levels - Year 21



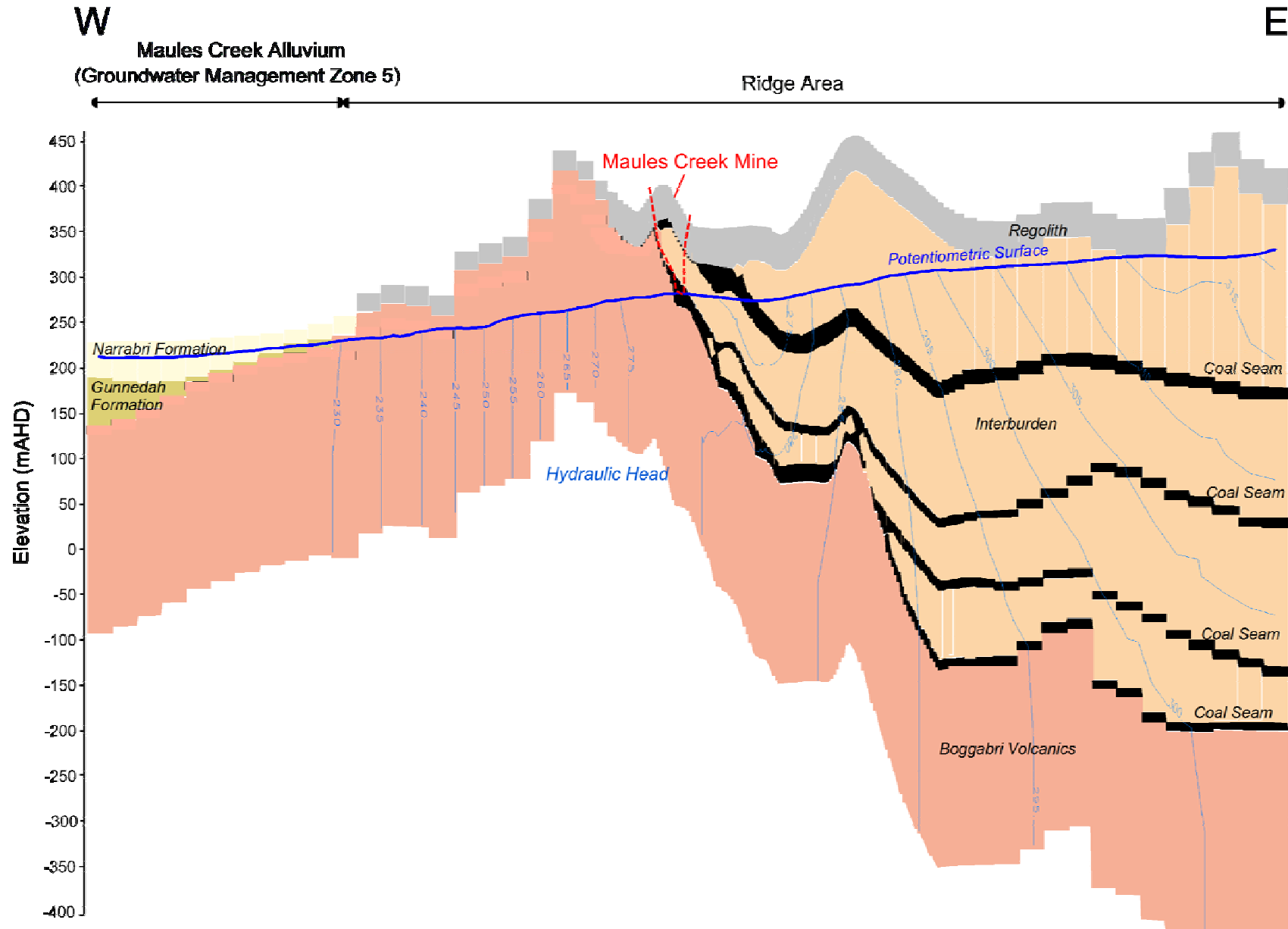
Cross Section A4.7 - N-S - Groundwater Levels - Recovered Heads with Void



