

APPENDIX A - SITE PHOTOS

Site photos showing structural features

Site photos

Photo A1



Photo in centre of Pit 3, looking west. Shows fault intersected in this pit.

Photo A2

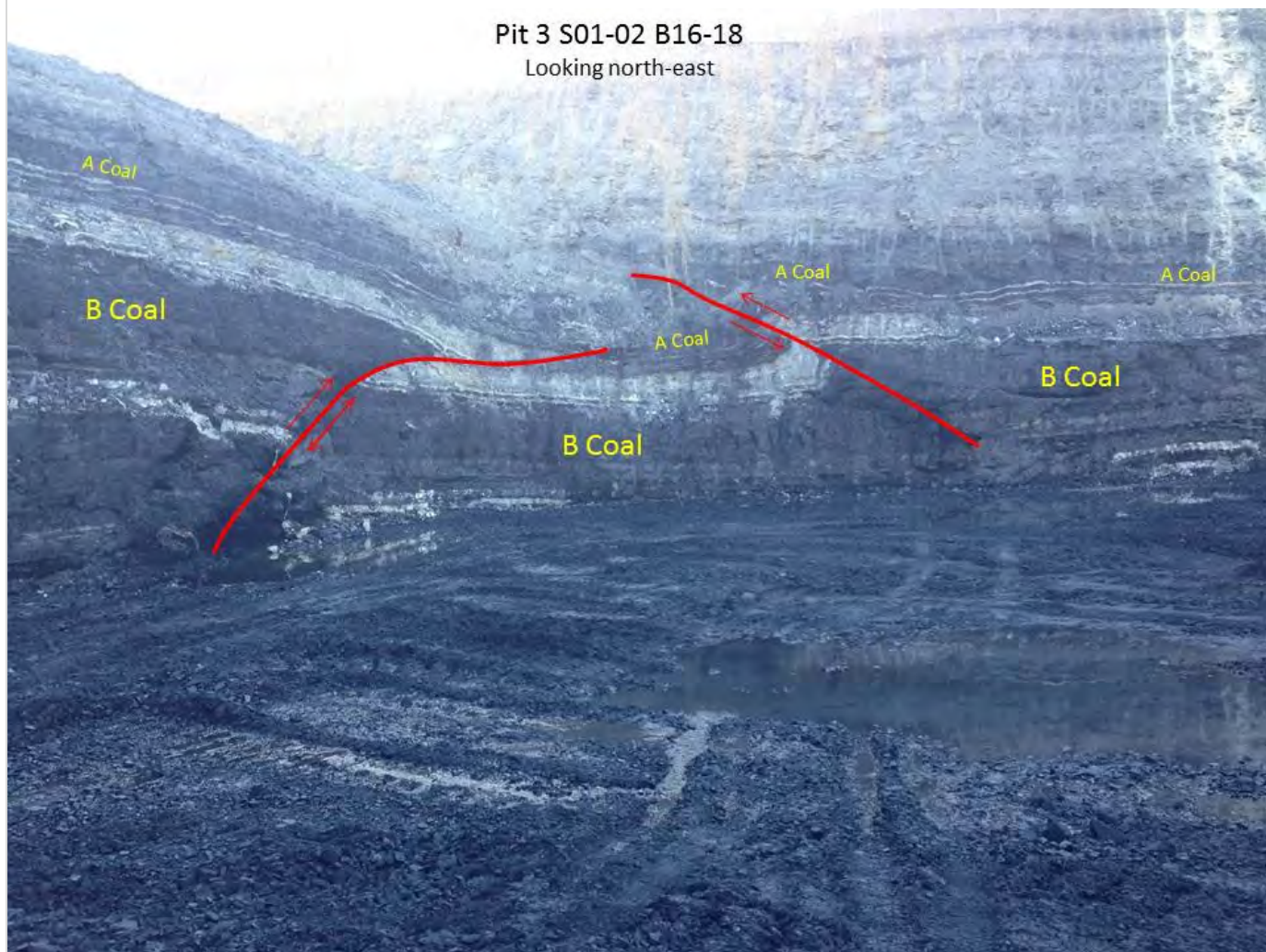
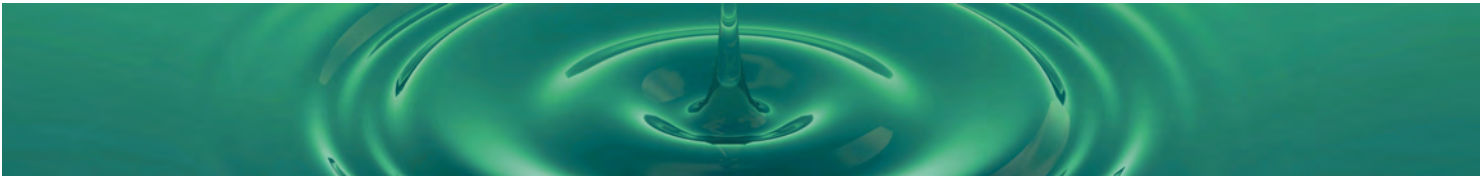


Photo in Pit 3, looking north-east. Shows other main fault structure intersected in this pit.

Photo A3

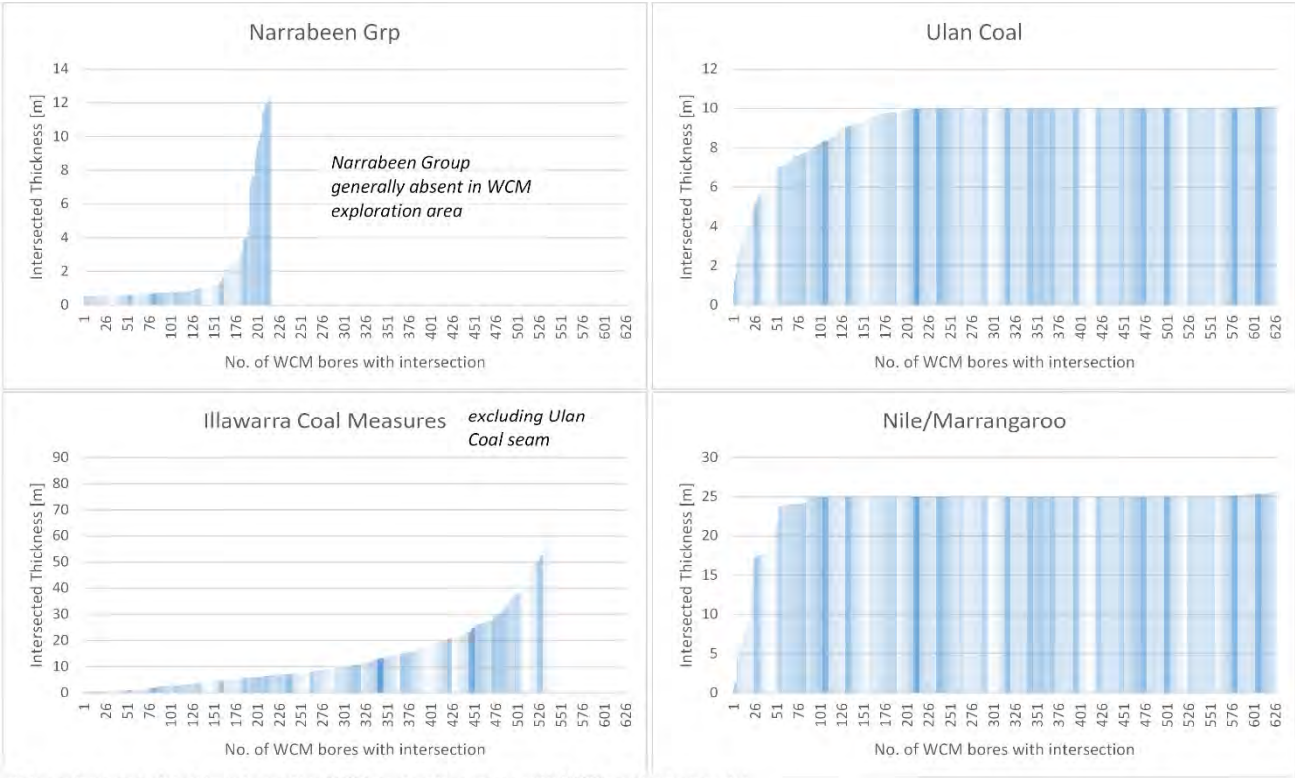


Photo from Pit 5, looking south-west. Shows palaeochannel features, which are also observed near Moolarben Mine, entering the Pit 5 footprint, after passing through the Pit 6 footprint.



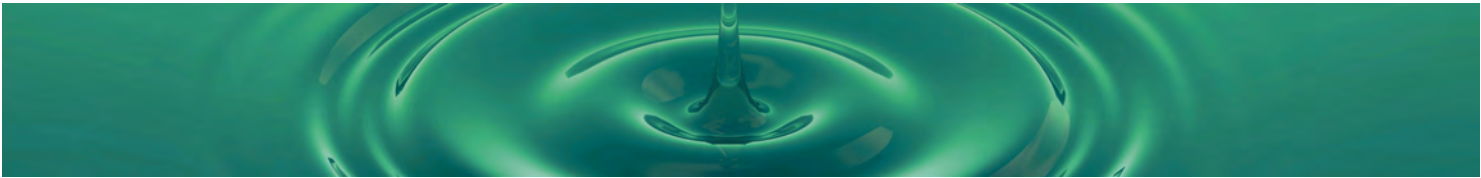
APPENDIX B – STRATIGRAPHIC THICKNESS

Summary of stratigraphic thickness from WCM bores and site-scale geological model



this analysis completed by intersecting WCM exploration bores with WCPL geological model.

C:\Higham\WMA05_Tech\Geology\Bore\WCM_Exploration\Bore_Intersection\WCM\Geology\Nile\NileCoal



APPENDIX C – GROUNDWATER LEVELS

Groundwater level hydrographs from WCM monitoring bores

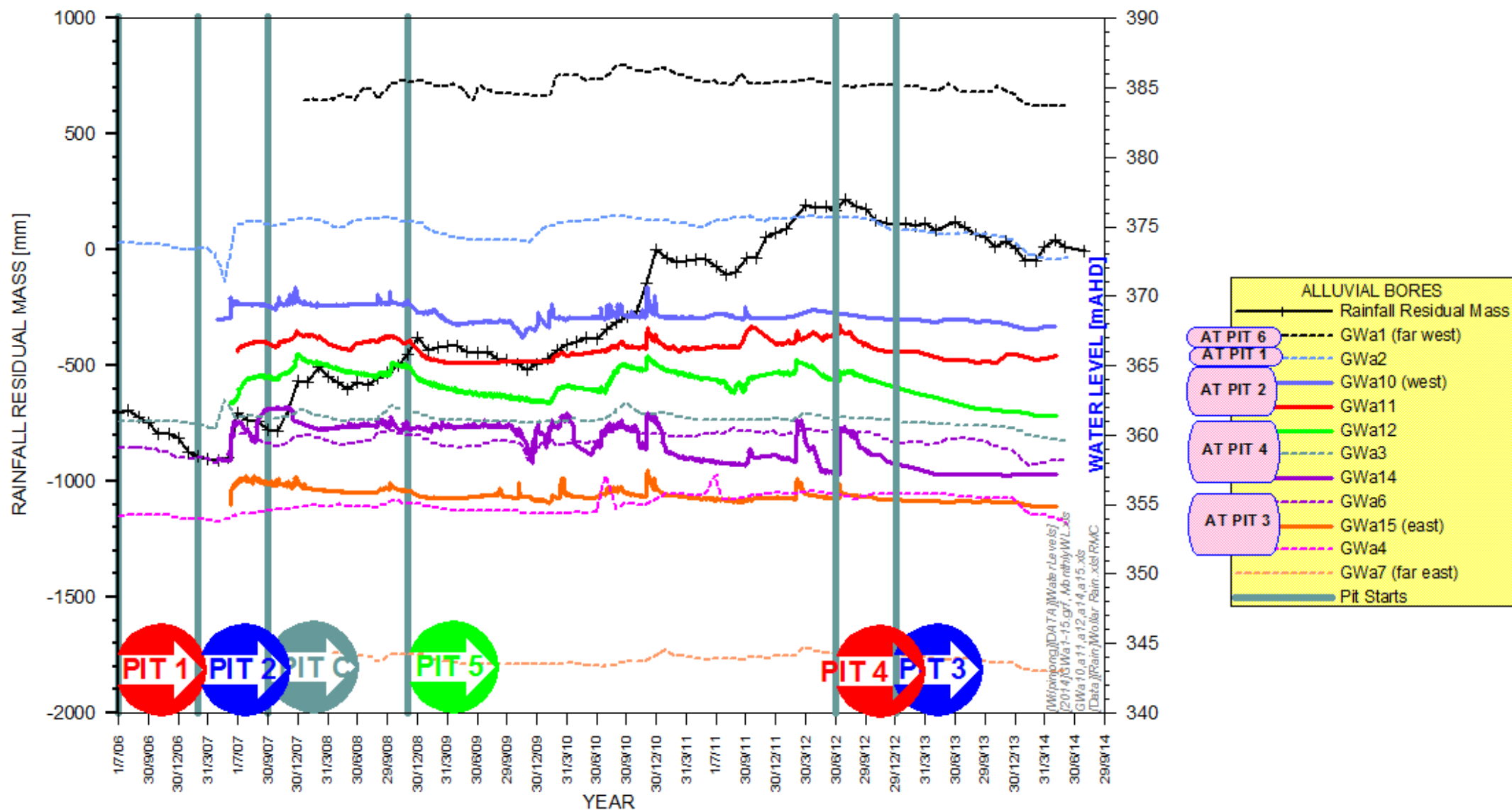


Figure C-2. Transition in Alluvial Bore Groundwater Levels from West to East along Wilpinjong Creek

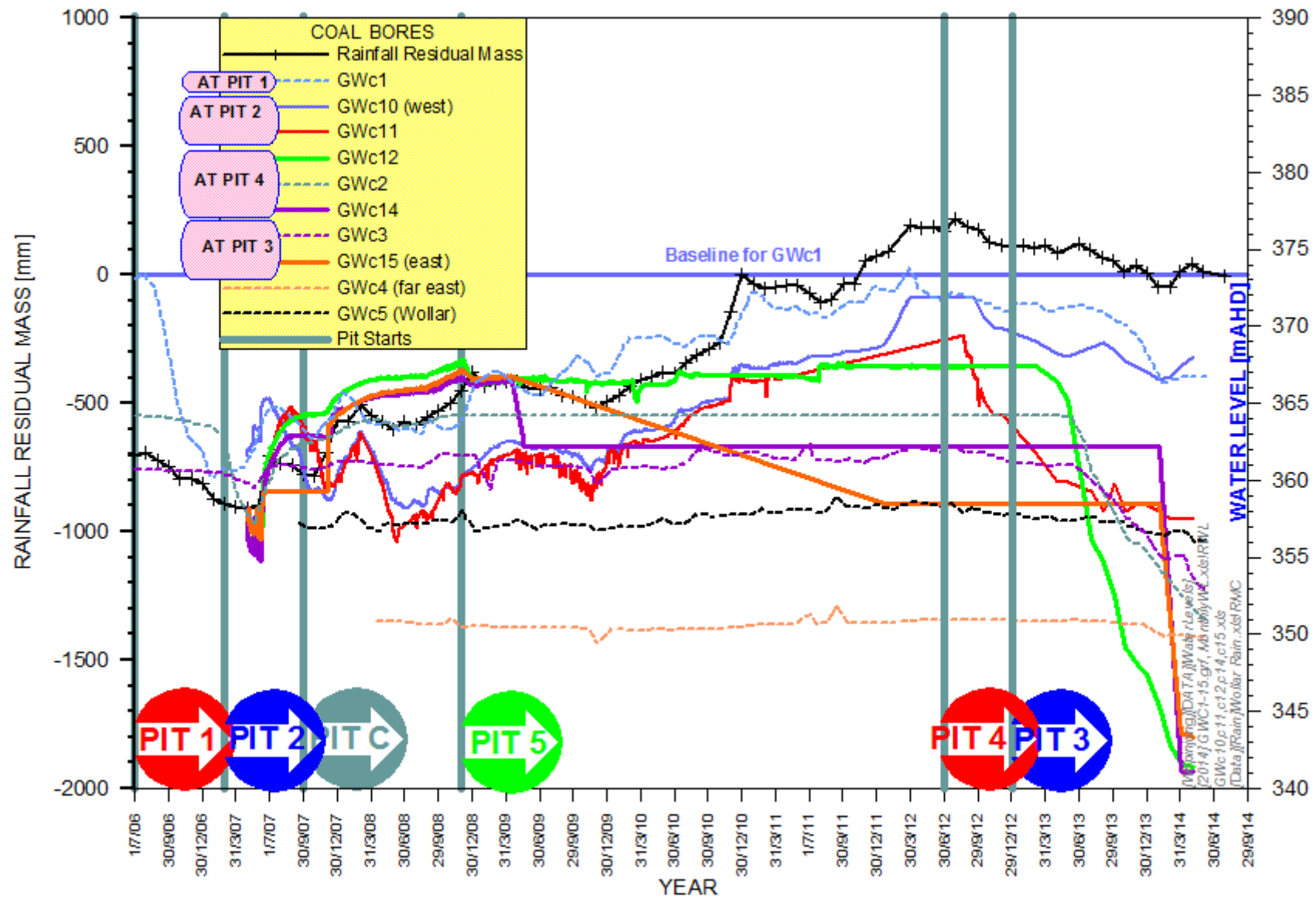


Figure C-3. Transition in Coal Bore Groundwater Levels from West to East along Wilpinjong Creek

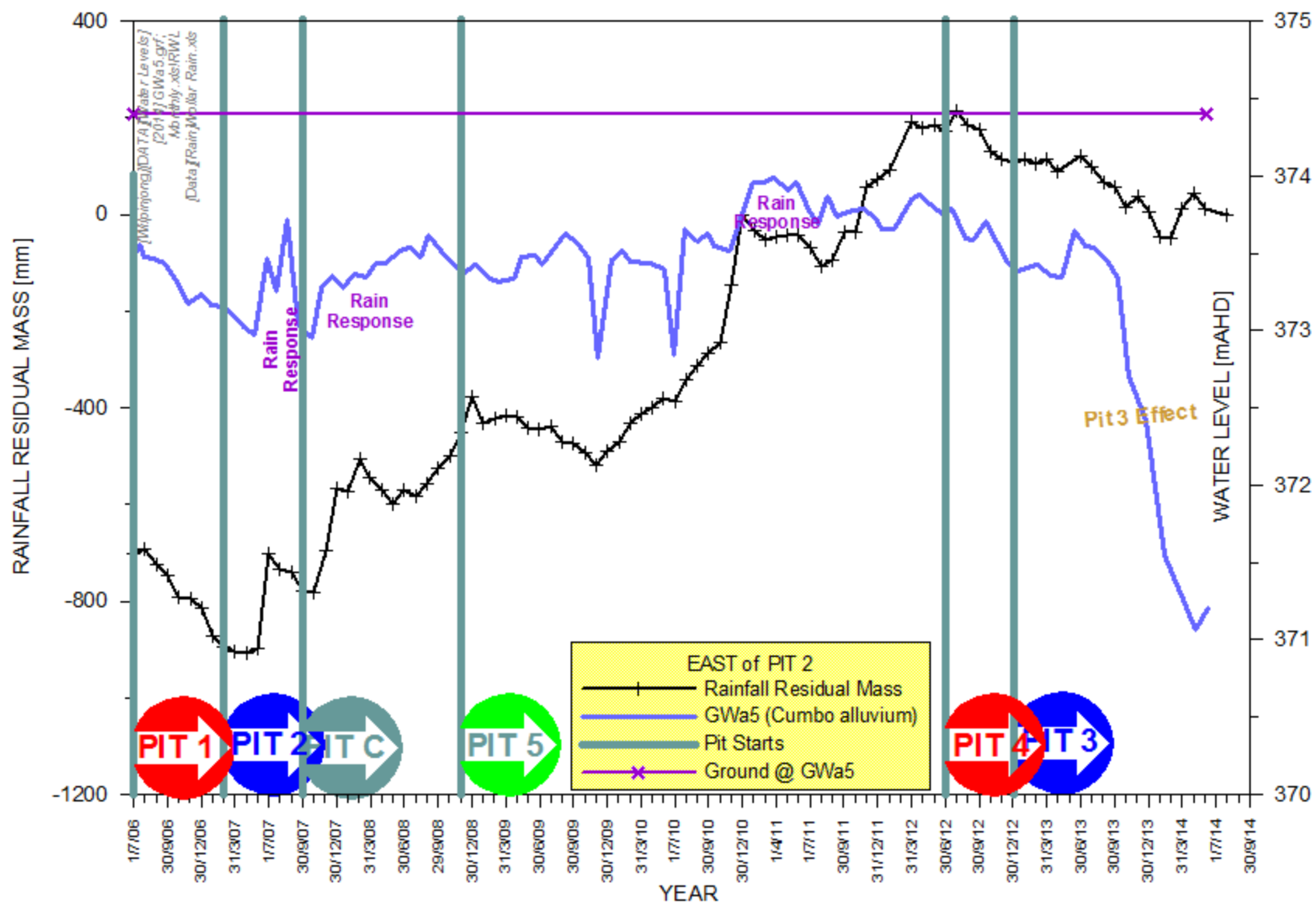


Figure C-4. Alluvial Groundwater Hydrograph at GWa5 between Pit 2 and Pit 3, adjacent to Cumbo Creek

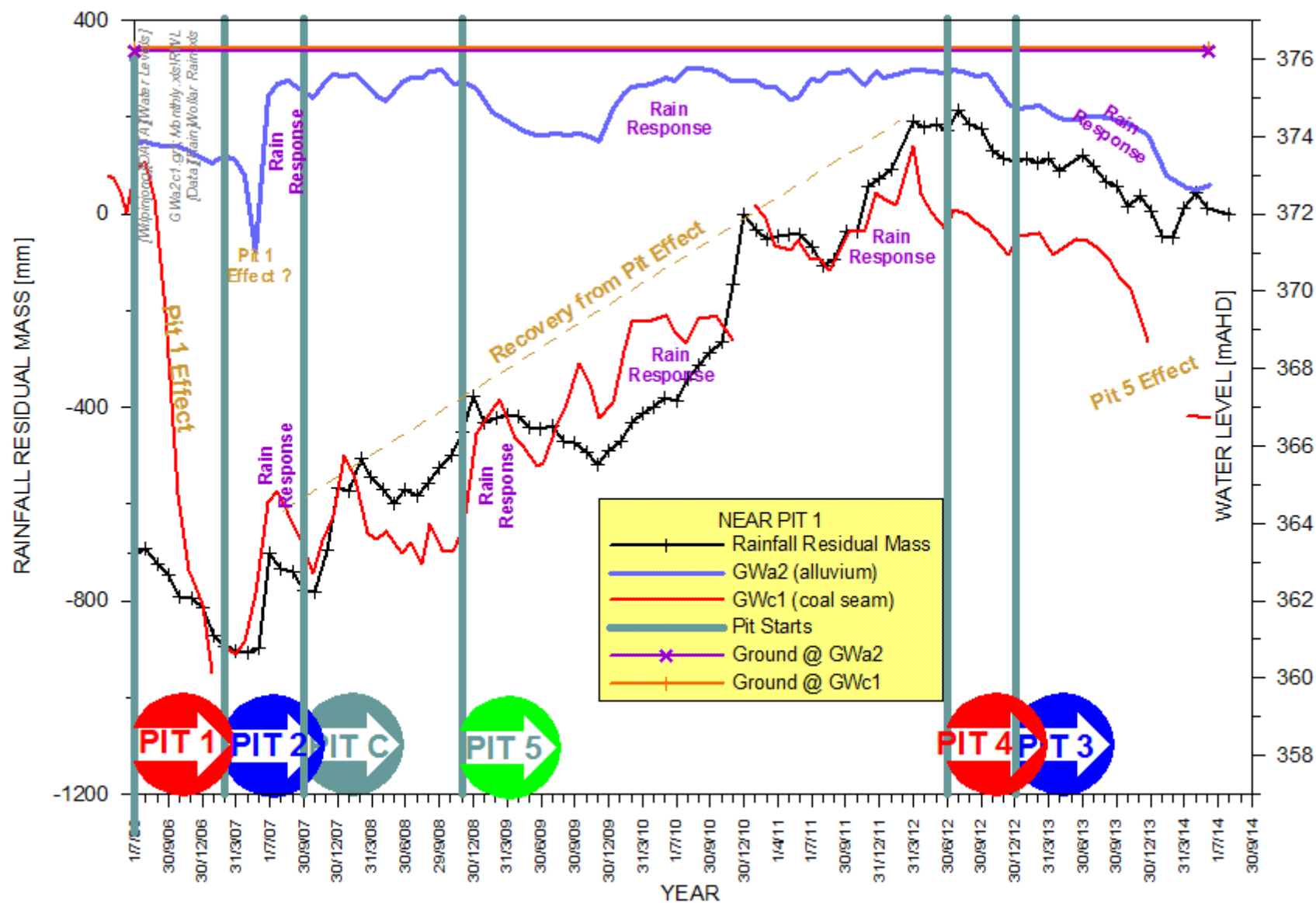


Figure C-5. Groundwater Hydrographs at GWa2 and GWc1 at 0.3 km North-West of Pit 1