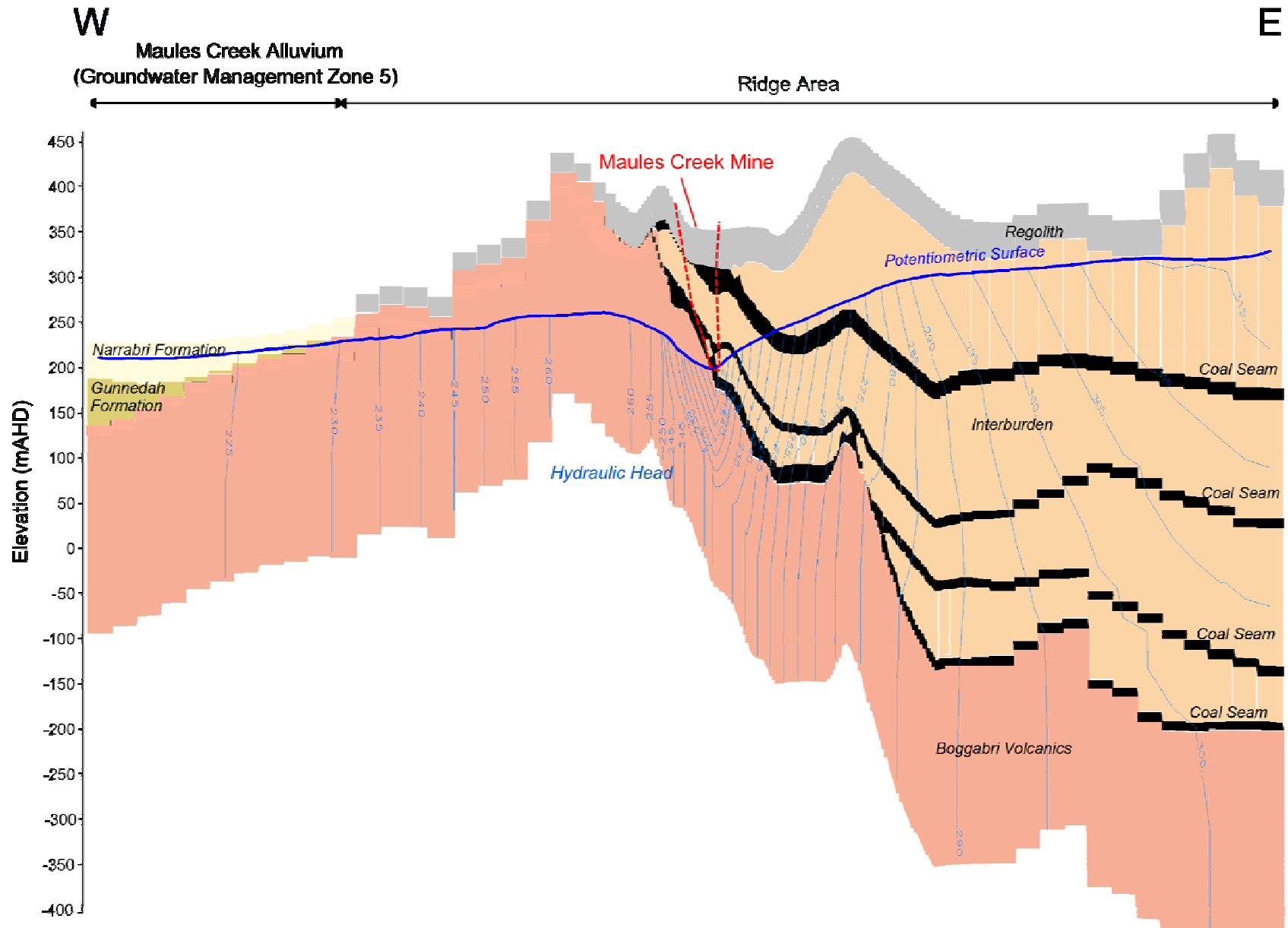
Cross Section A4.8 - N-S - Groundwater Levels - Recovered Heads with Backfill



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