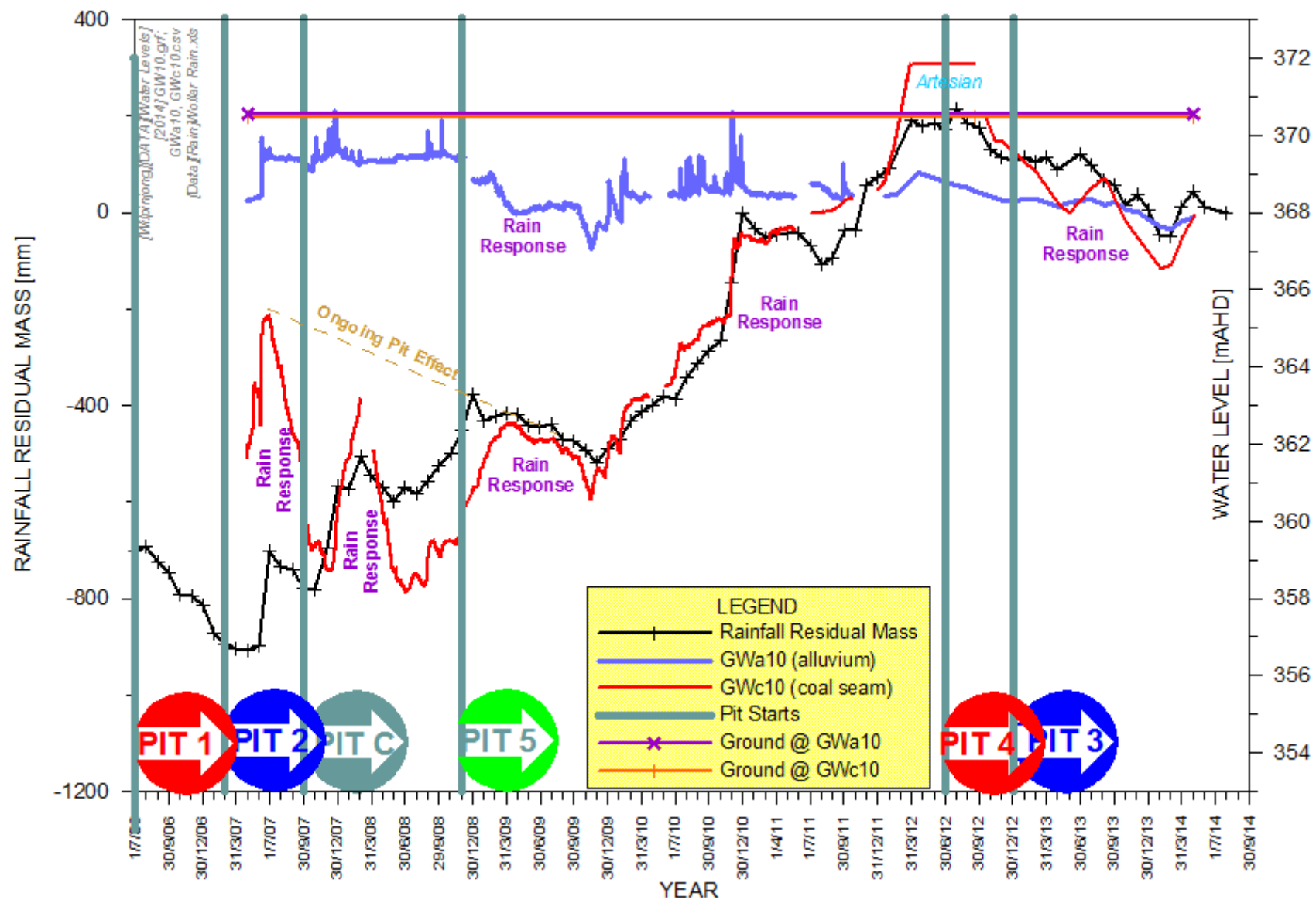


Figure C-6. Groundwater Hydrographs at GWa10 and GWc10 at 0.3 km North-East of Pit 1

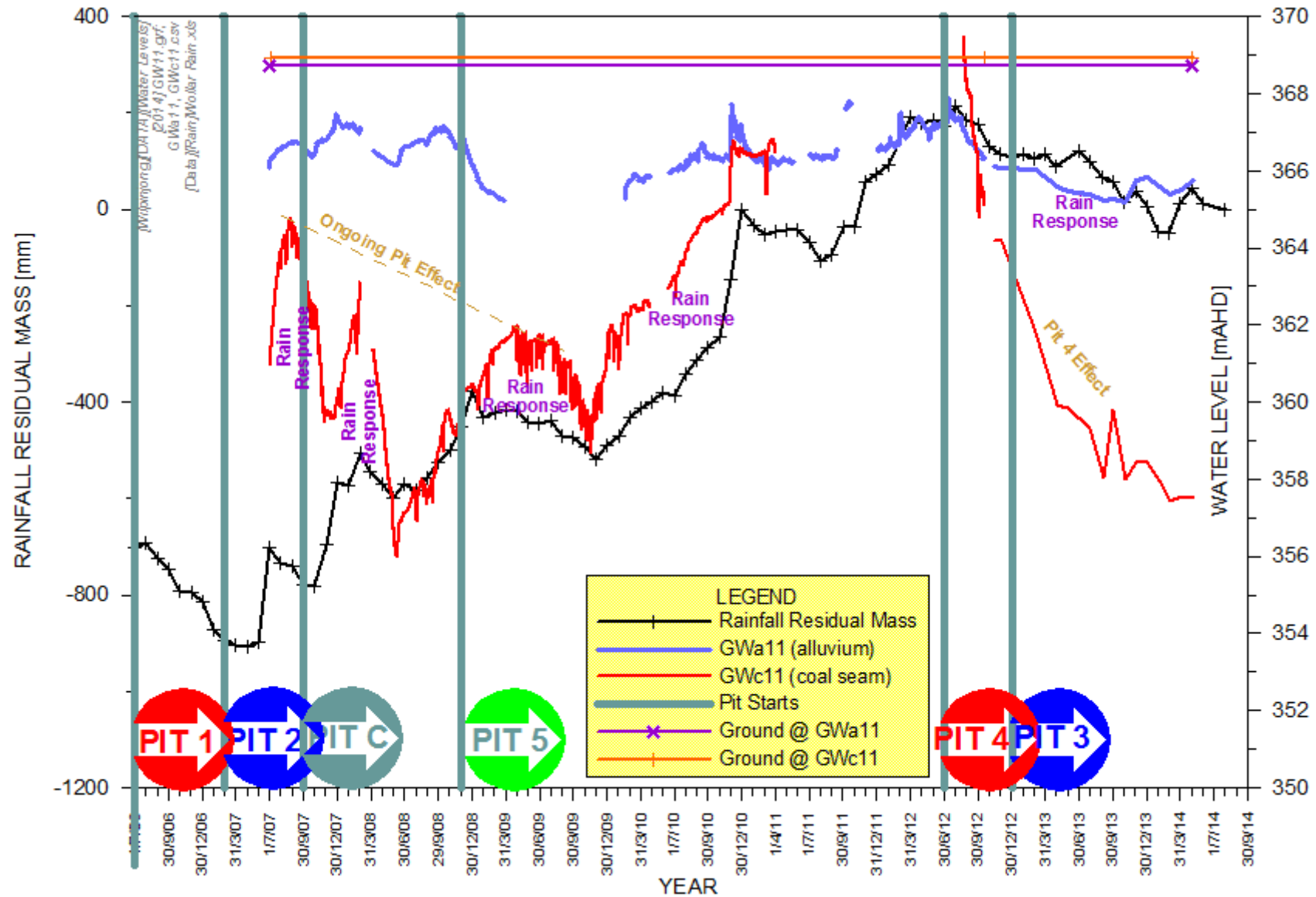


Figure C-7. Groundwater Hydrographs at GWa11 and GWc11 at 0.3 km North of Pit 2

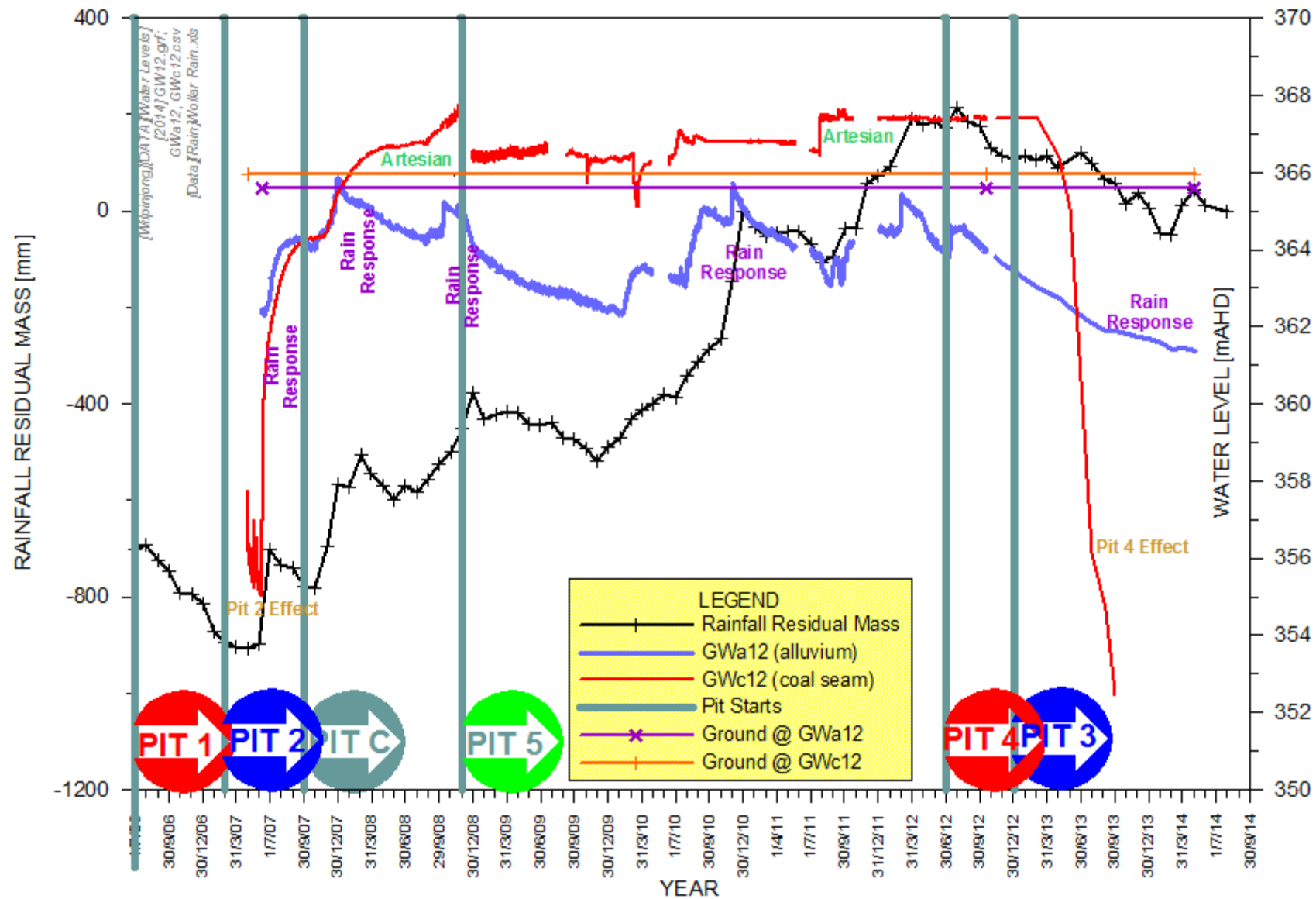


Figure C-8. Groundwater Hydrographs at GWa12 and GWc12 at 0.5 km North of Pit 4

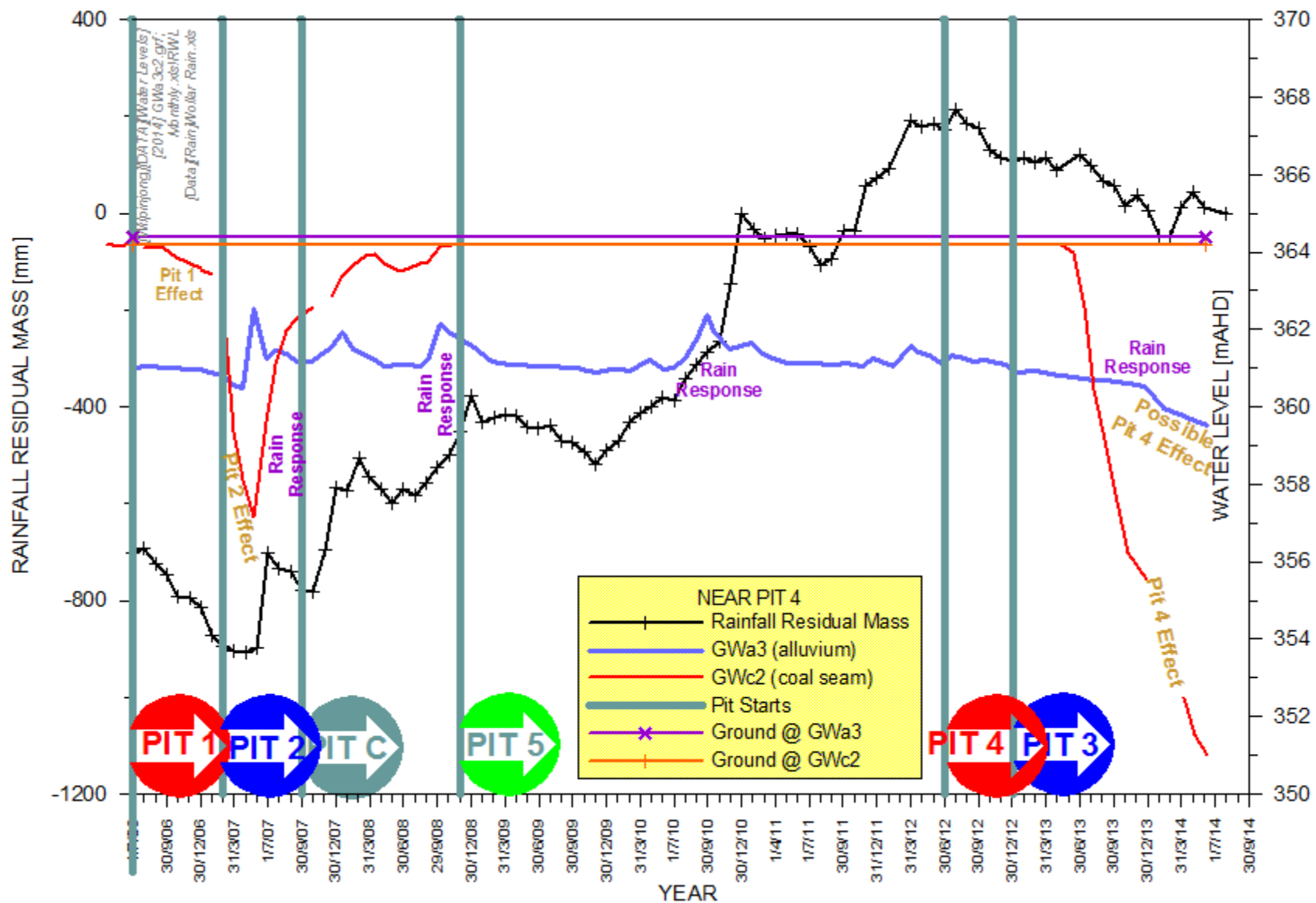


Figure C-9. Groundwater Hydrographs at GWa3 and GWc2 at 0.45 km North of Pit 4

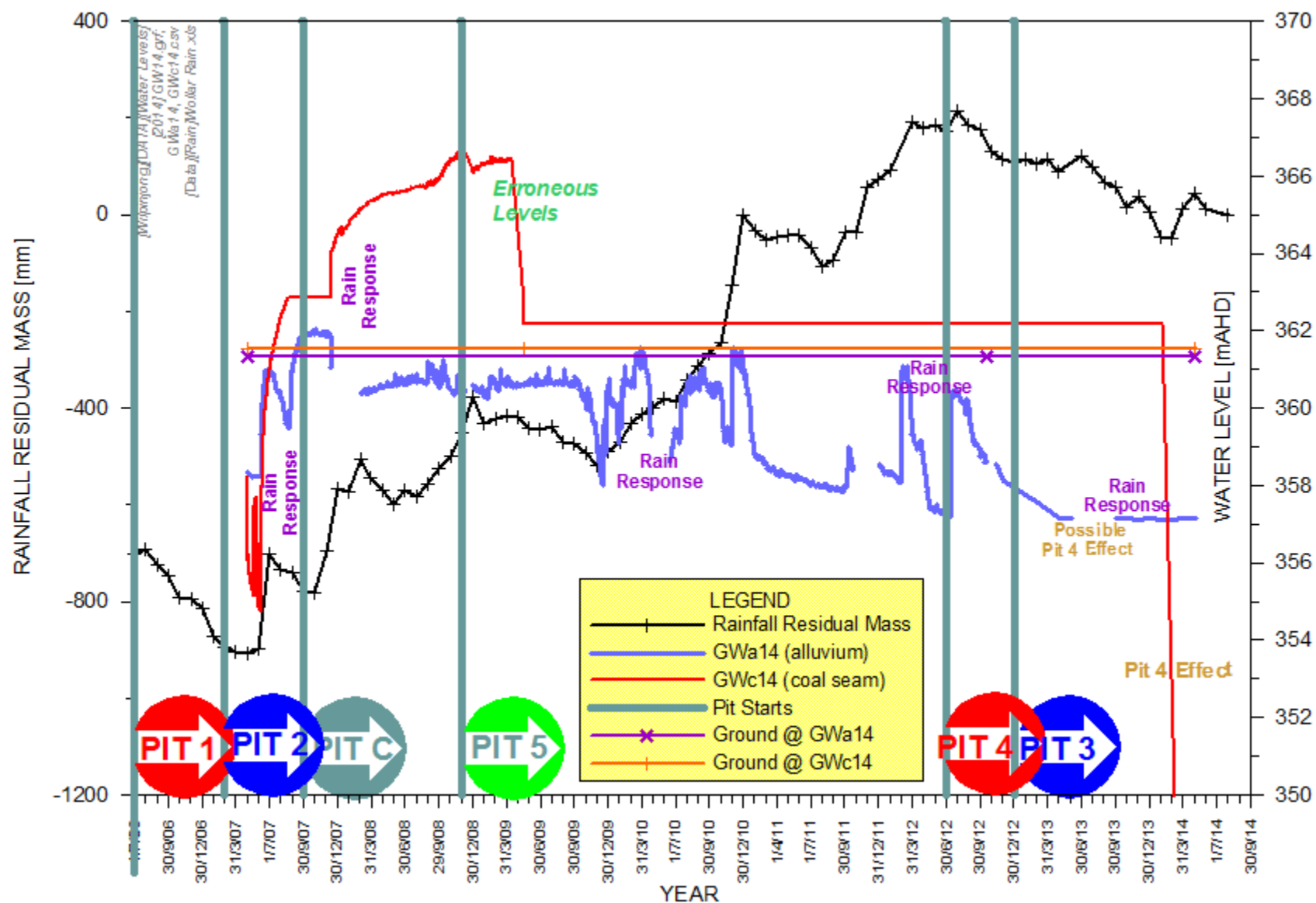


Figure C-10. Groundwater Hydrographs at GWA14 and GWC14 at 0.3 km North of Pit 4

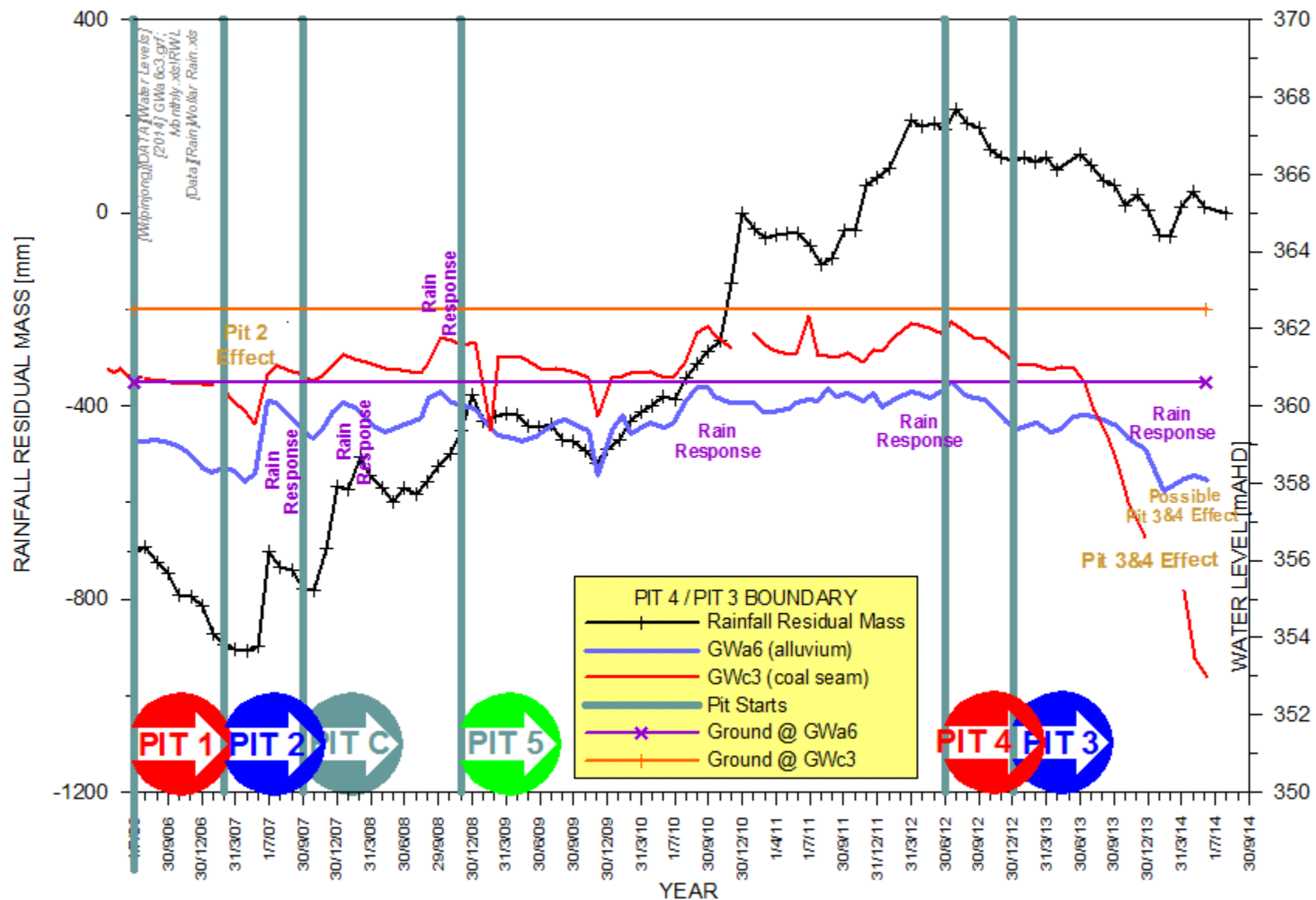


Figure C-11. Groundwater Hydrographs at Gwa6 and Gwc3 at Northern Junction of Pits 3 and 4, adjacent to Cumbo Creek

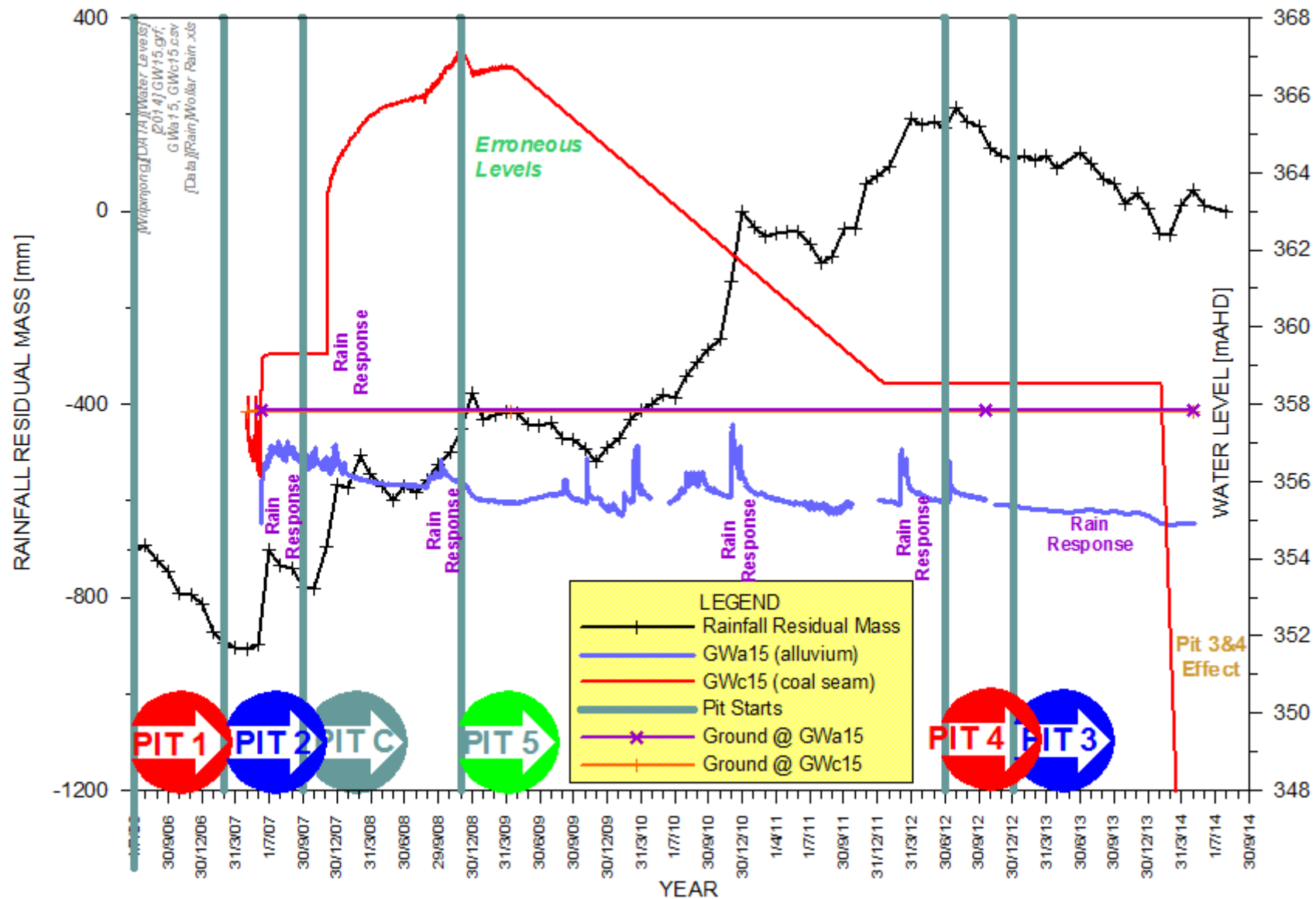


Figure C-12. Groundwater Hydrographs at GWa15 and GWc15 at 0.2 km North of Pit 3

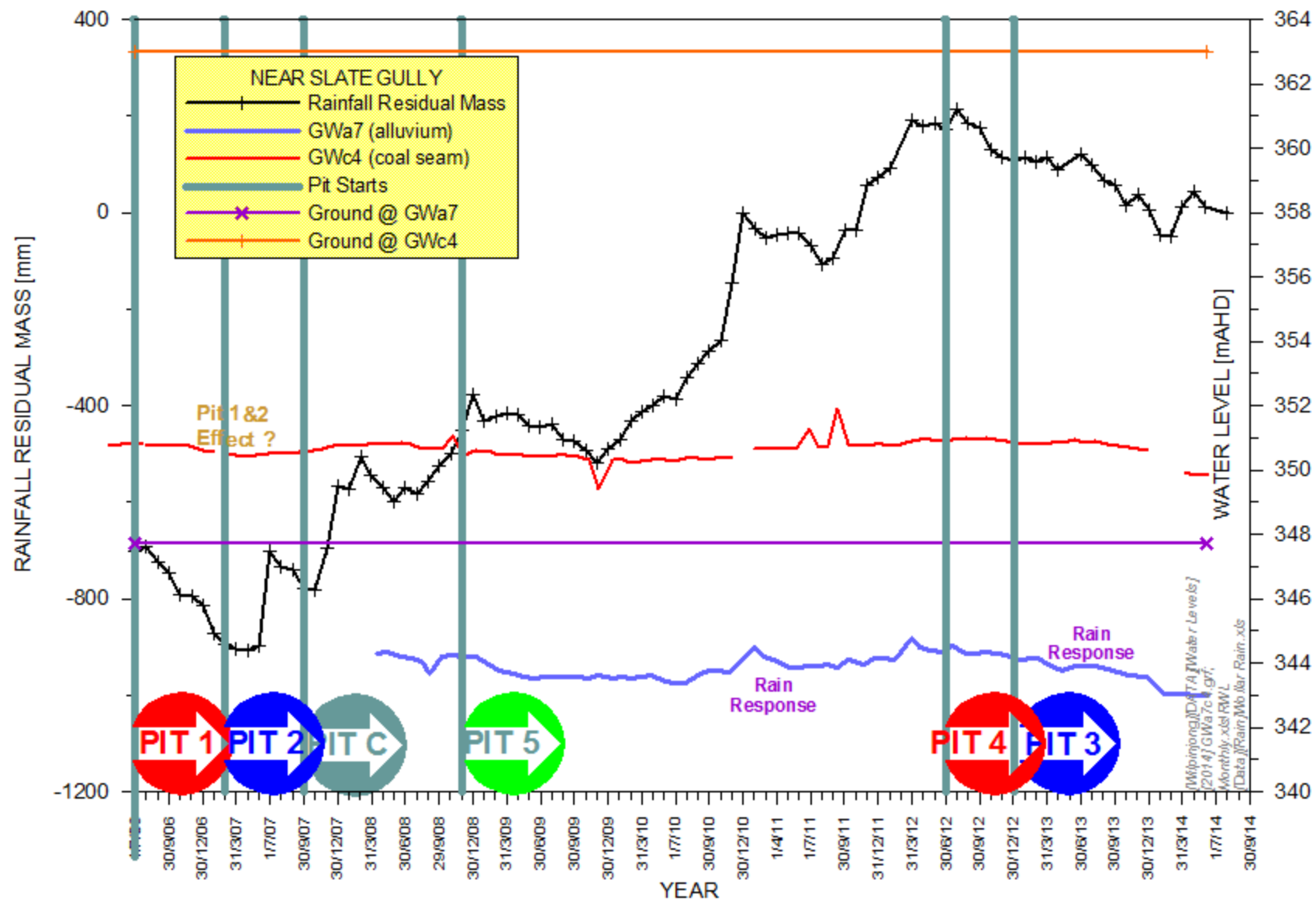


Figure C-13. Groundwater Hydrographs at GWa7 and GWc4 near the Confluence of Wilpinjong Creek and Wollar Creek

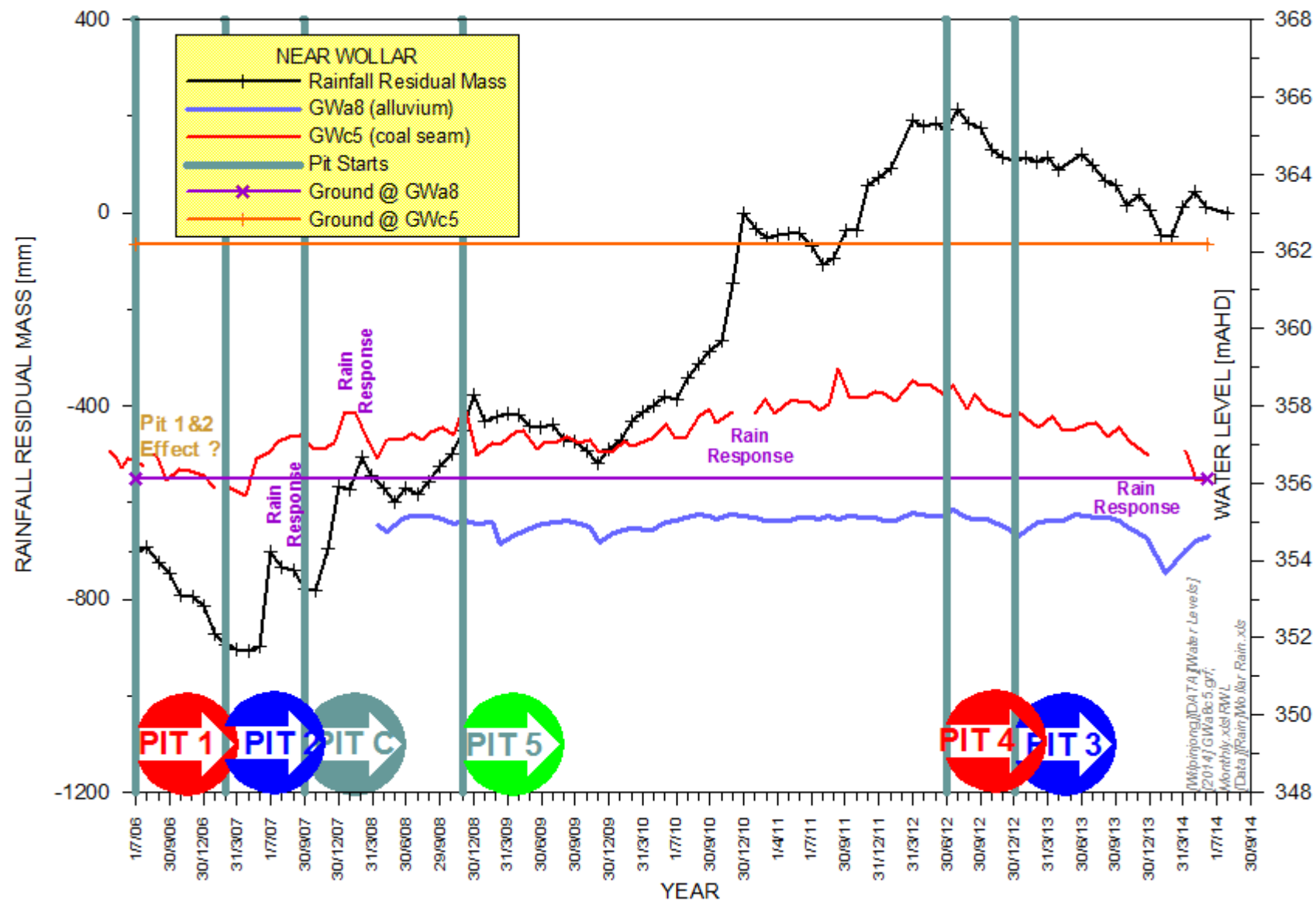
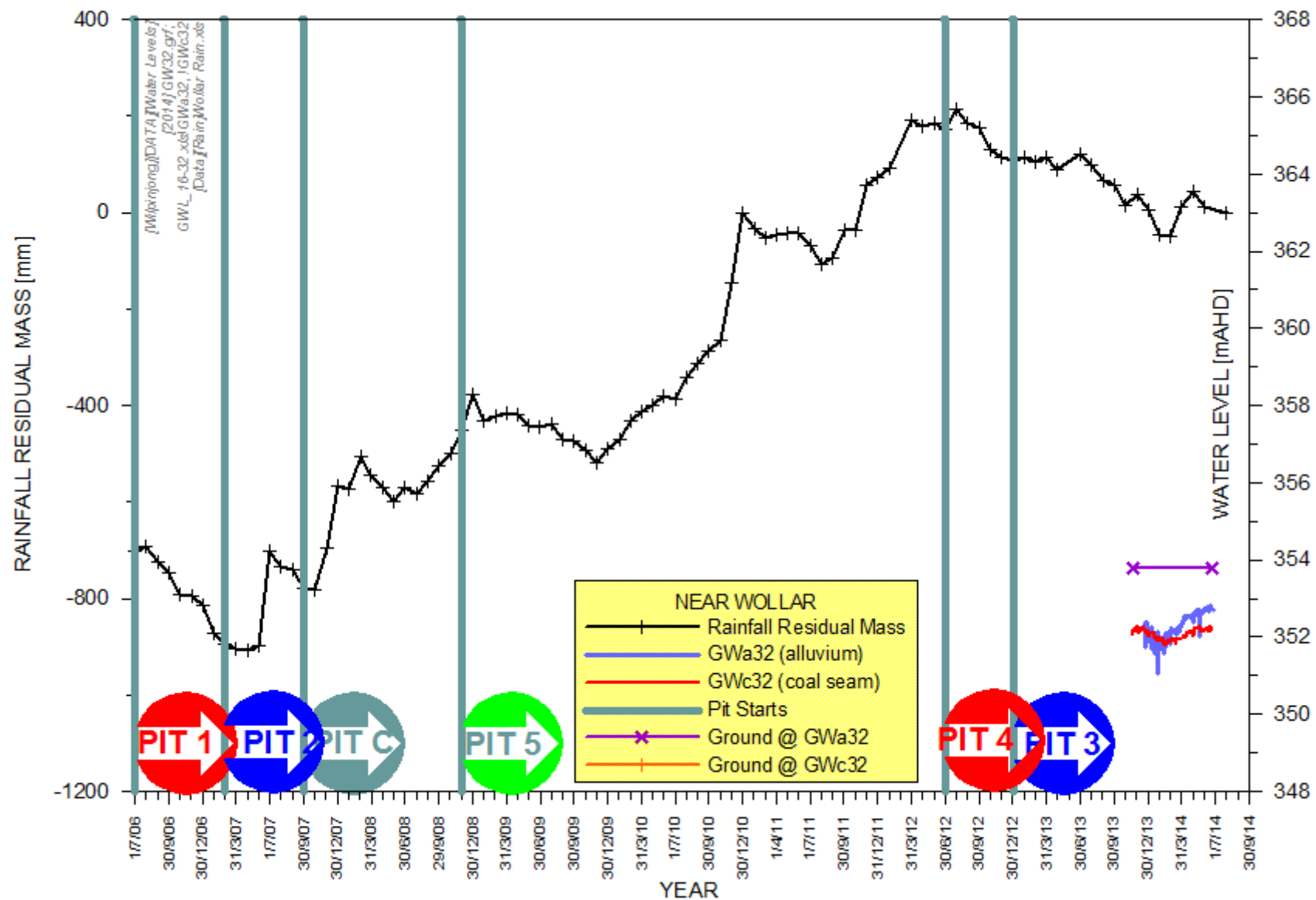


Figure C-14. Groundwater Hydrographs at GWa8 and GWc5 near Wollar



FigureC-15. Groundwater Hydrographs at GWa32 and GWc32 adjacent to Wollar Creek

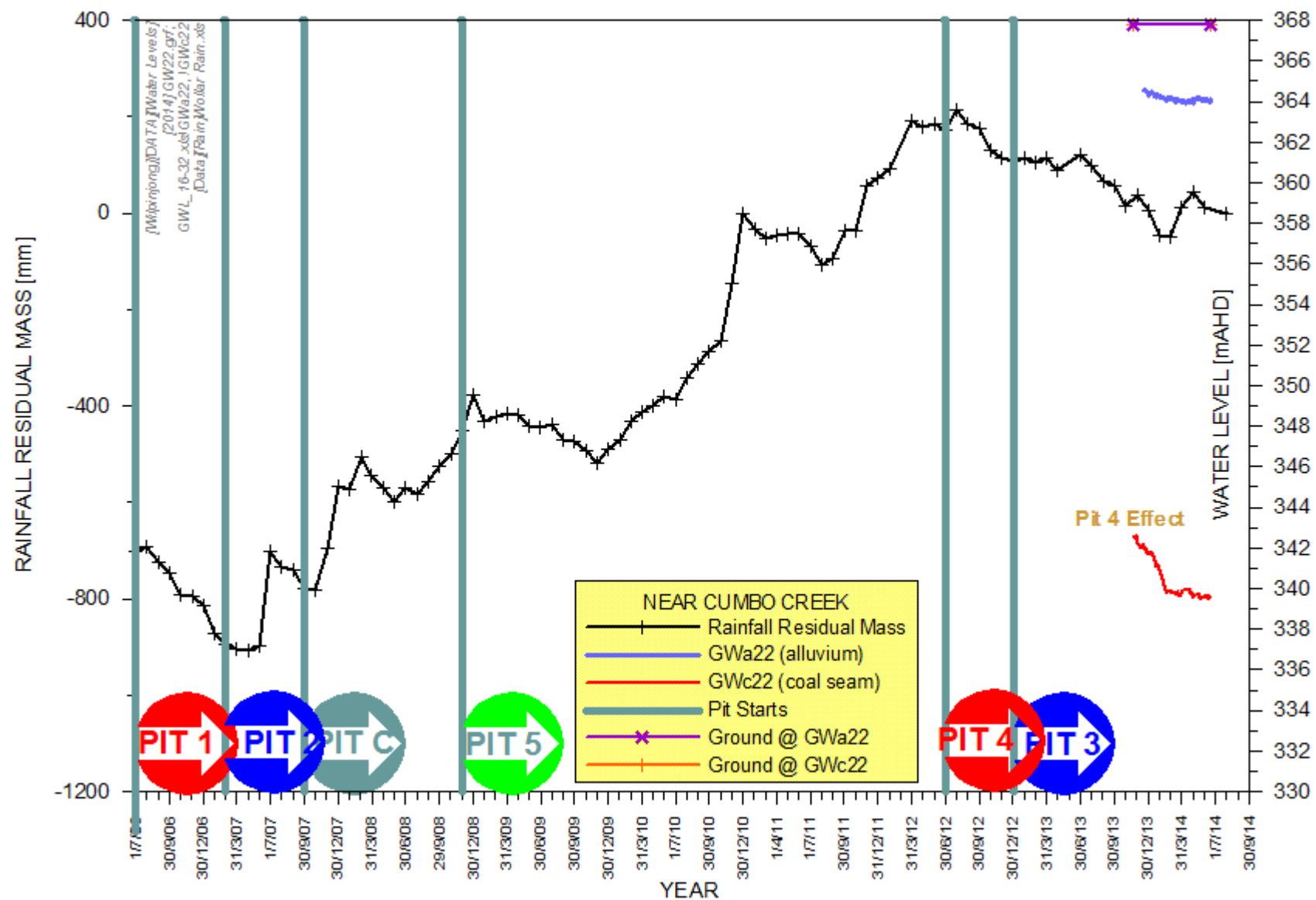


Figure C-16. Groundwater Hydrographs at GWA22 and GWC22 adjacent to Cumbo Creek

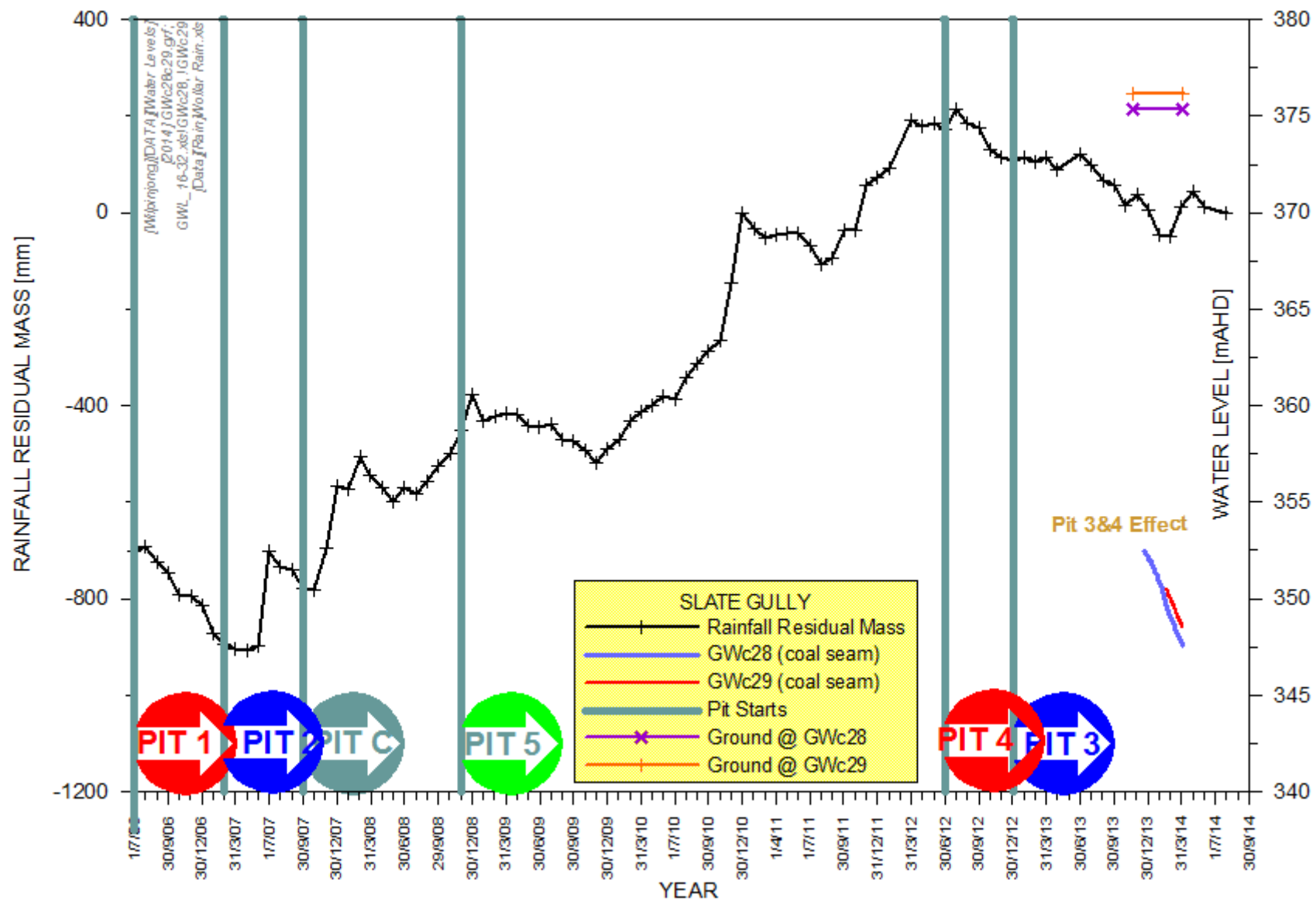


Figure C-17. Groundwater Hydrographs at GWc28 and GWc29 in Slate Gully

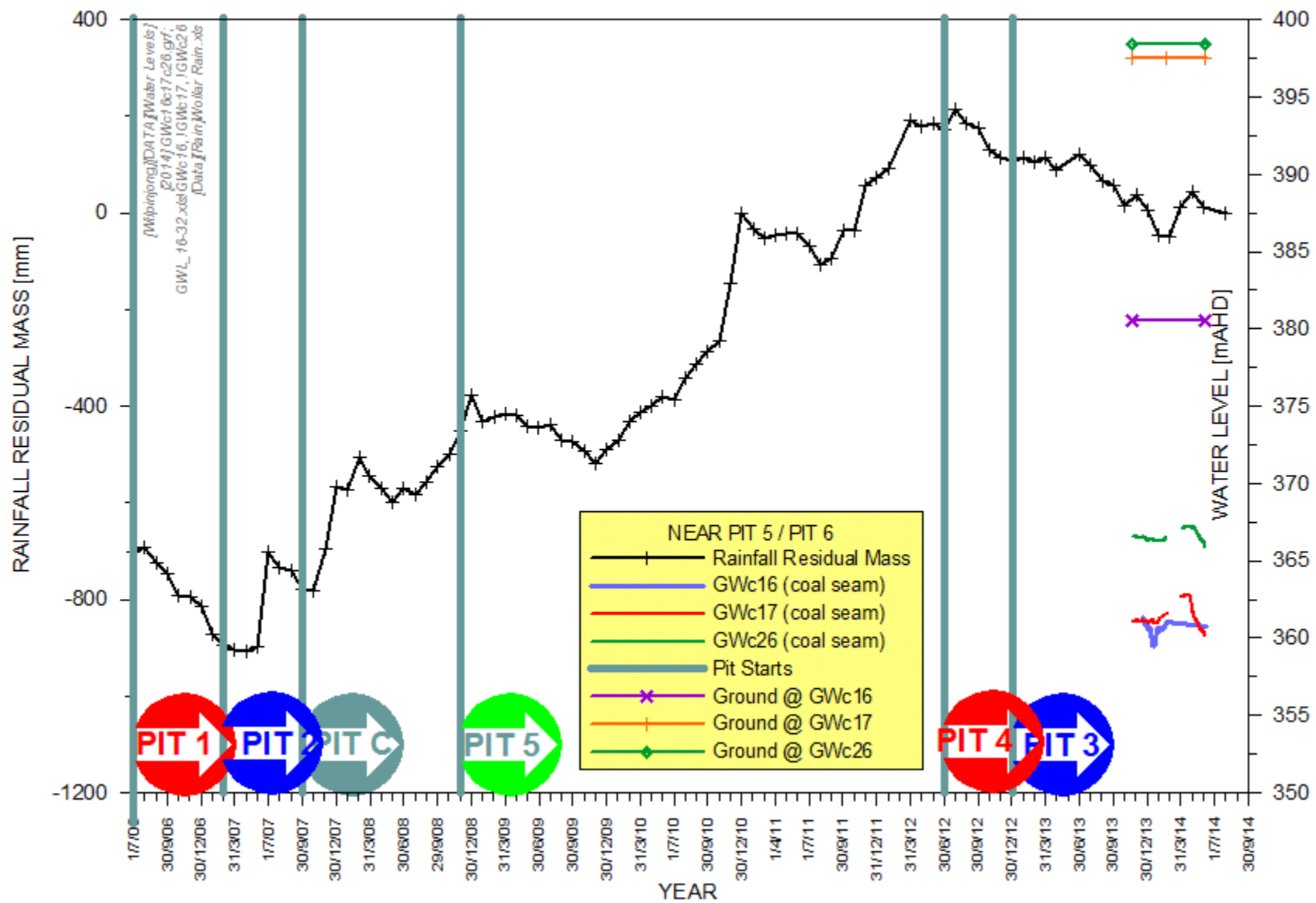


Figure C-18. Groundwater Hydrographs at GWc16, GWc17 and GWc26 at Pit 6 and North of Pit 5

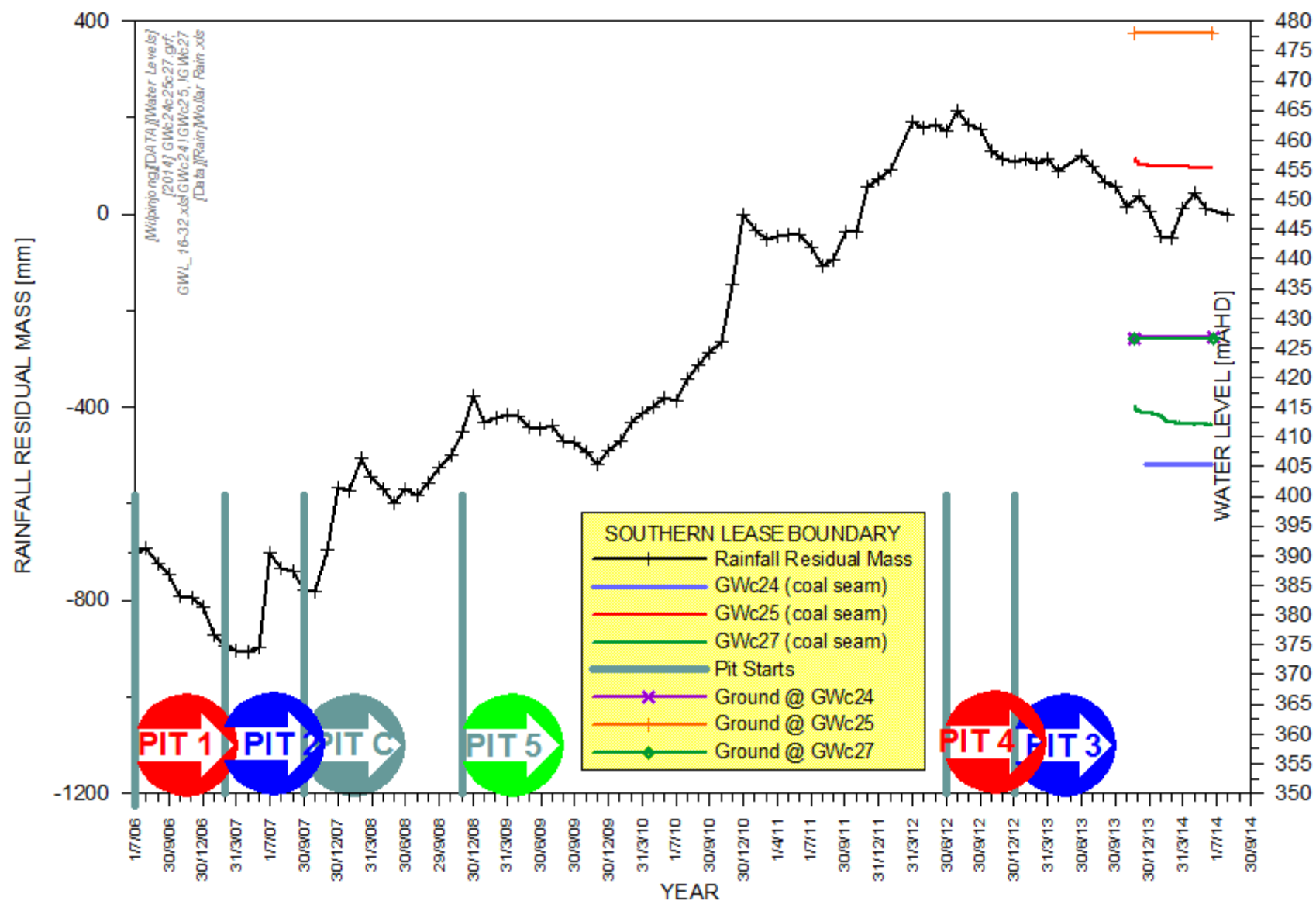


Figure C-19. Groundwater Hydrographs at GWc24, GWc25 and GWc27 at the Southern Lease Boundary

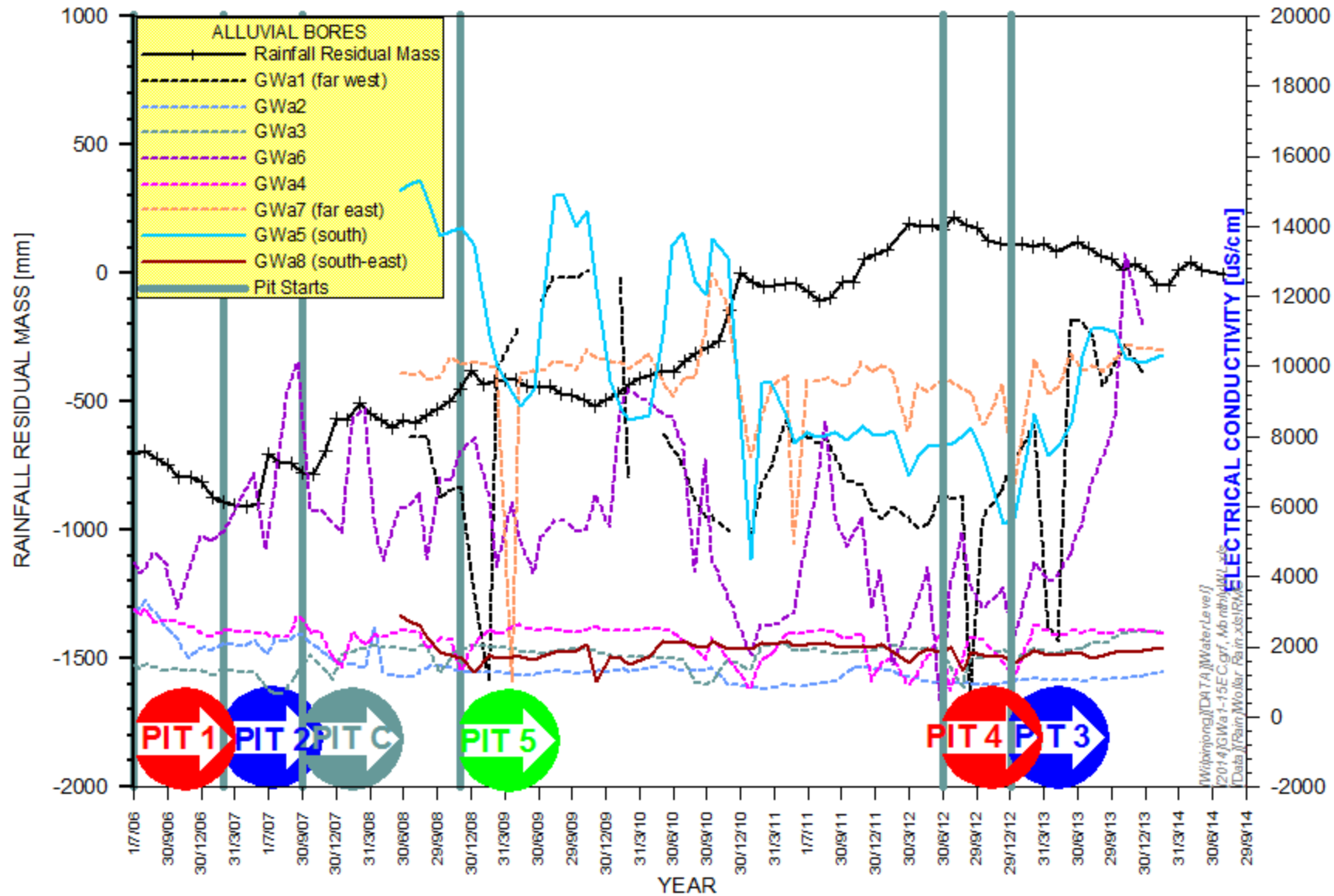
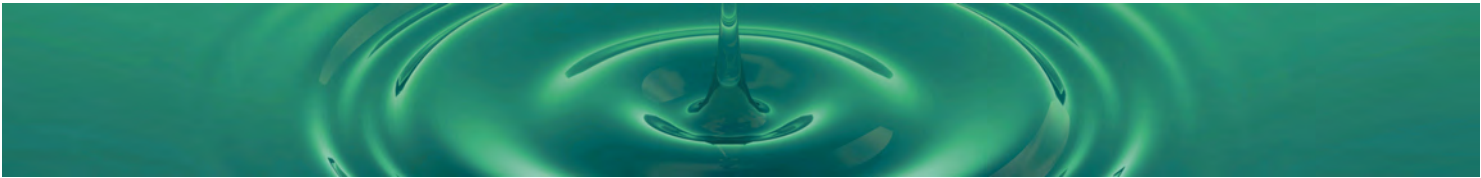
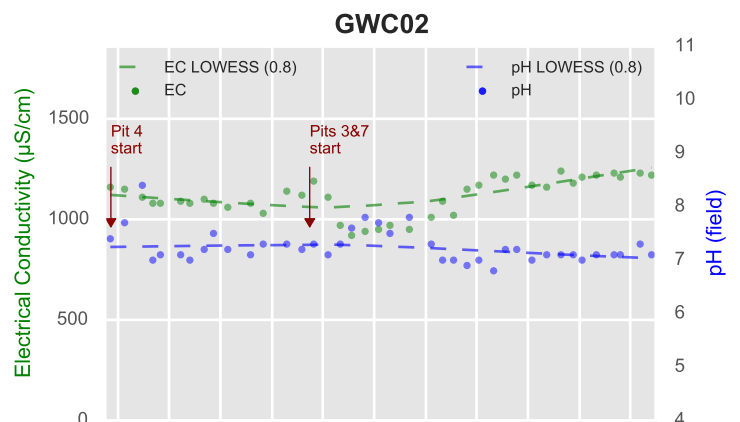
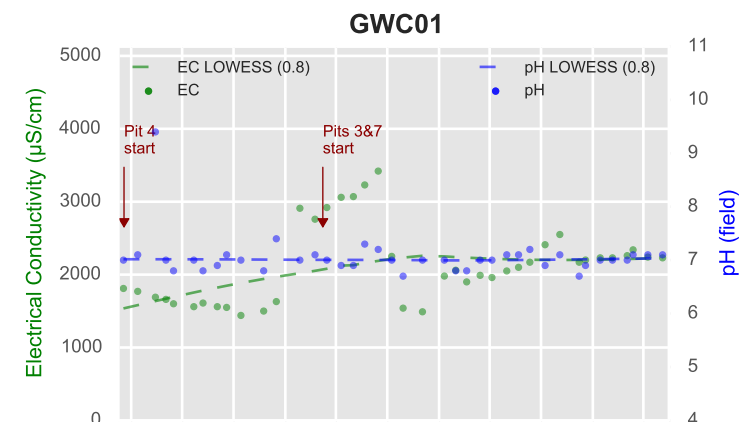
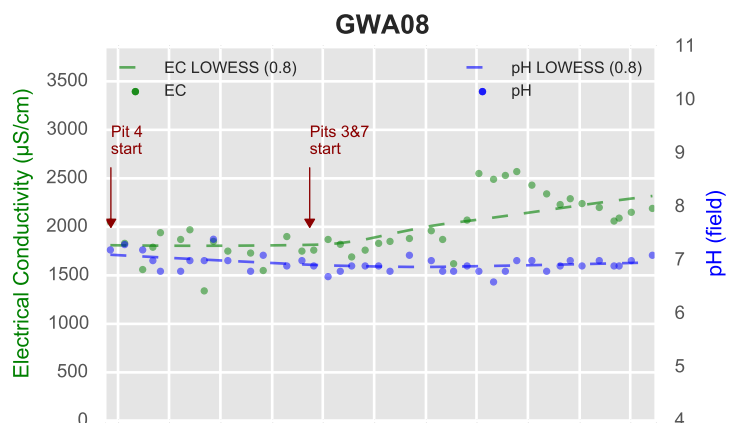
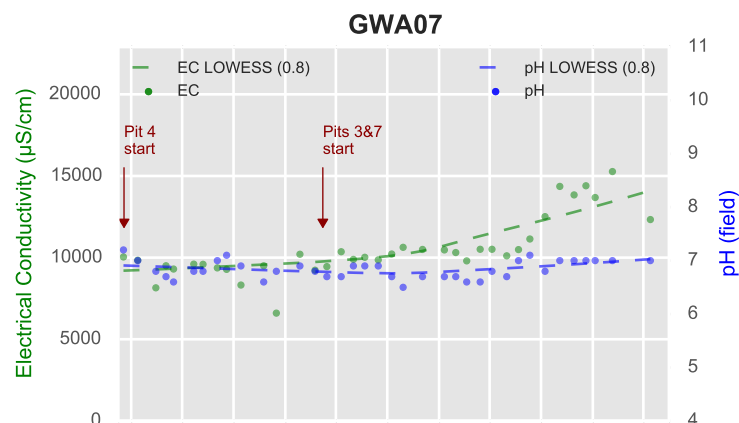
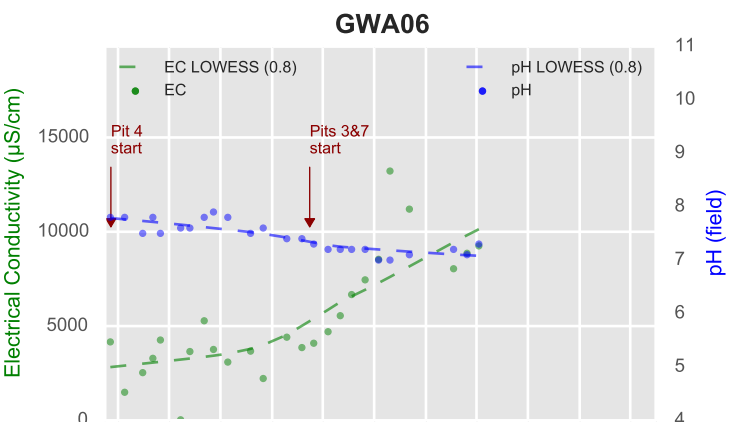
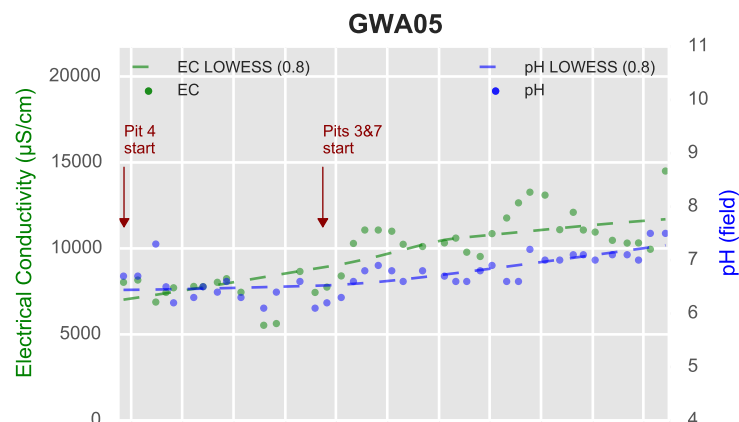
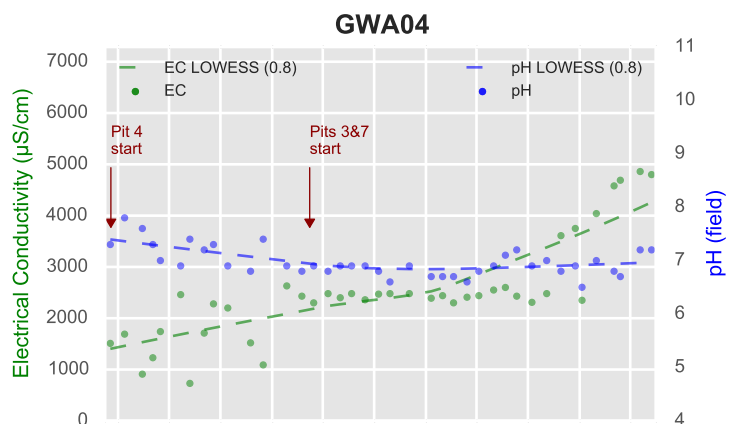
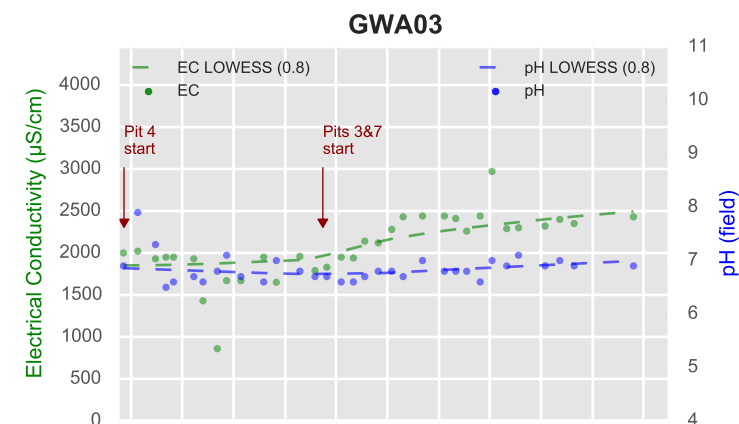
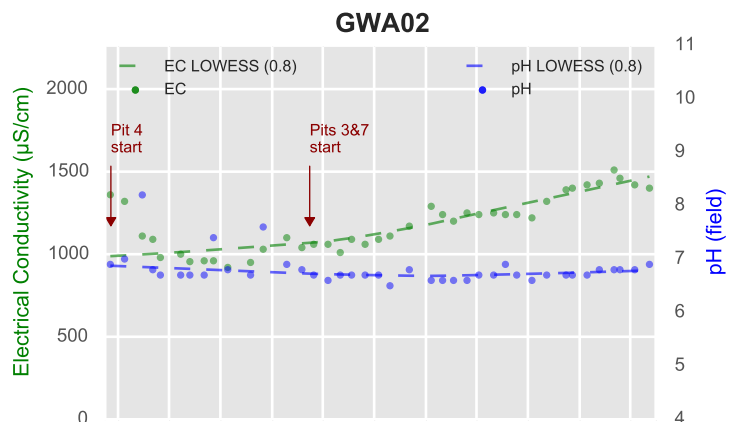
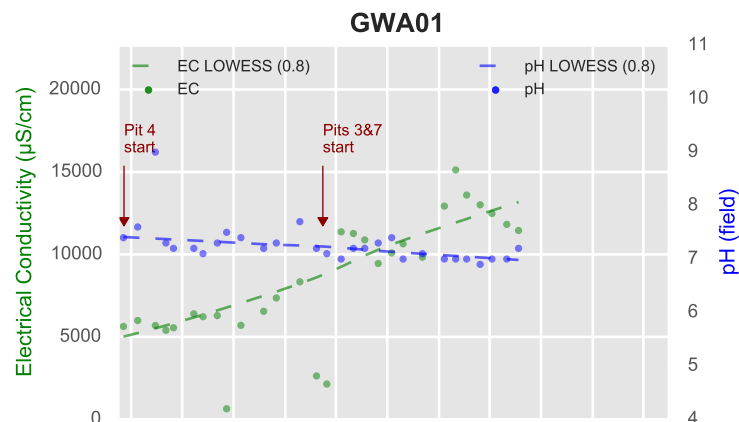


Figure C-20. Electrical Conductivity Temporal Variations in Alluvium (µS/cm)



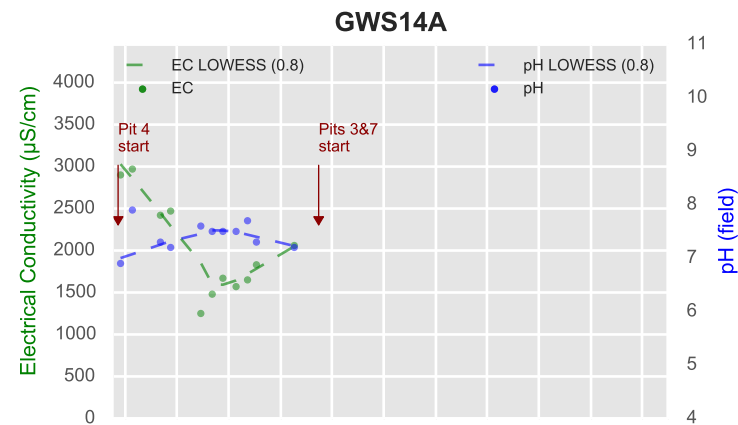
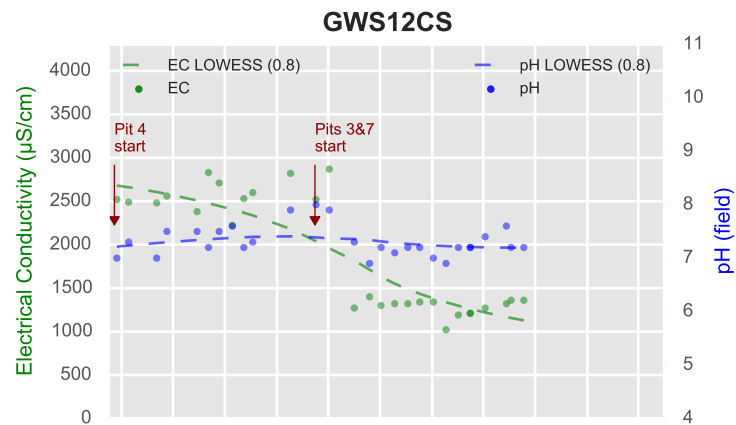
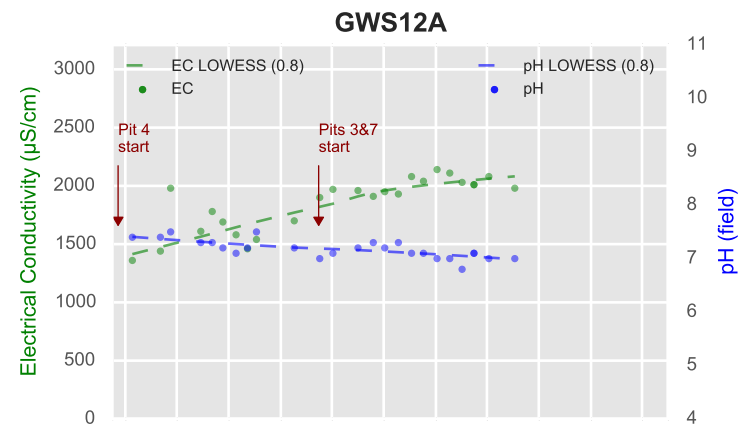
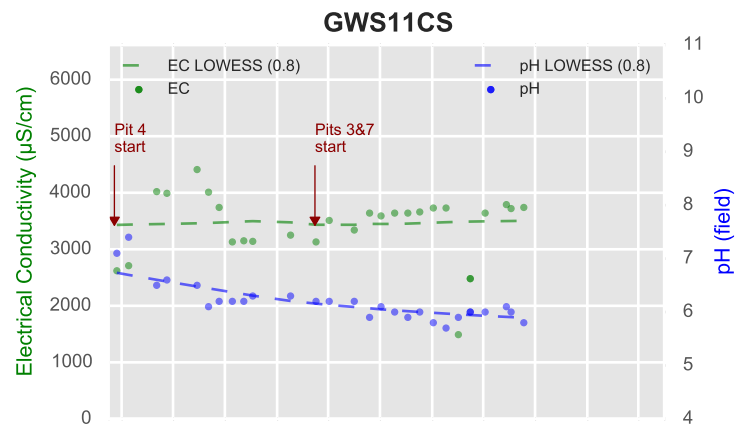
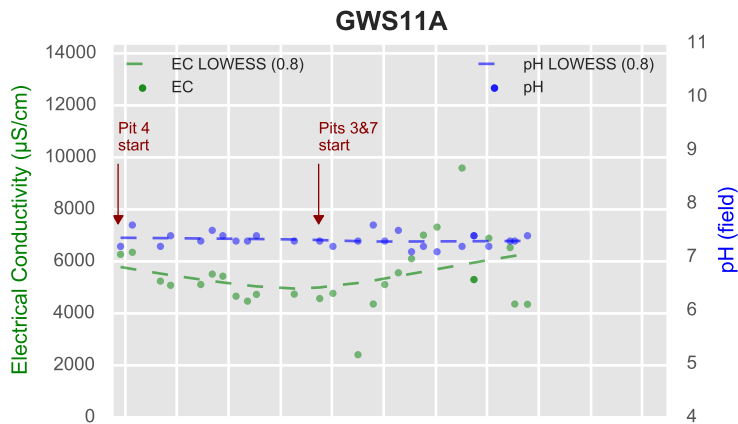
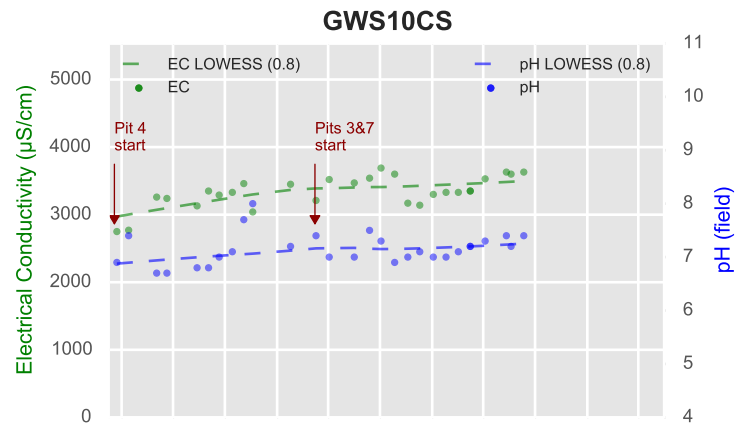
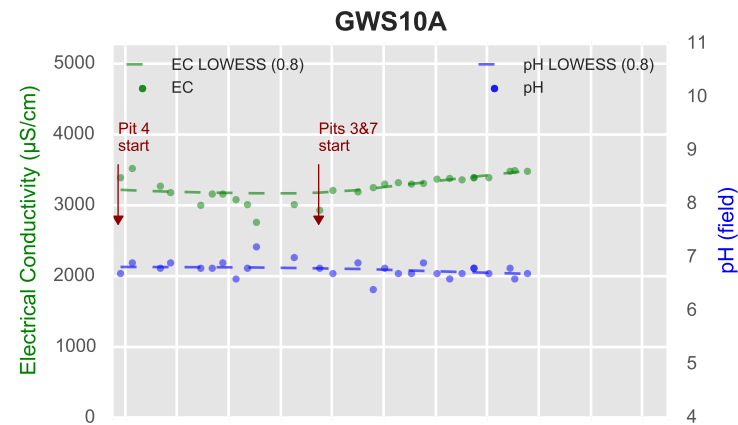
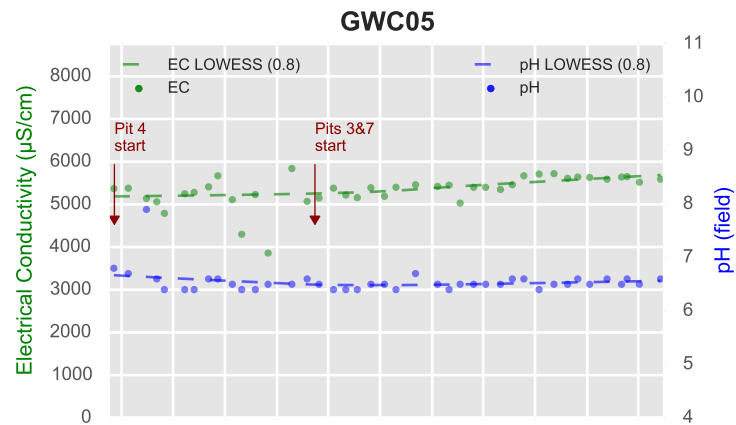
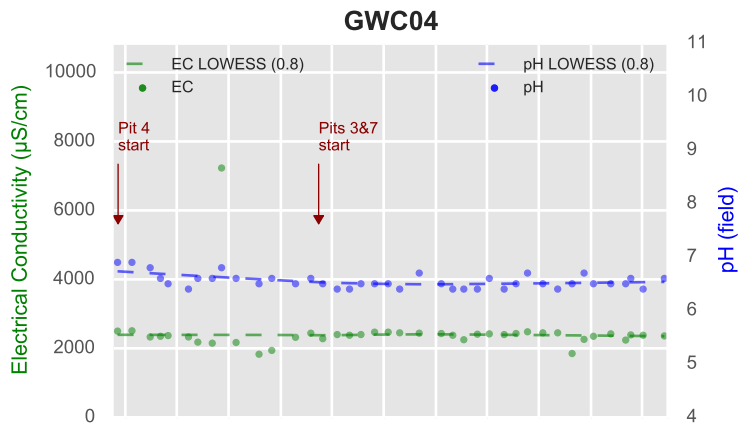
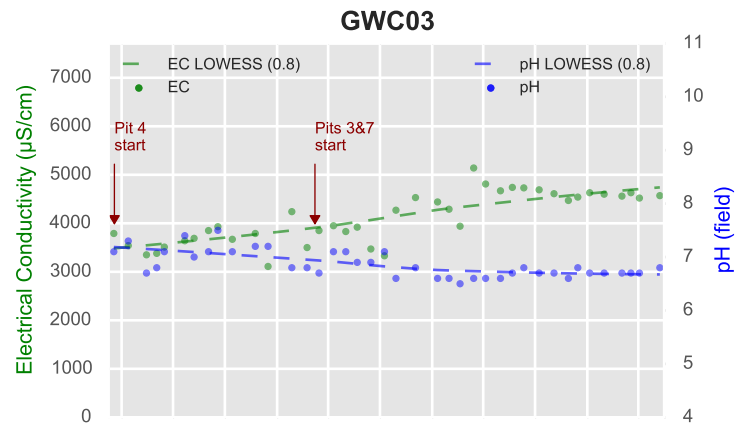
APPENDIX D – GROUNDWATER QUALITY

Time series Plots of Groundwater pH and Electrical Conductivity (EC)

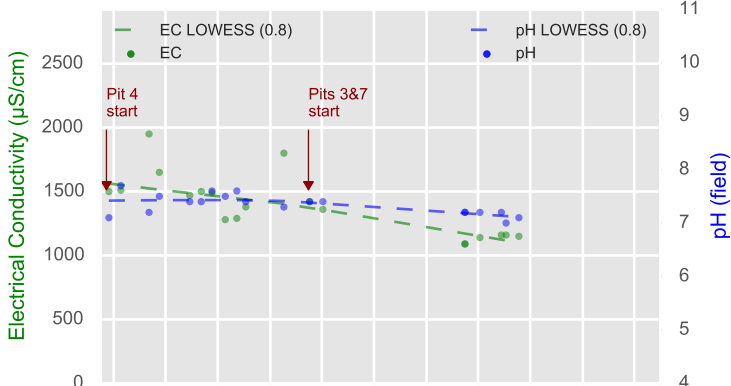


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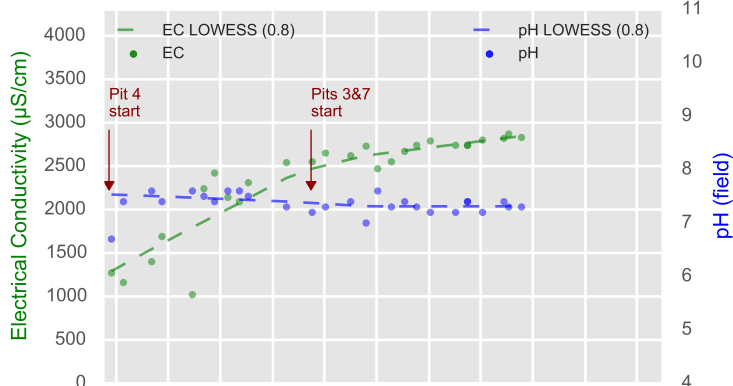
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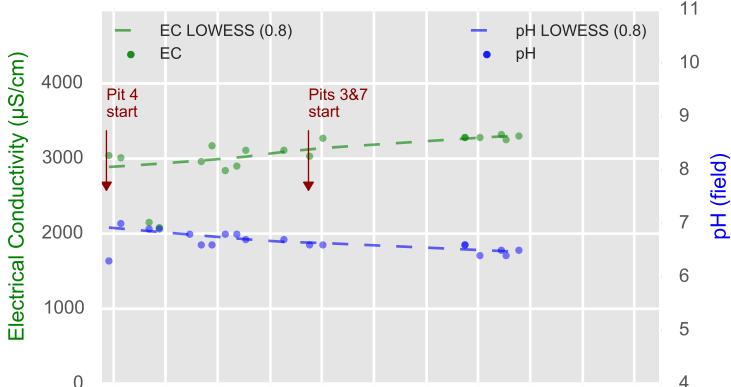
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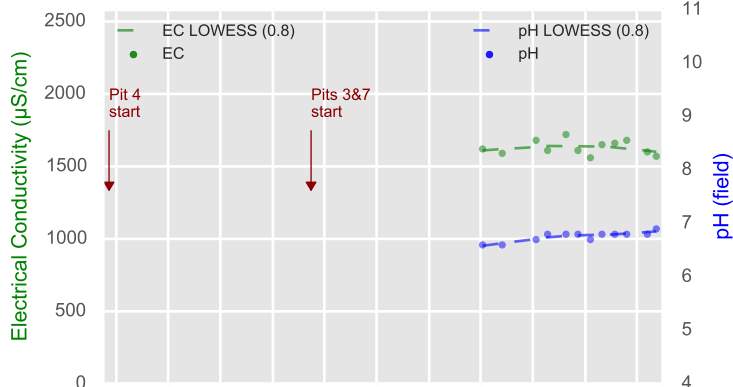
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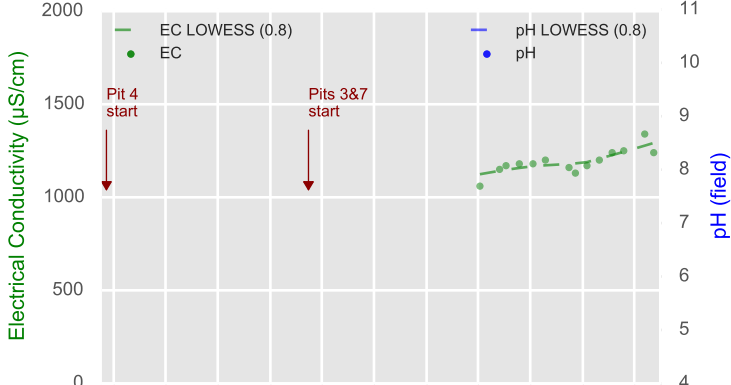
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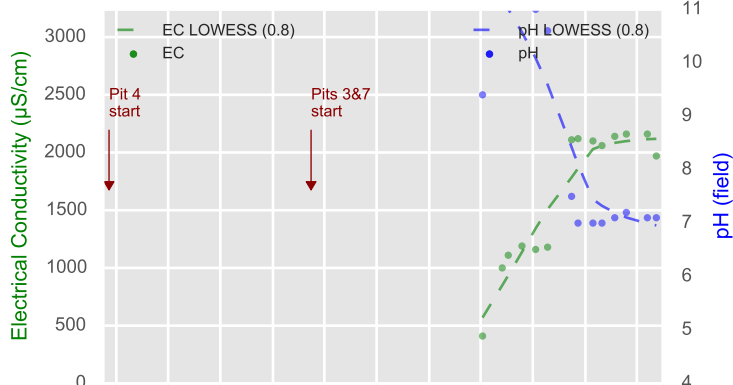
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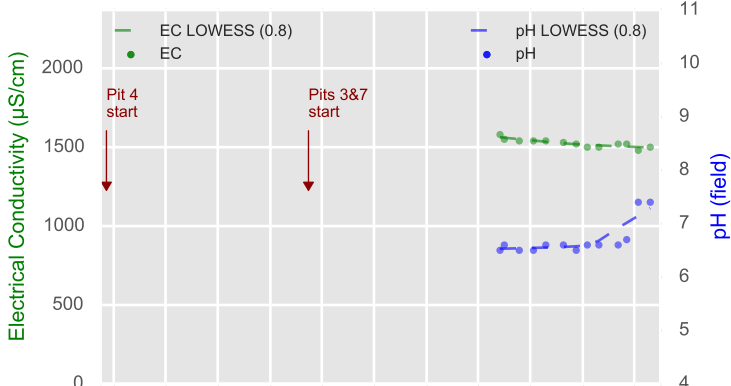
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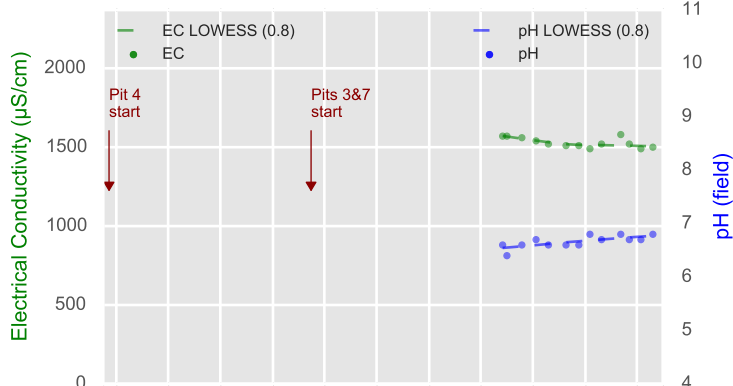
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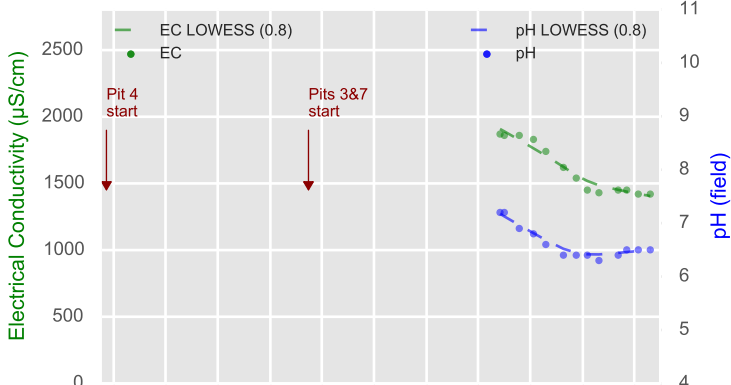
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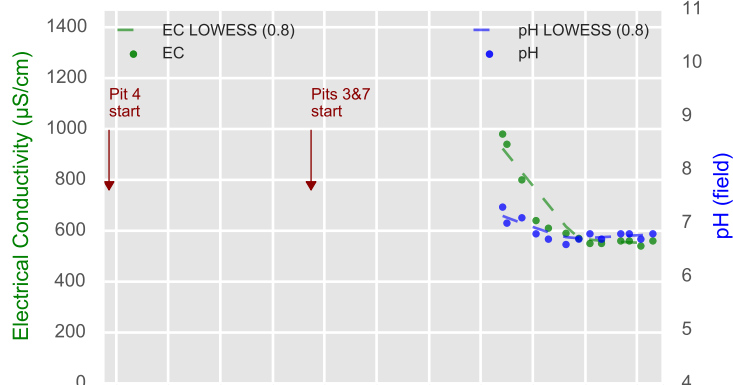
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GWC19

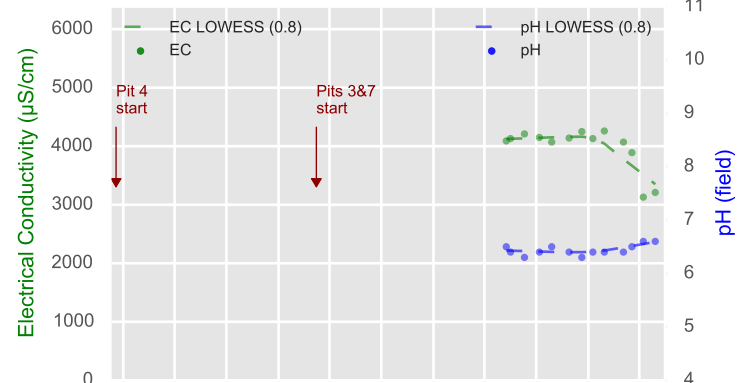


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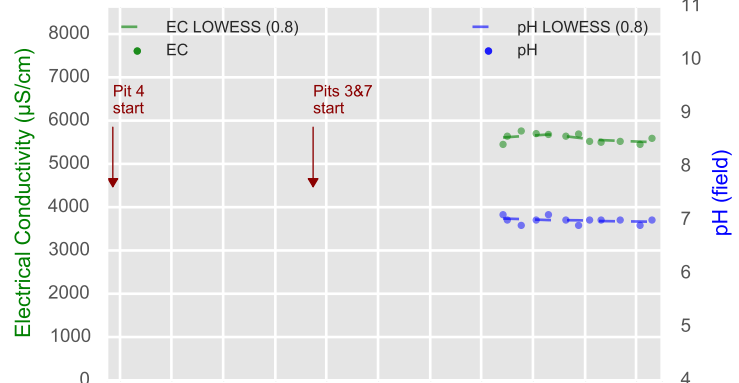


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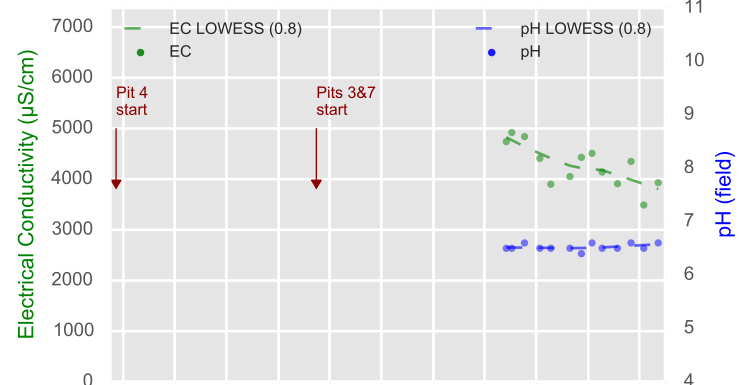
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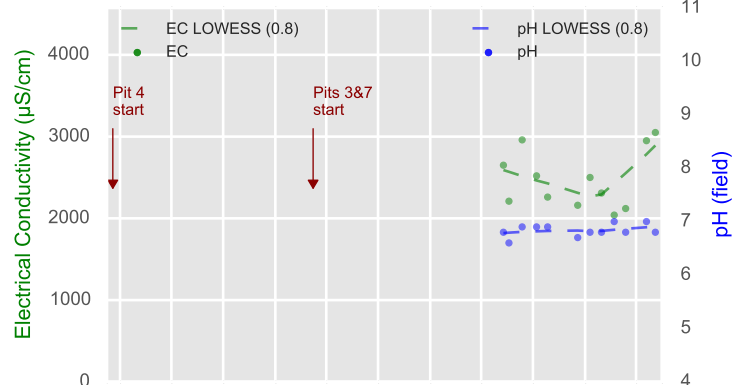
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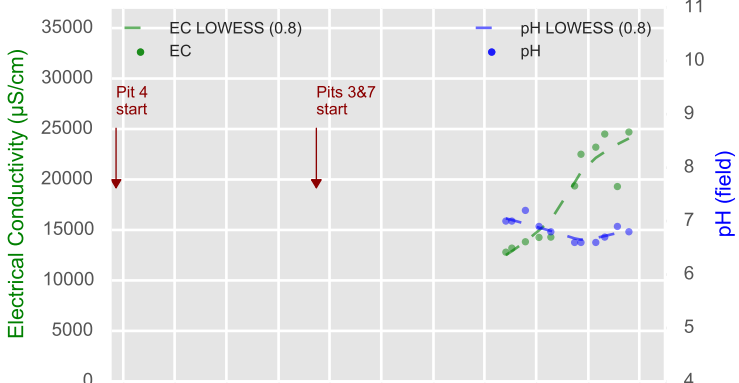
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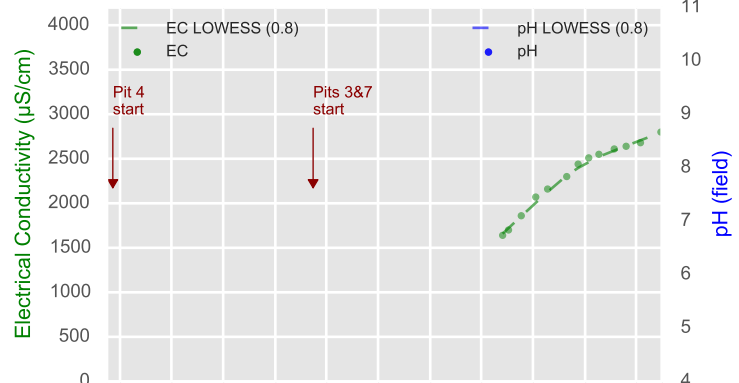
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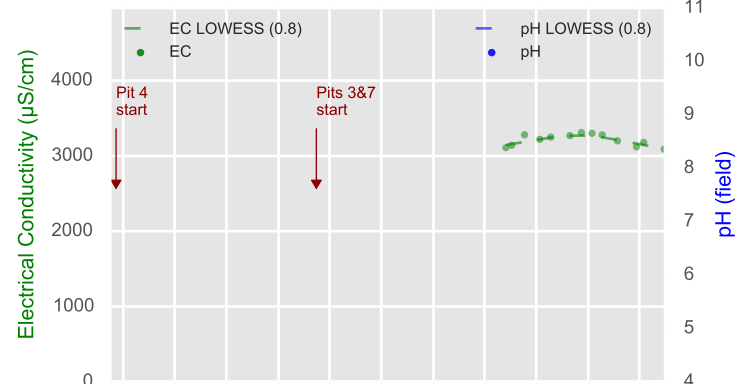
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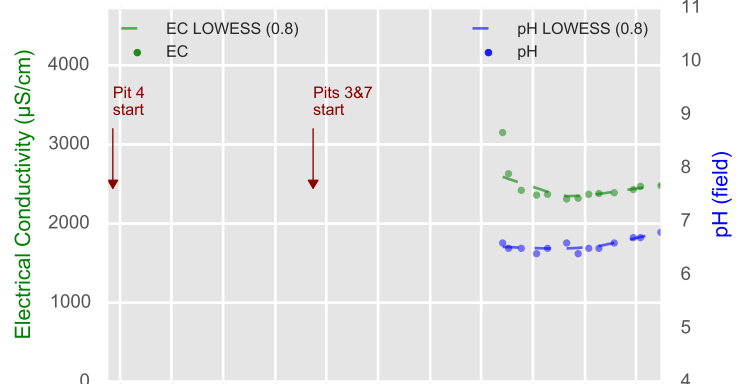
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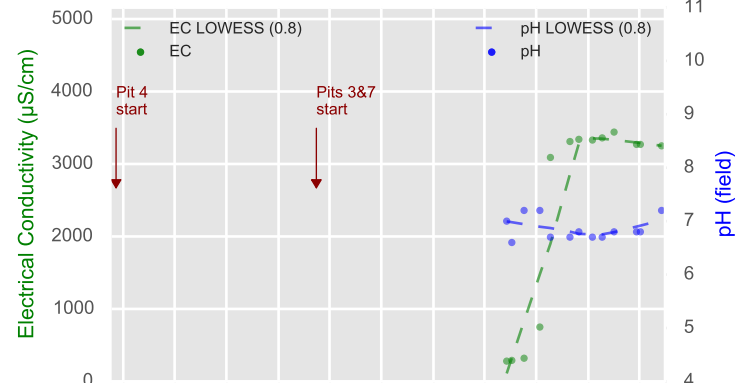
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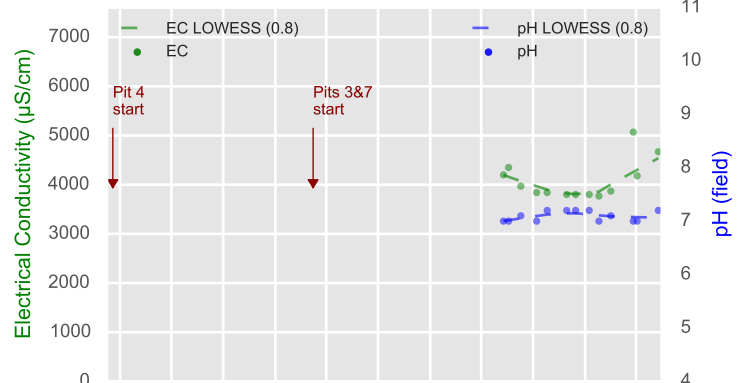
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GWC32

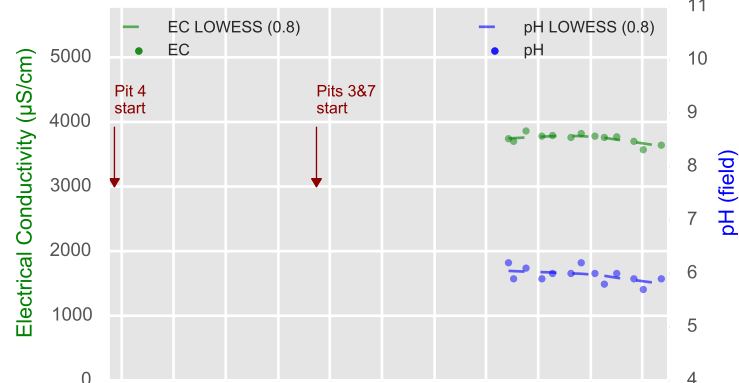


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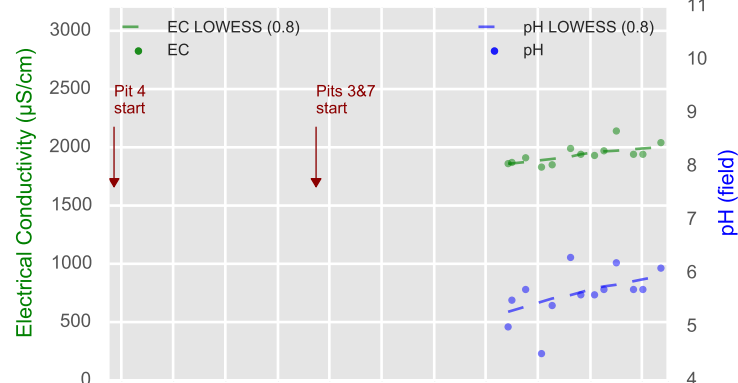


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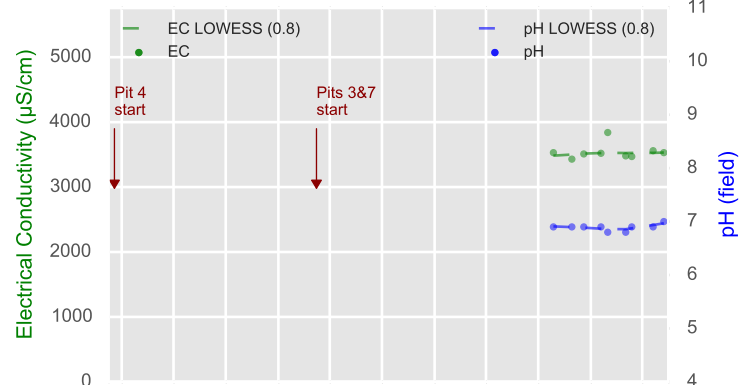
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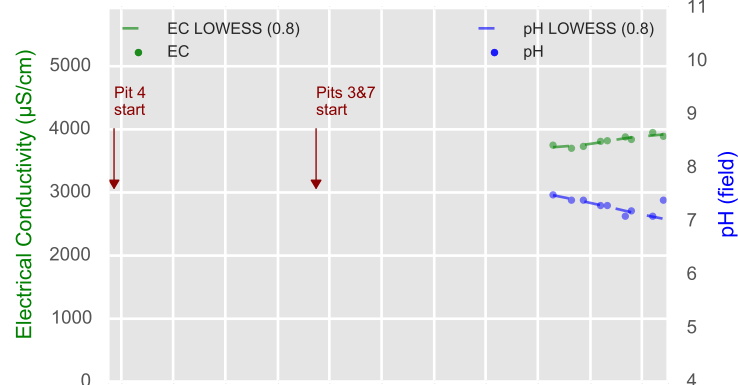
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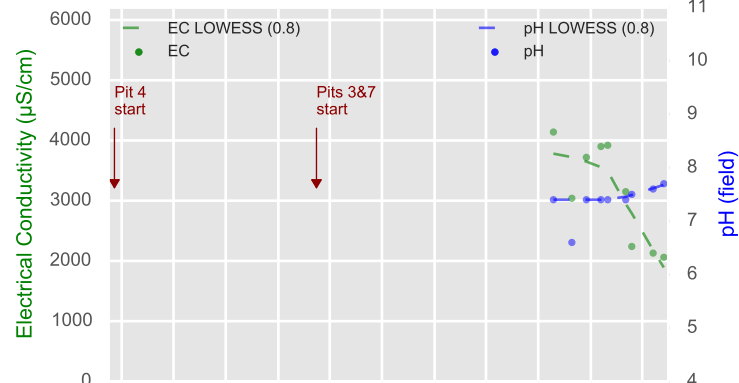
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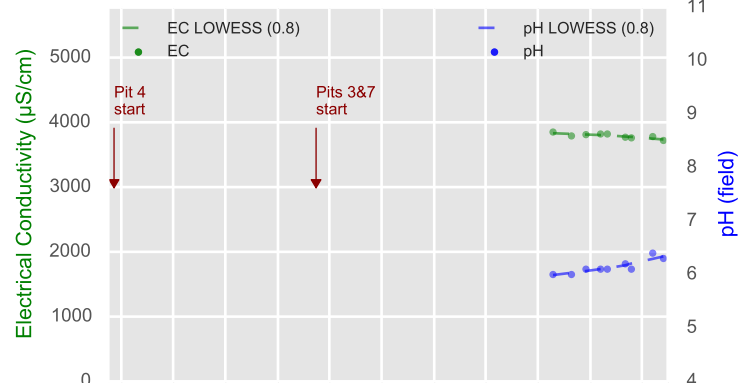
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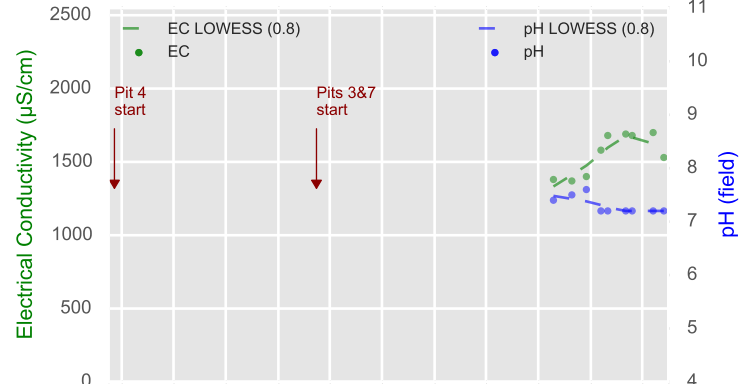
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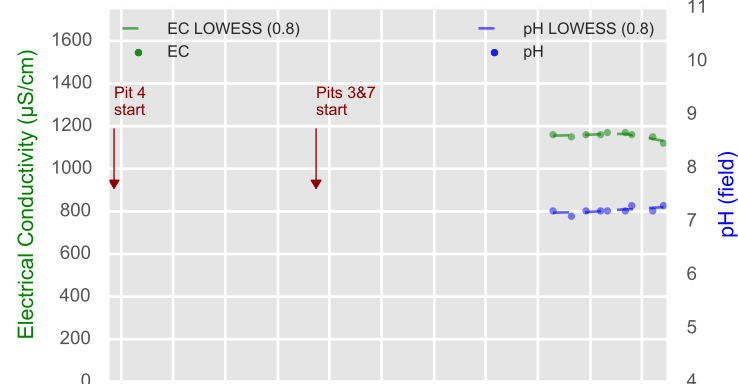
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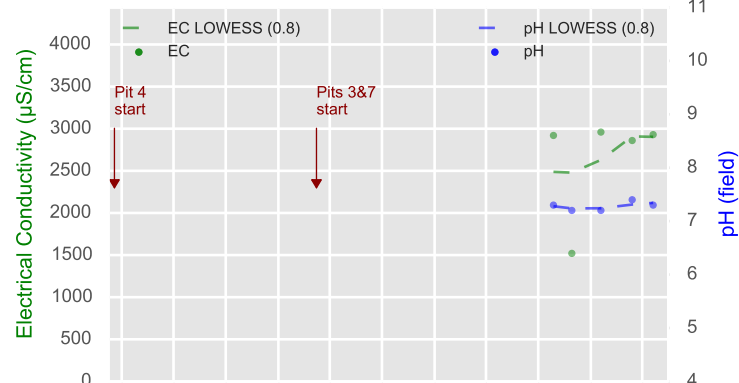
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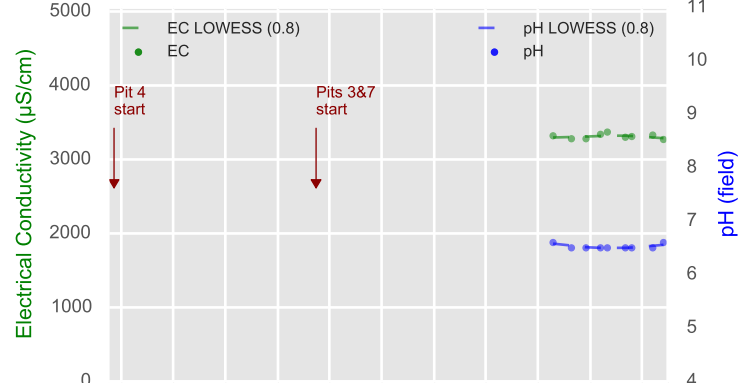
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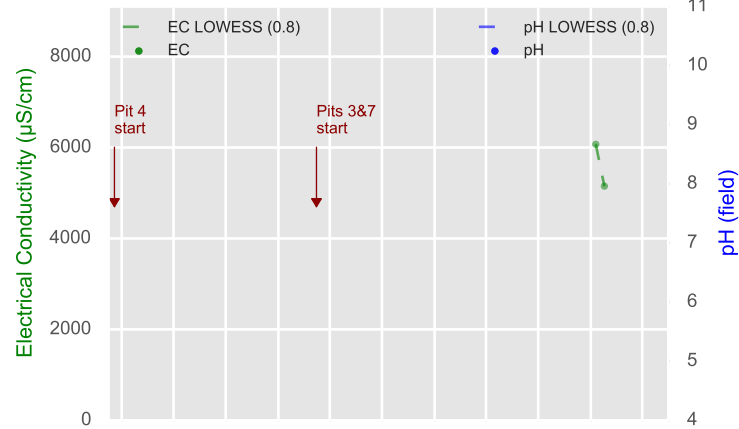
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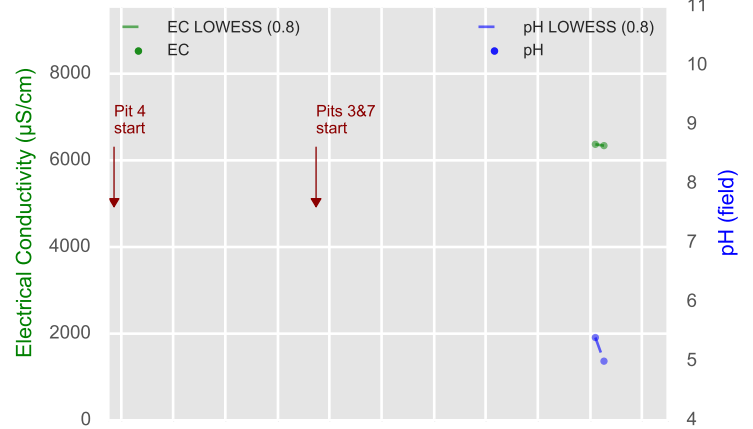
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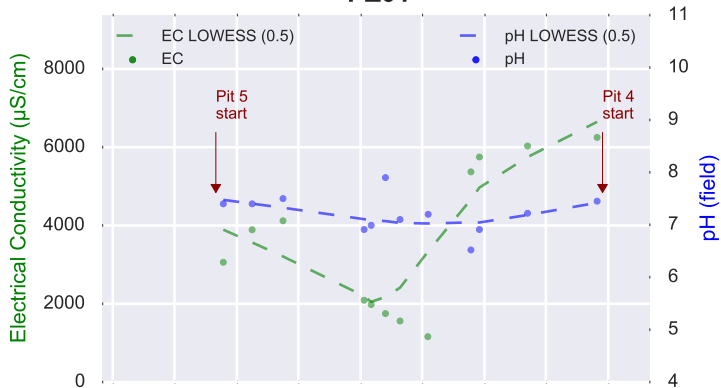
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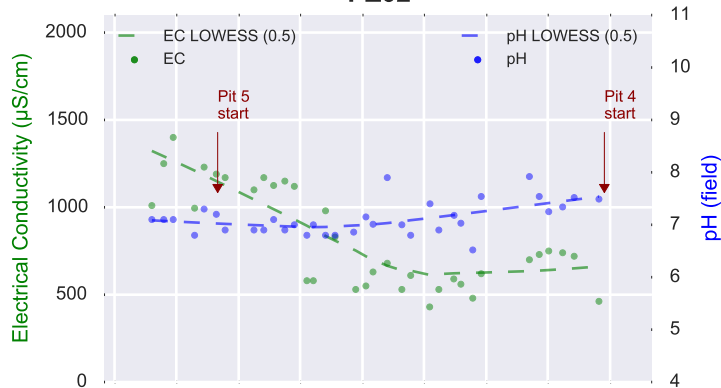
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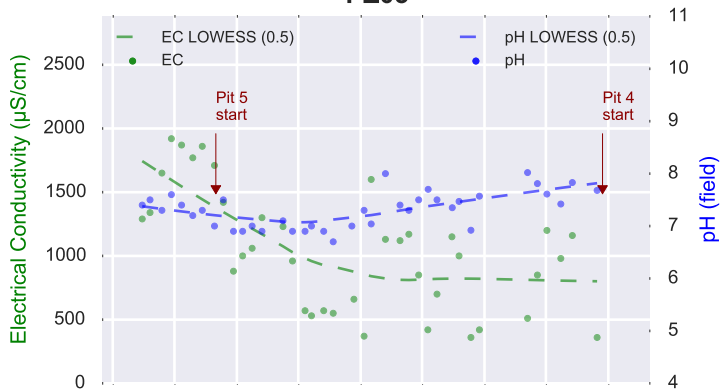
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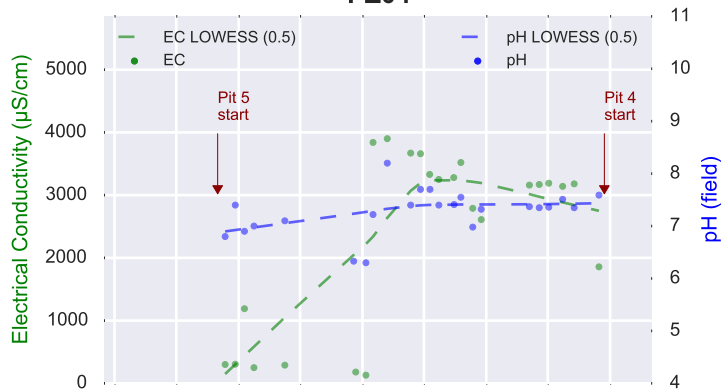
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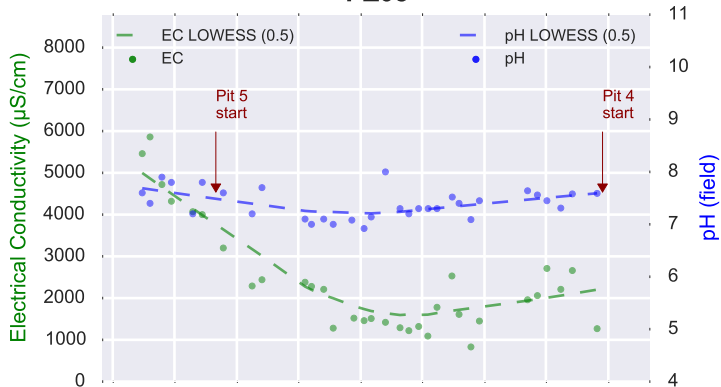
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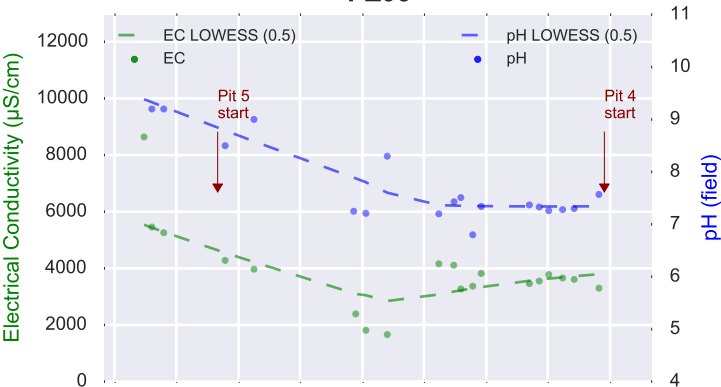
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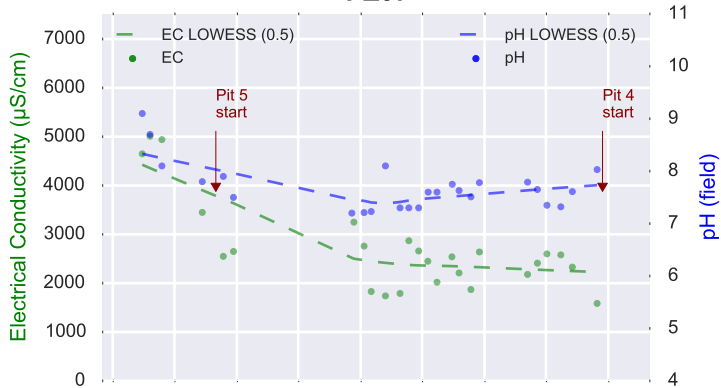
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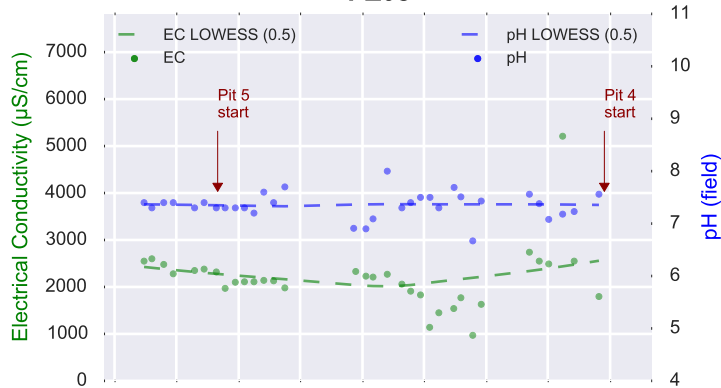
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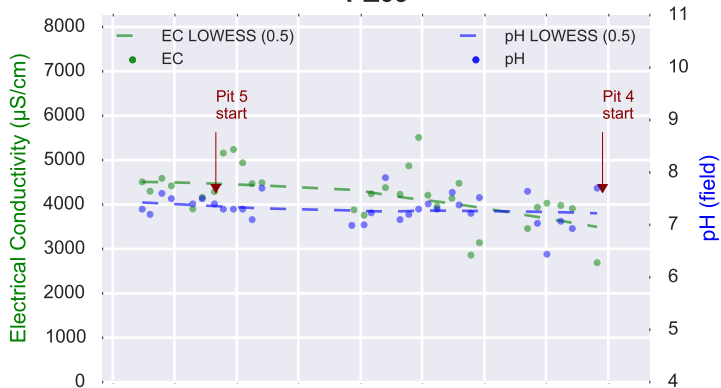
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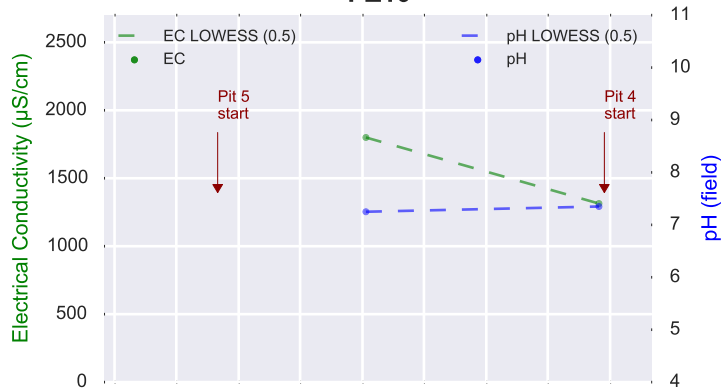
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PZ09

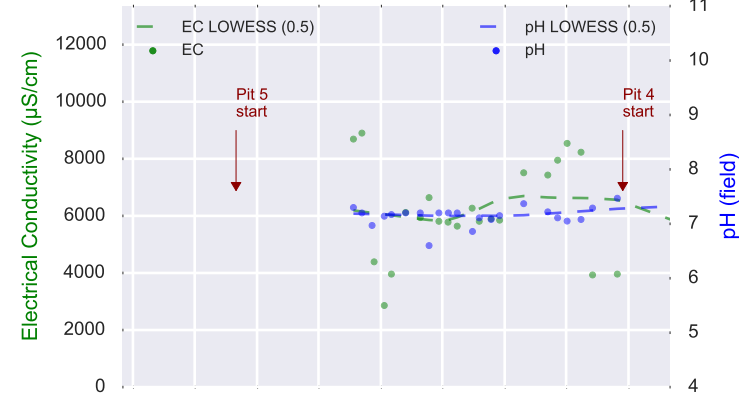


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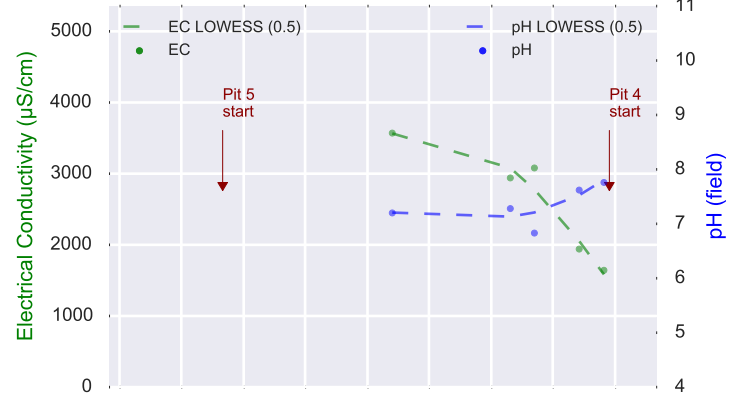


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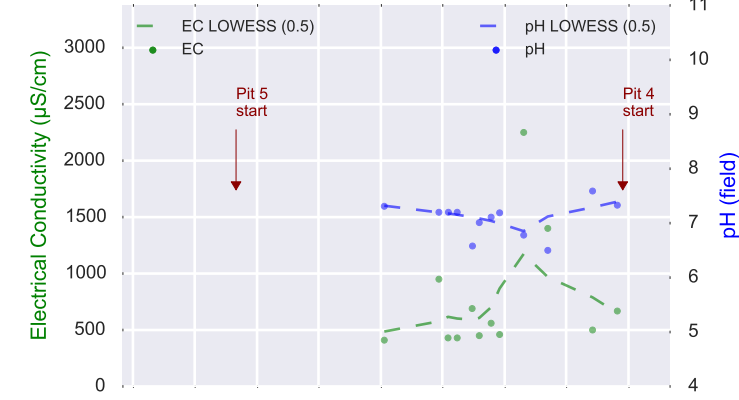
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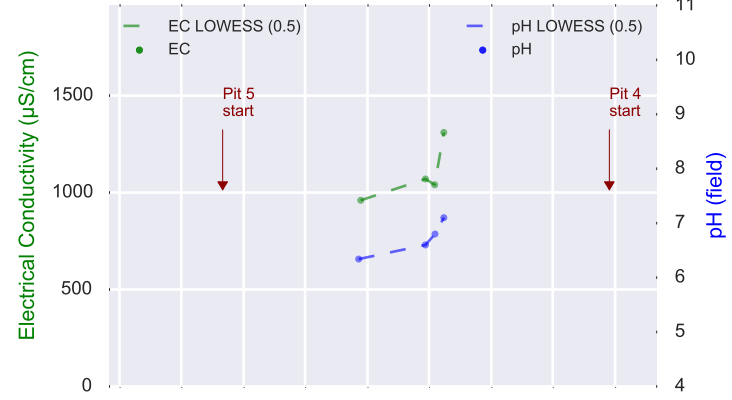
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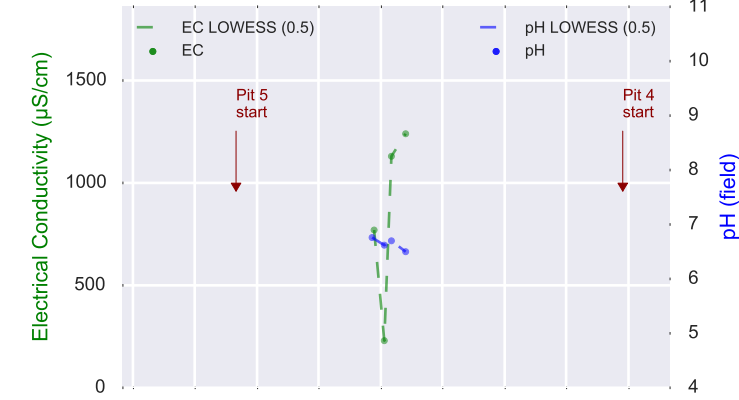
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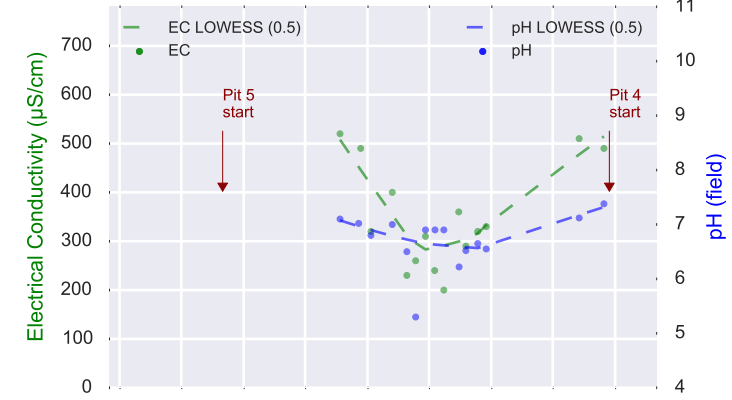
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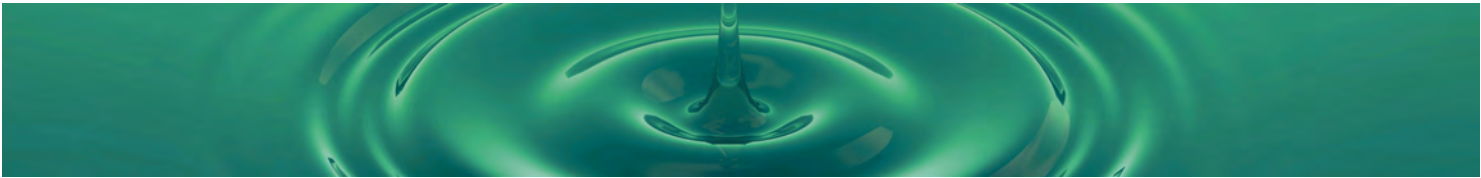


PZ26



PZ28





APPENDIX E – GROUNDWATER MODEL CONFIDENCE

Assessment of groundwater model confidence
(based on Barnett *et al*, 2012)

Wilpinjong Extension Project (WEP) – Groundwater Model: Model Confidence Assessment based on 2012 Modelling Guidelines (Barnett *et al*, 2012)

Table 2-1: Model confidence level classification—characteristics and indicators

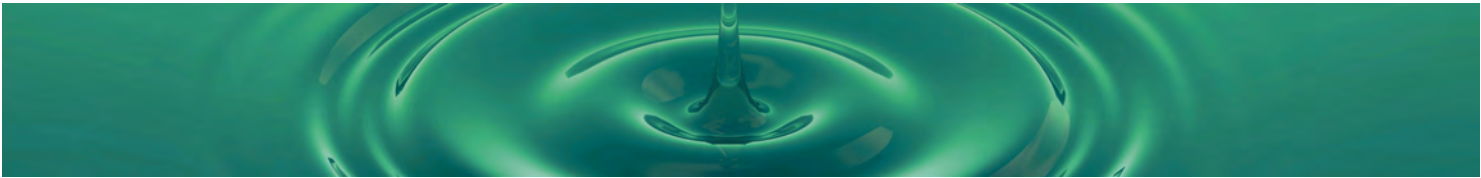
Confidence level classification	Data	Calibration	Prediction	Key indicator	Examples of specific uses
Class 3	- Spatial and temporal distribution of groundwater head observations adequately define groundwater behaviour, especially in areas of greatest interest and where outcomes are to be reported. - Spatial distribution of bore logs and associated stratigraphic interpretations clearly define aquifer geometry. - Reliable metered groundwater extraction and injection data is available. - Rainfall and evaporation data is available. - Aquifer-testing data to define key parameters. - Streamflow and stage measurements are available with reliable baseflow estimates at a number of points. - Reliable land-use and soil-mapping data available. - Reliable irrigation application data (where relevant) is available. - Good quality and adequate spatial coverage of digital elevation model to define ground surface elevation.	- Adequate validation* is demonstrated. - Scaled RMS error (refer Chapter 5) or other calibration statistics are acceptable. - Long-term trends are adequately replicated where these are important. - Seasonal fluctuations are adequately replicated where these are important. - Transient calibration is current, i.e. uses recent data. - Model is calibrated to heads and fluxes. - Observations of the key modelling outcomes dataset is used in calibration.	- Length of predictive model is not excessive compared to length of calibration period. - Temporal discretisation used in the predictive model is consistent with the transient calibration. - Level and type of stresses included in the predictive model are within the range of those used in the transient calibration. - Model validation* suggests calibration is appropriate for locations and/or times outside the calibration model. - Steady-state predictions used when the model is calibrated in steady-state only.	- Key calibration statistics are acceptable and meet agreed targets. - Model predictive time frame is less than 3 times the duration of transient calibration. - Stresses are not more than 2 times greater than those included in calibration. - Temporal discretisation in predictive model is the same as that used in calibration. - Mass balance closure error is less than 0.5% of total. - Model parameters consistent with conceptualisation. - Appropriate computational methods used with appropriate spatial discretisation to model the problem. - The model has been reviewed and deemed fit for purpose by an experienced, independent hydrogeologist with modelling experience.	- Suitable for predicting groundwater responses to arbitrary changes in applied stress or hydrological conditions anywhere within the model domain. - Provide information for sustainable yield assessments for high-value regional aquifer systems. - Evaluation and management of potentially high-risk impacts. - Can be used to design complex mine-dewatering schemes, salt-interception schemes or water-allocation plans. - Simulating the interaction between groundwater and surface water bodies to a level of reliability required for dynamic linkage to surface water models. - Assessment of complex, large-scale solute transport processes.
Class 2	Groundwater head observations and bore logs are available but may not provide adequate coverage throughout the model domain.	- Validation* is either not undertaken or is not demonstrated for the full model domain. - Calibration statistics are generally reasonable but may suggest significant errors in parts of the	- Transient calibration over a short time frame compared to that of prediction. - Temporal discretisation used in the predictive model is different from that used in transient	- Key calibration statistics suggest poor calibration in parts of the model domain. - Model predictive time frame is between 3 and 10 times the duration of transient calibration. - Stresses are between 2 and 5 times greater than those	- Prediction of impacts of proposed developments in medium value aquifers. - Evaluation and management of medium risk impacts.
Cont'd overleaf					

Confidence level classification	Data	Calibration	Prediction	Key Indicator	Examples of specific uses
Class 2 Cont'd	- Metered groundwater-extraction data may be available but spatial and temporal coverage may not be extensive. - Streamflow data and baseflow estimates available at a few points. - Reliable irrigation-application data available in part of the area or for part of the model duration.	- model domain(s). - Long-term trends not replicated in all parts of the model domain. - Transient calibration to historic data but not extending to the present day. - Seasonal fluctuations not adequately replicated in all parts of the model domain. - Observations of the key modelling outcome data set are not used in calibration.	- calibration. - Level and type of stresses included in the predictive model are outside the range of those used in the transient calibration. - Validation* suggests relatively poor match to observations when calibration data is extended in time and/or space.	- included in calibration. - Temporal discretisation in predictive model is not the same as that used in calibration. - Mass balance closure error is less than 1% of total. - Not all model parameters consistent with conceptualisation. - Spatial refinement too coarse in key parts of the model domain. - The model has been reviewed and deemed fit for purpose by an independent hydrogeologist.	- Providing estimates of dewatering requirements for mines and excavations and the associated impacts. - Designing groundwater management schemes such as managed aquifer recharge, salinity management schemes and infiltration basins. - Estimating distance of travel of contamination through particle-tracking methods. Defining water source protection zones.
Class 1	- Few or poorly distributed existing wells from which to obtain reliable groundwater and geological information. - Observations and measurements unavailable or sparsely distributed in areas of greatest interest. - No available records of metered groundwater extraction or injection. - Climate data only available from relatively remote locations. - Little or no useful data on land-use, soils or river flows and stage elevations.	- No calibration is possible. - Calibration illustrates unacceptable levels of error especially in key areas. - Calibration is based on an inadequate distribution of data. - Calibration only to datasets other than that required for prediction.	- Predictive model time frame far exceeds that of calibration. - Temporal discretisation is different to that of calibration. - Transient predictions are made when calibration is in steady state only. - Model validation* suggests unacceptable errors when calibration dataset is extended in time and/or space.	- Model is uncalibrated or key calibration statistics do not meet agreed targets. - Model predictive time frame is more than 10 times longer than transient calibration period. - Stresses in predictions are more than 5 times higher than those in calibration. - Stress period or calculation interval is different from that used in calibration. - Transient predictions made but calibration in steady state only. - Cumulative mass-balance closure error exceeds 1% or exceeds 5% at any given calculation time. - Model parameters outside the range expected by the conceptualisation with no further justification. - Unsuitable spatial or temporal discretisation. - The model has not been reviewed.	- Design observation bore array for pumping tests. - Predicting long-term impacts of proposed developments in low-value aquifers. - Estimating impacts of low-risk developments. - Understanding groundwater flow processes under various hypothetical conditions. - Provide first-pass estimates of extraction volumes and rates required for mine dewatering. - Developing coarse relationships between groundwater extraction locations and rates and associated impacts. - As a starting point on which to develop higher class models as more data is collected and used.

WCM mine inflow data of reasonable quality

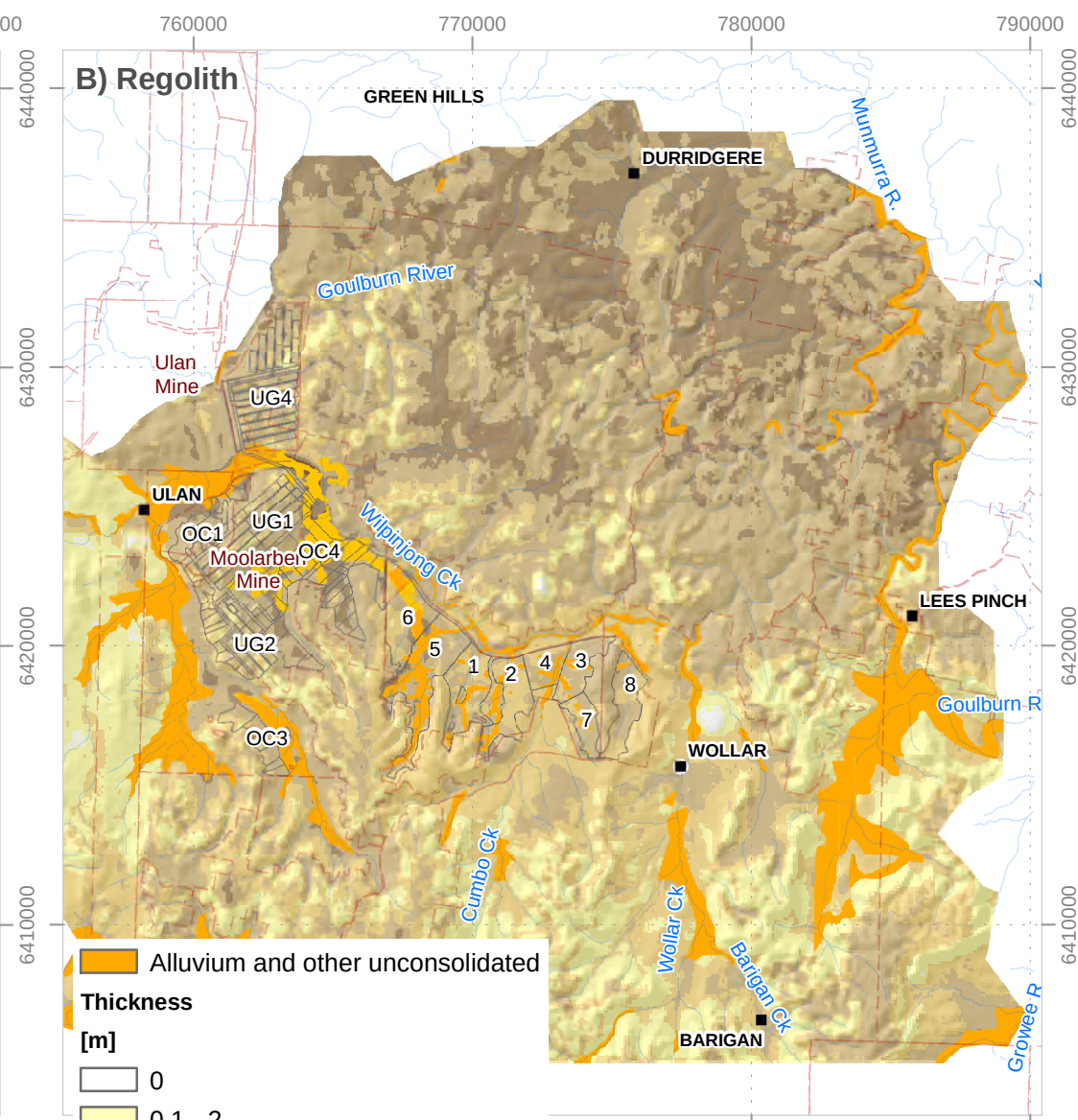
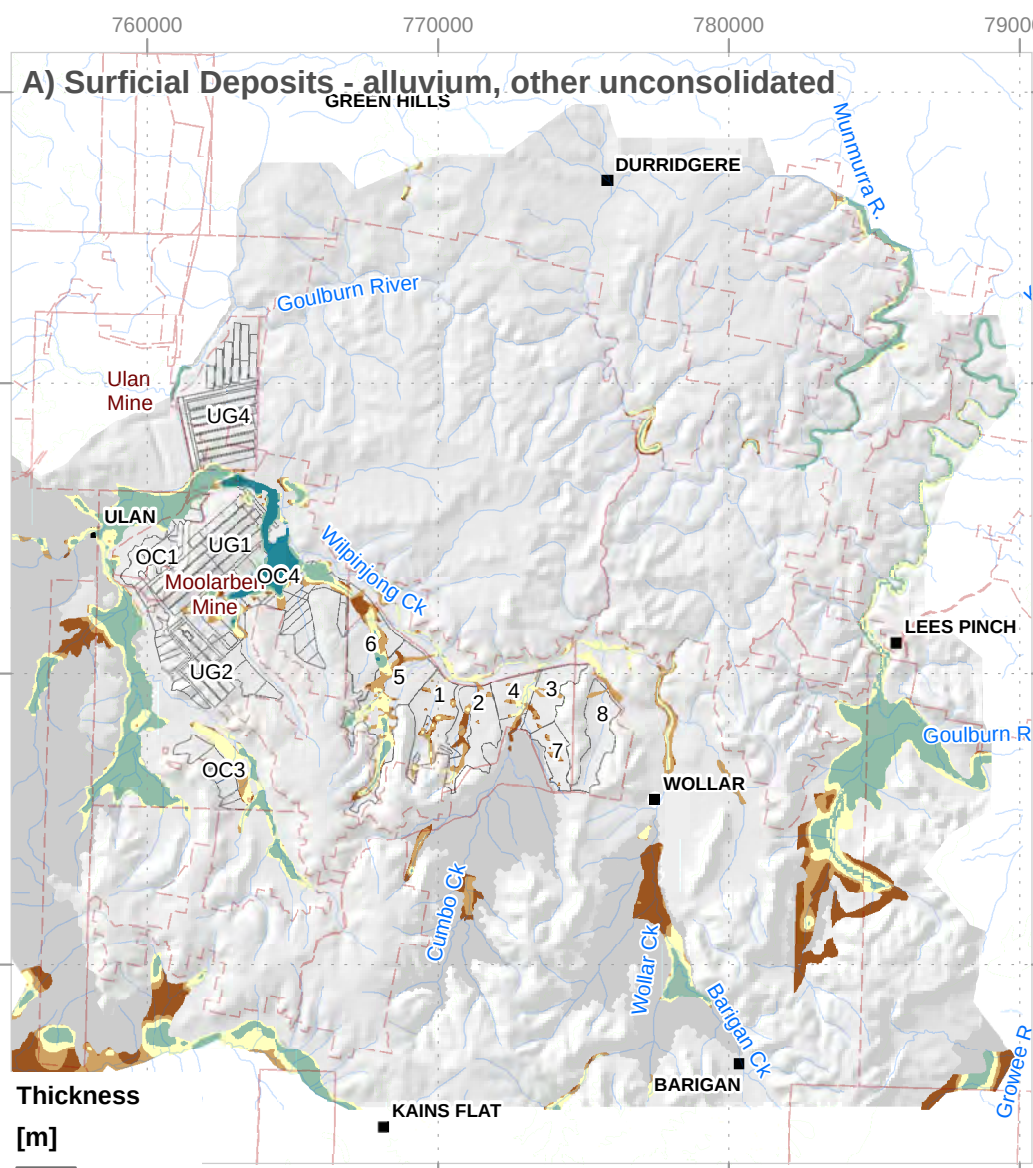
For neighbouring GW users

(* Refer Chapter 5 for discussion around validation as part of the calibration process.)



APPENDIX F – GEOLOGICAL MODEL

Isopachs from the regional geological model



Scale: 260,000 at A4
GDA 1994 MGA Zone 55



0 1.25 2.5 5 7.5 10 km

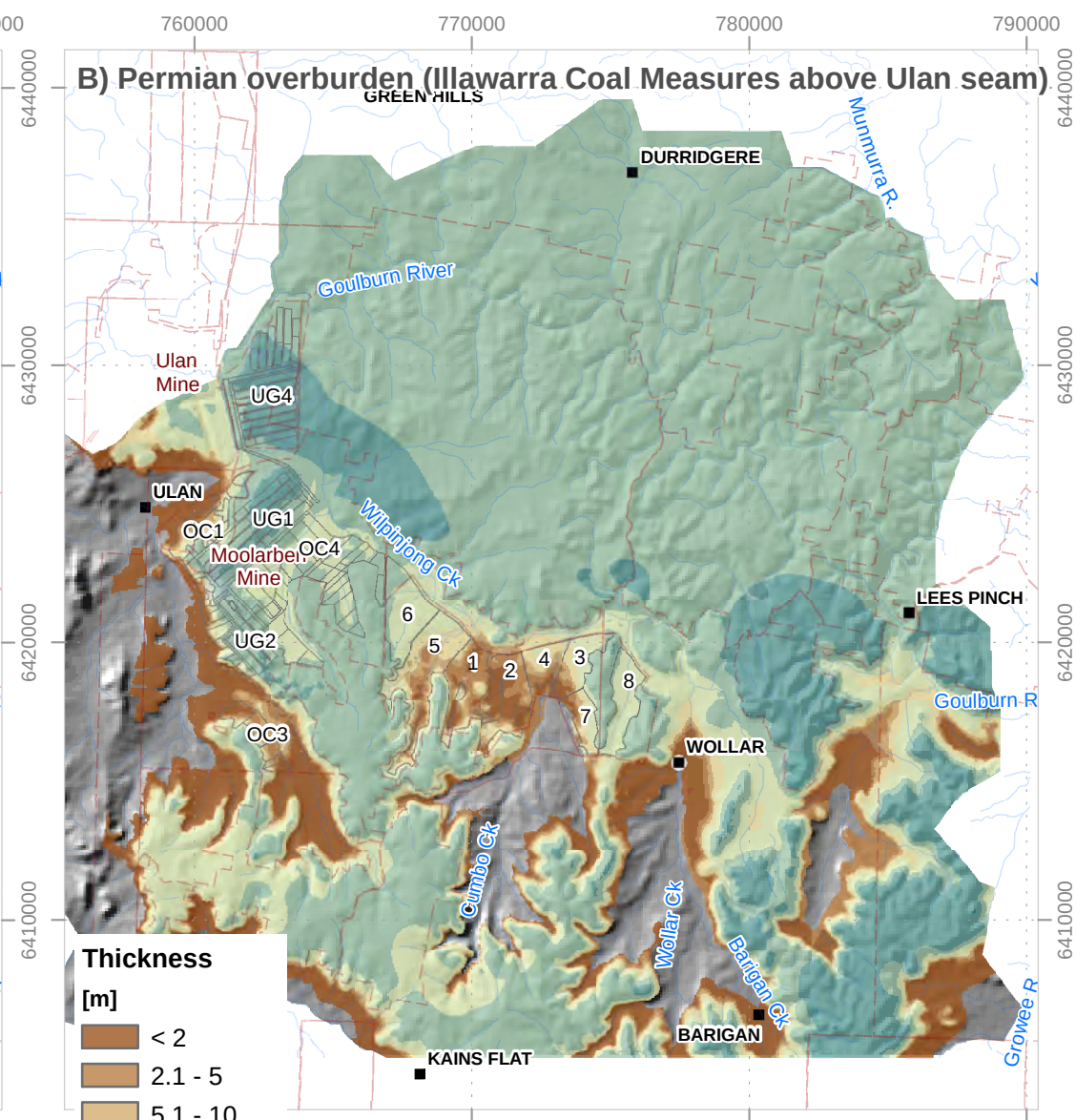
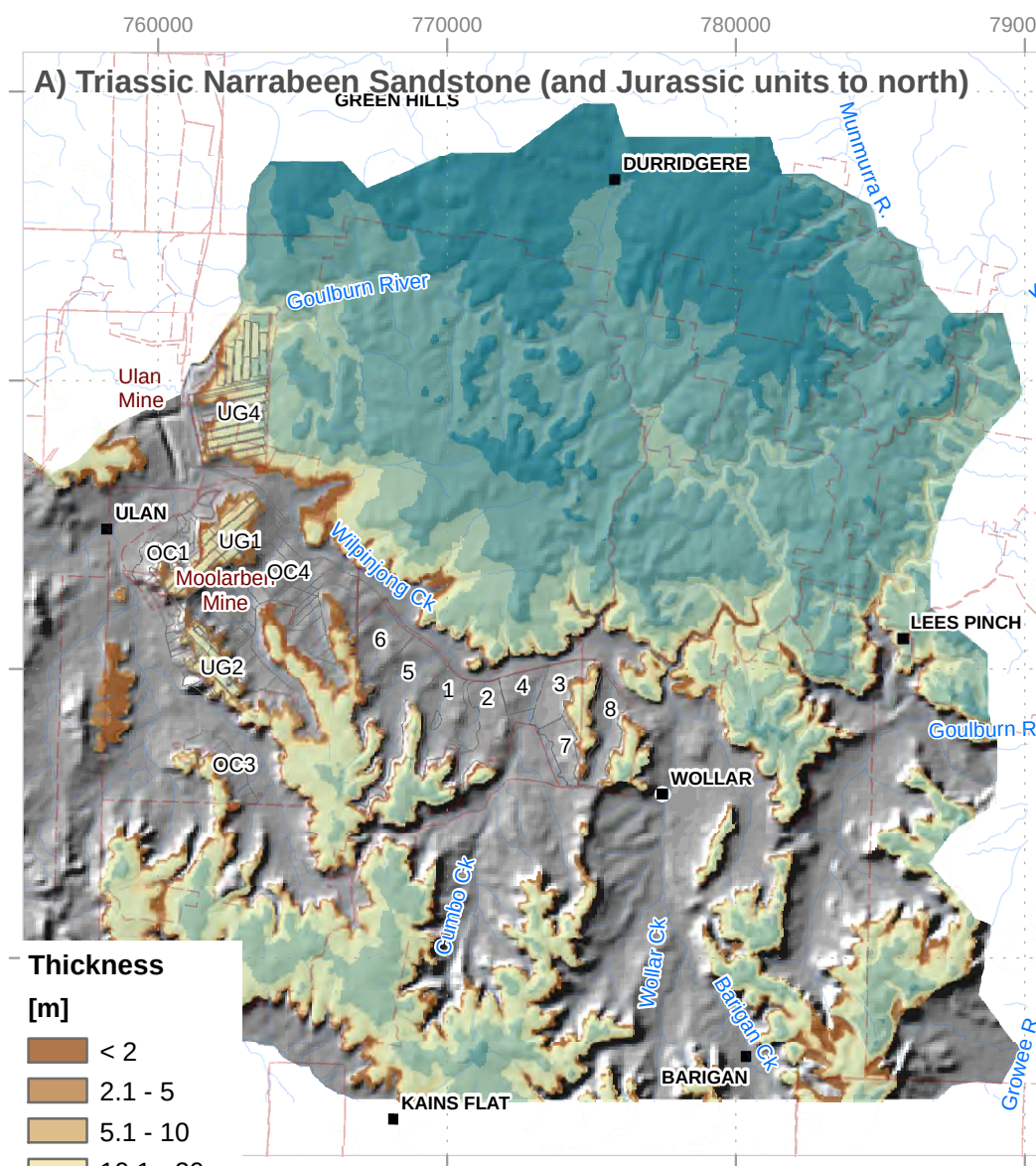
Rev: A | WMinchin | 25/10/2015
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Wilpinjong Coal
Wilpinjong Extension Project

**Geological Unit Isopachs for the WEP Regional Model
Surficial Deposits and Regolith**

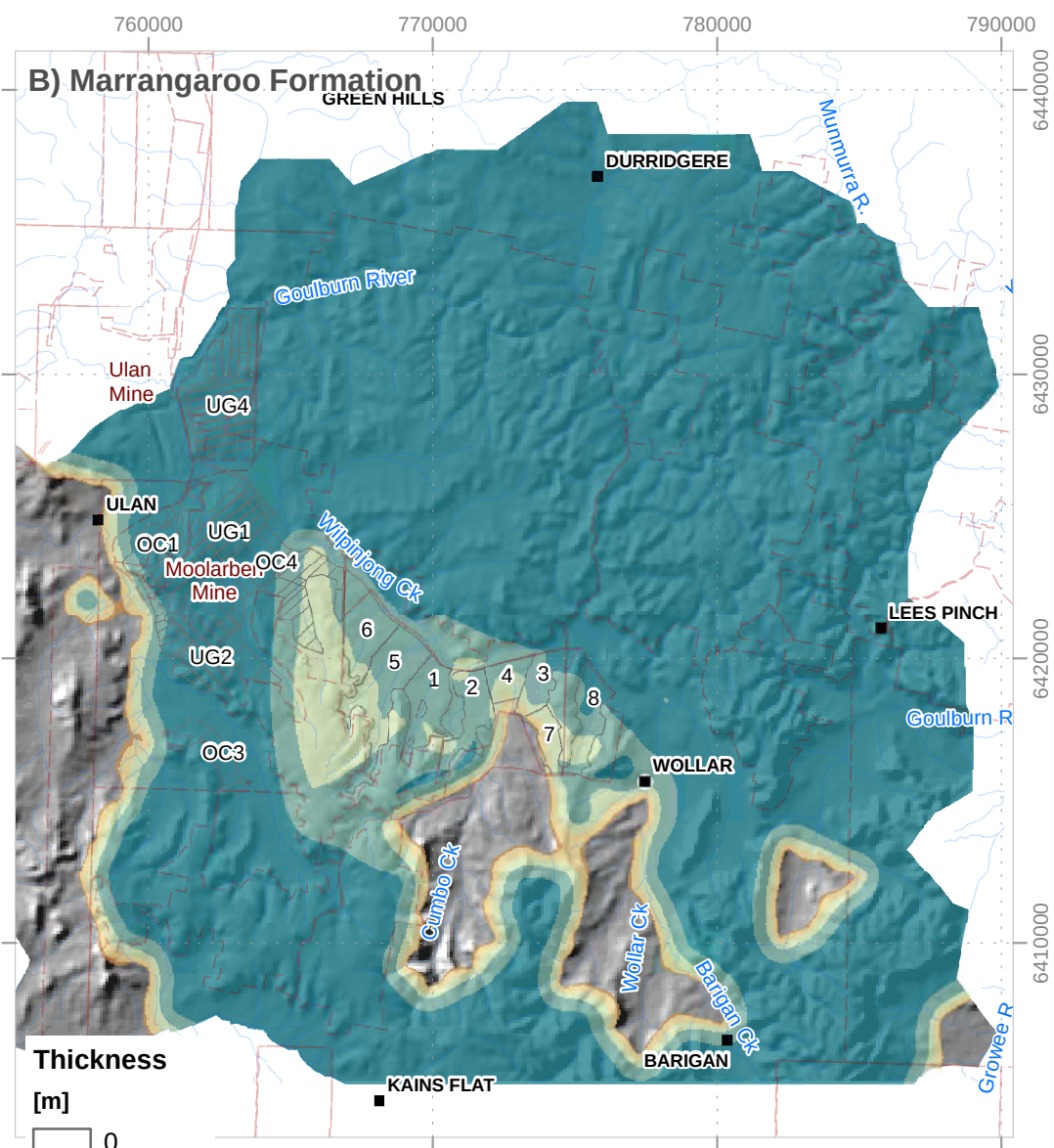
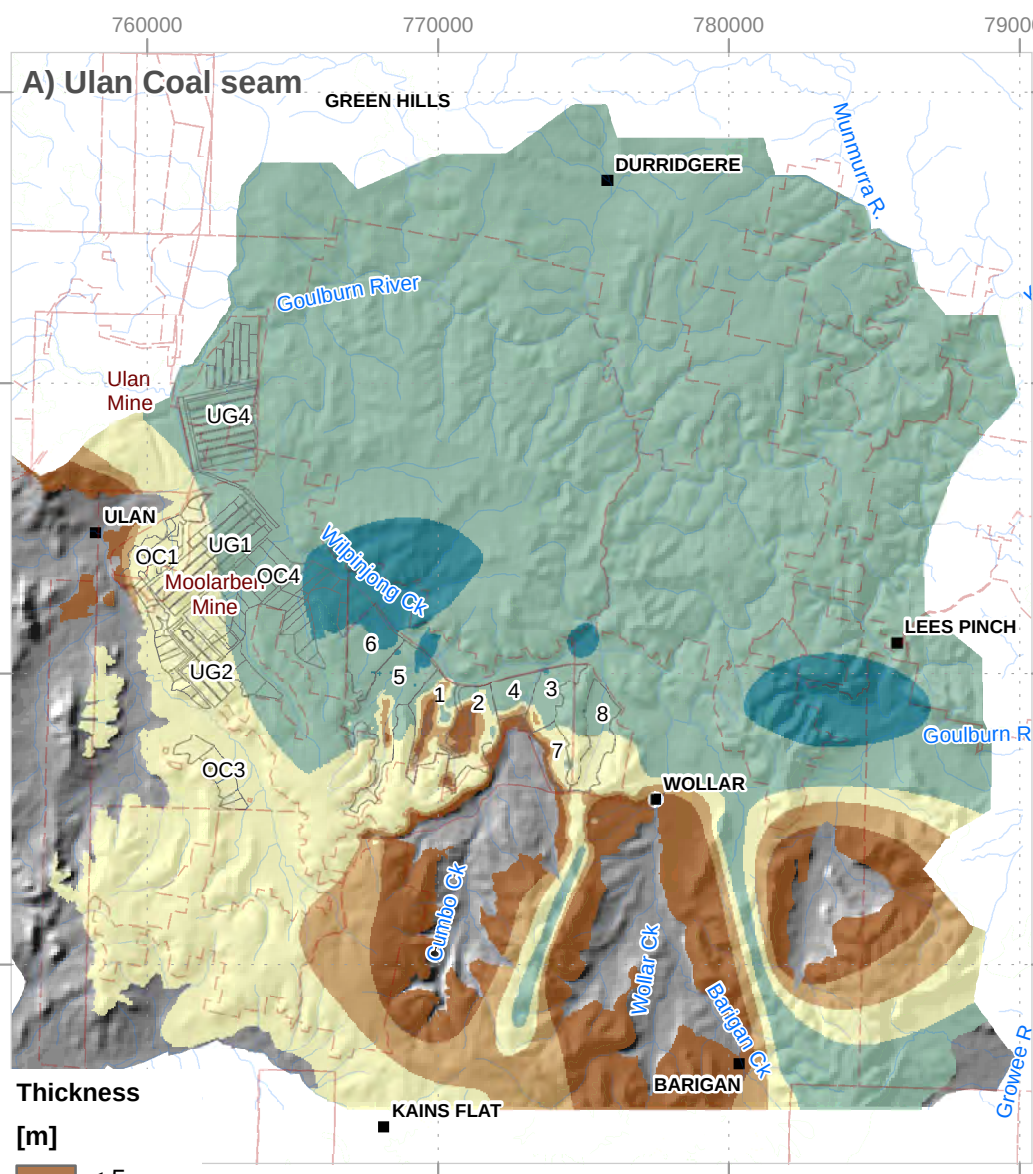
Figure F-1



Scale: 260,000 at A4
GDA 1994 MGA Zone 55

Rev: A | WMinchin | 25/10/2015

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Rev: A | WMinchin | 25/10/2015

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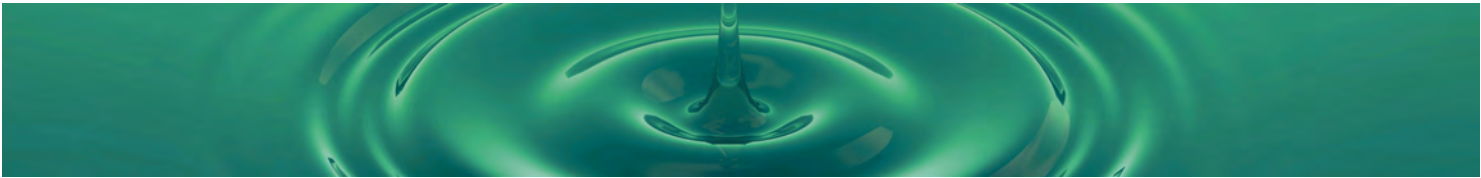


0 2.5 5 7.5 10 km

Wilpinjong Coal
Wilpinjong Extension Project

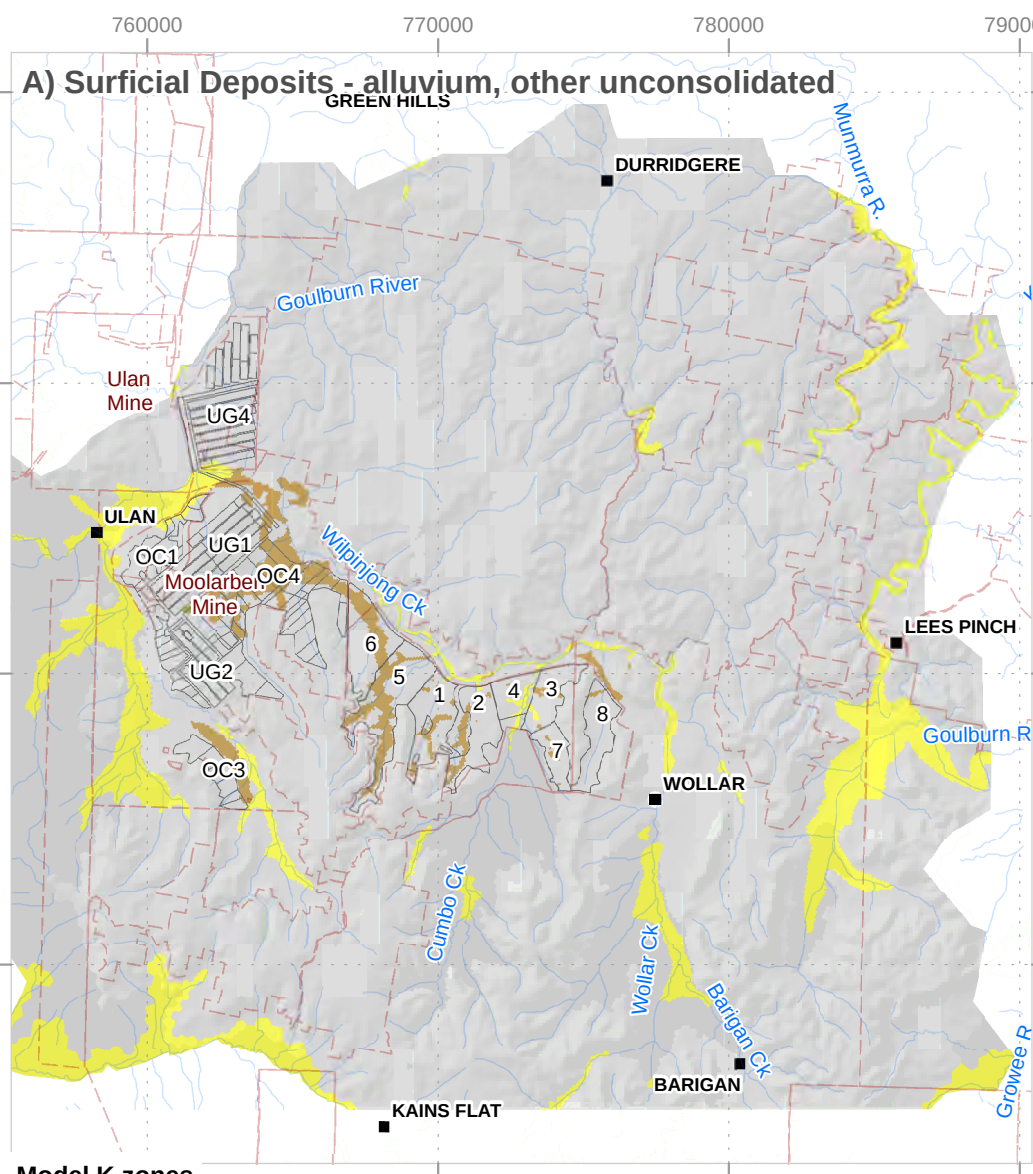
Geological Unit Isopachs for the WEP Regional Model:
Ulan Coal seam and Marrangaroo Formation

Figure F-3



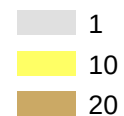
APPENDIX G – MODELLED HYDRAULIC CONDUCTIVITY

Hydraulic conductivity zones used in the groundwater flow model



Model K zones

Zone



Scale: 260,000 at A4
GDA 1994 MGA Zone 55

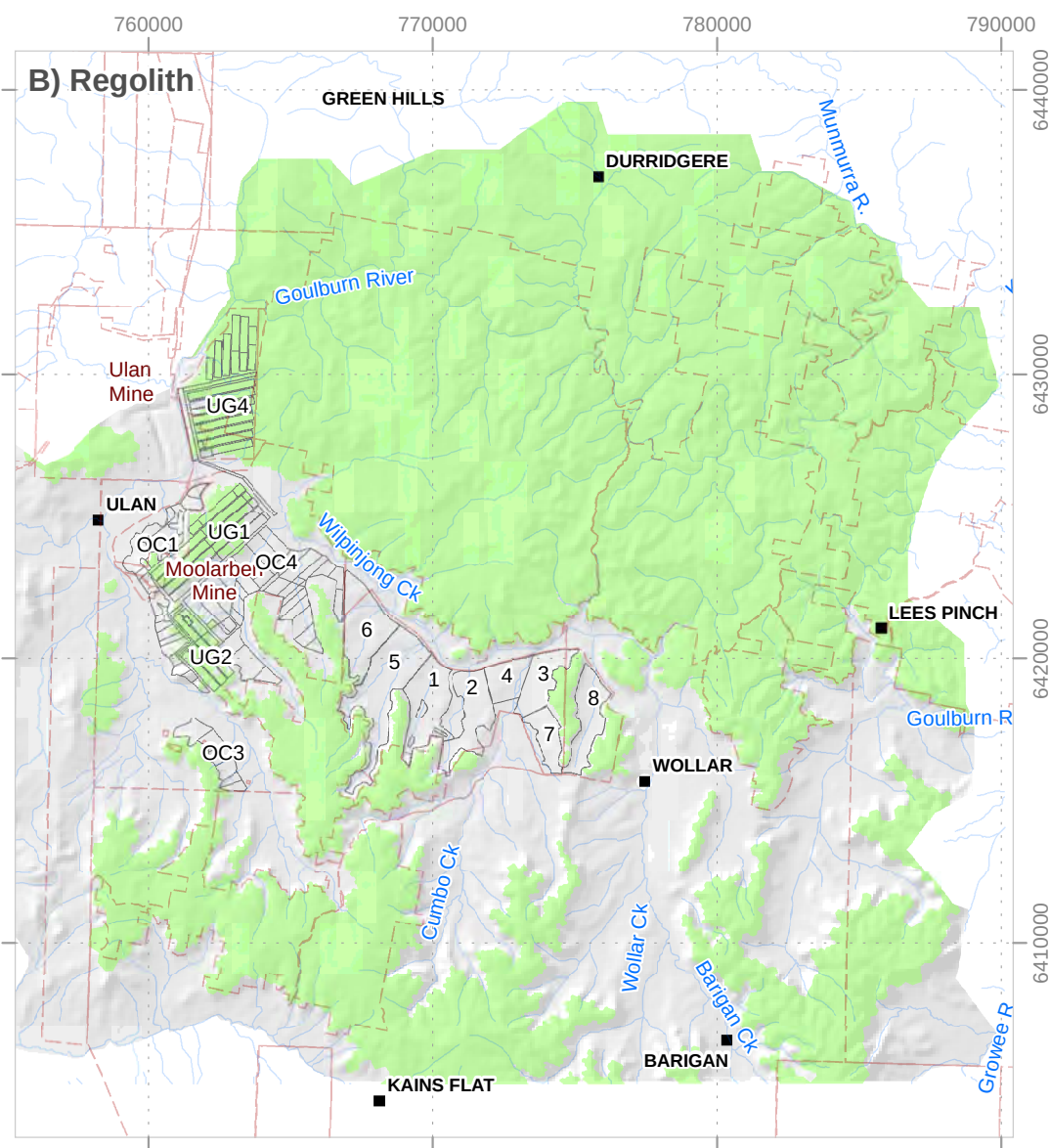


0 1.25 2.5 5 7.5 10
km

Rev: A | WMinchin | 25/10/2015

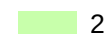
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SIMULATIONS



Model K zones

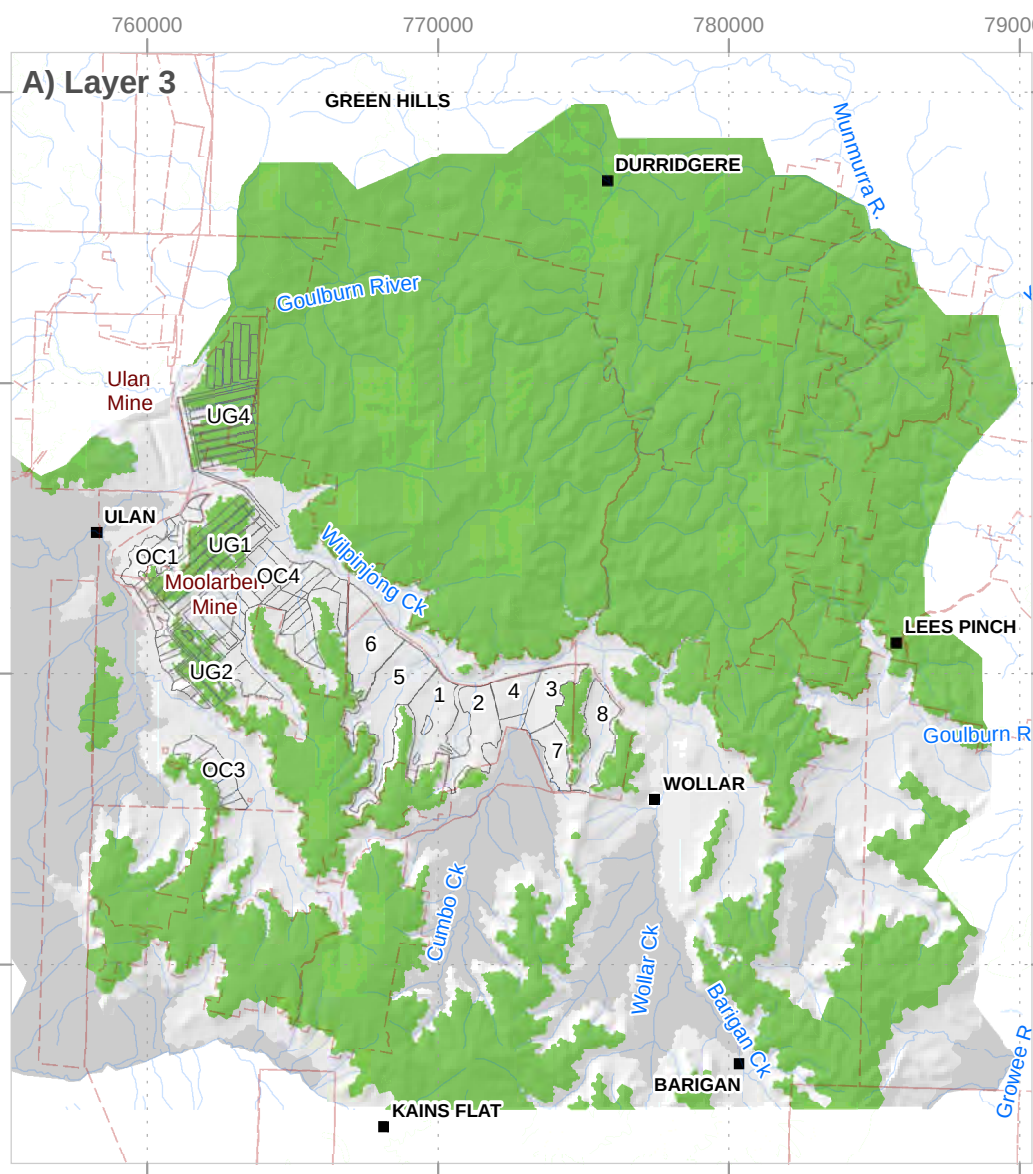
Zone



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Hydraulic Conductivity Zones in the WEP Regional Model
Layers 1 and 2

Figure G-1



Model K zones

Zone

3

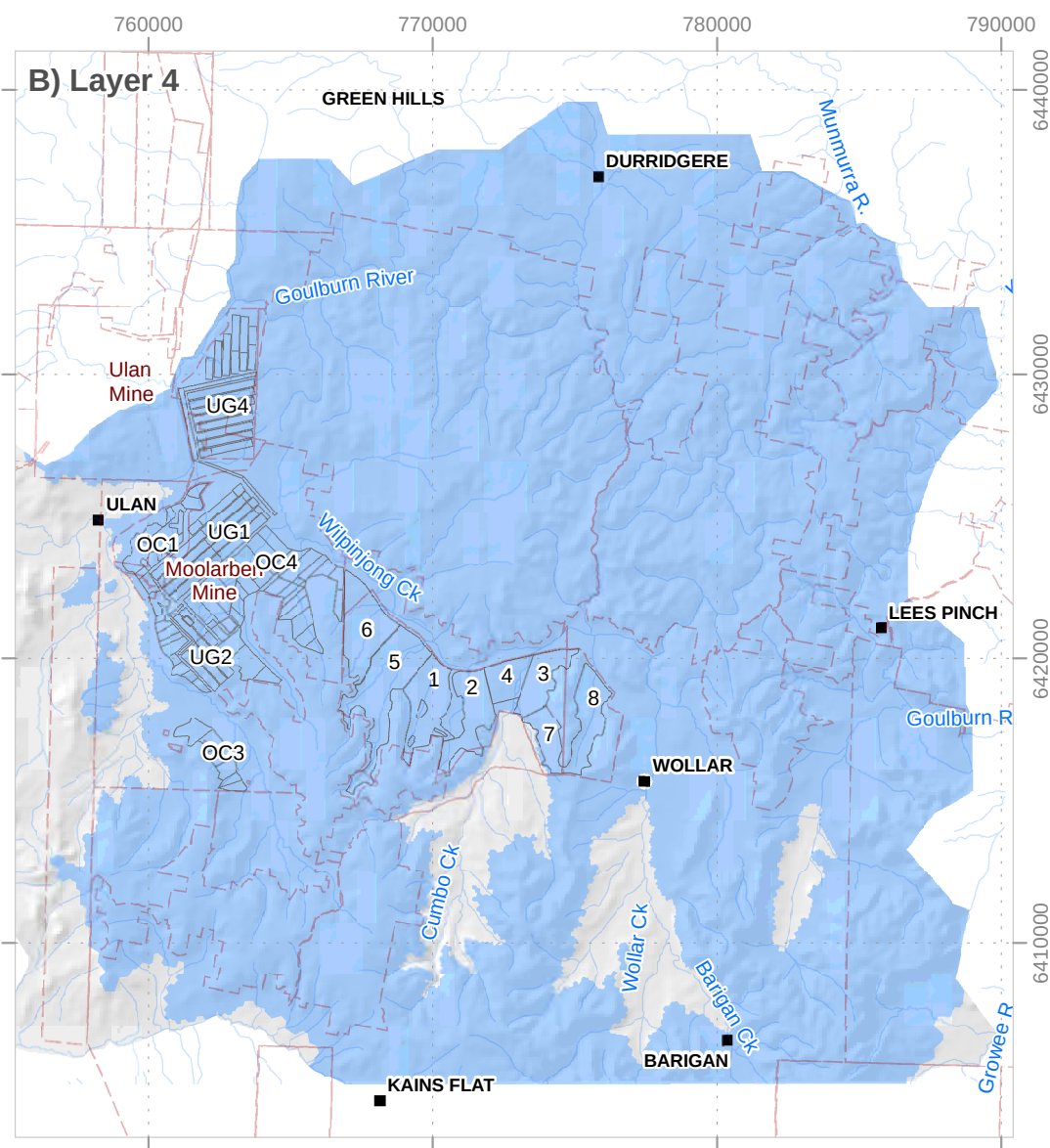
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GDA 1994 MGA Zone 55

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0 1.25 2.5 5 7.5 10 km



Model K zones

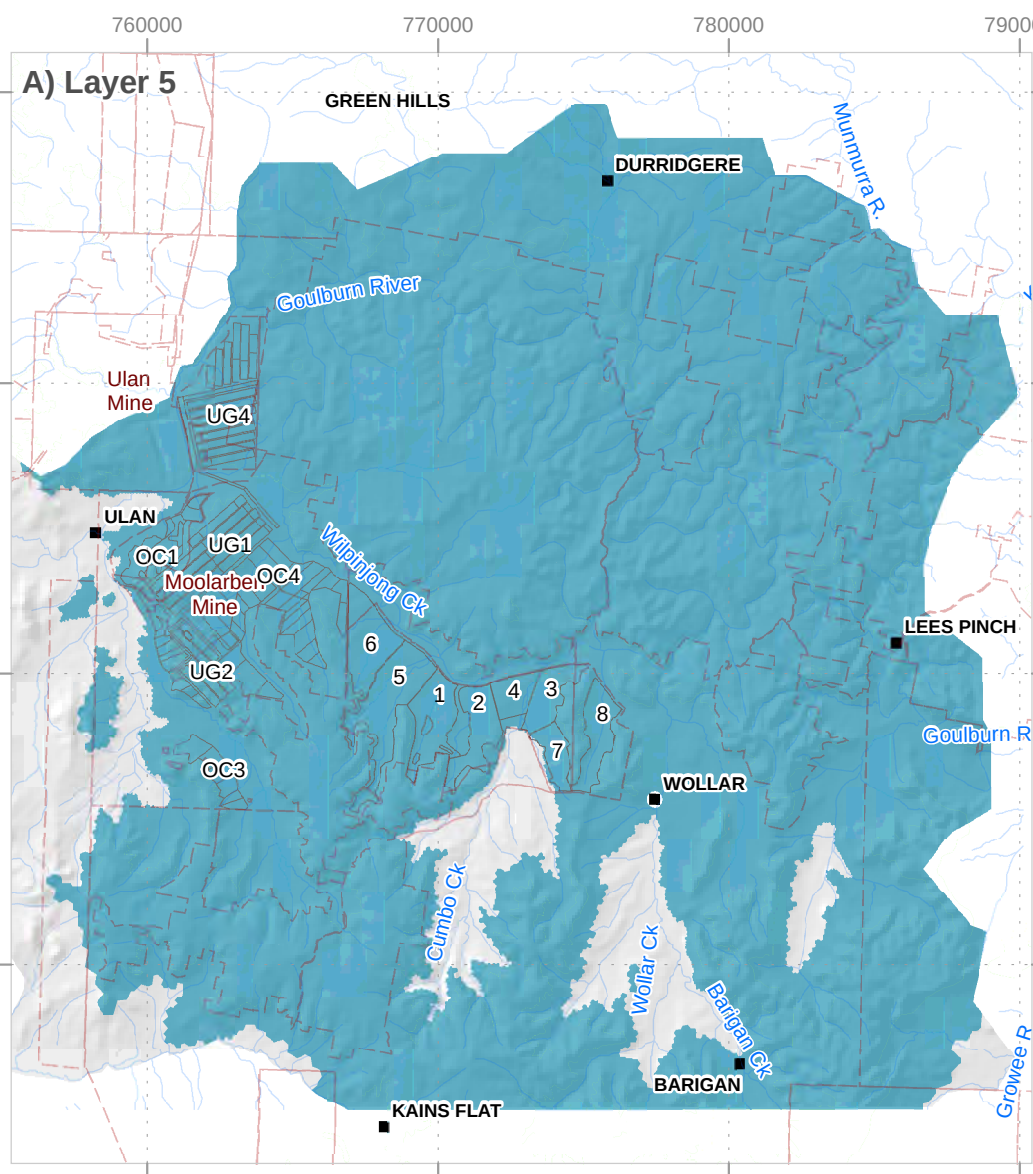
Zone

4

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Hydraulic Conductivity Zones in the WEP Regional Model
Layers 3 and 4

Figure G-2



Model K zones

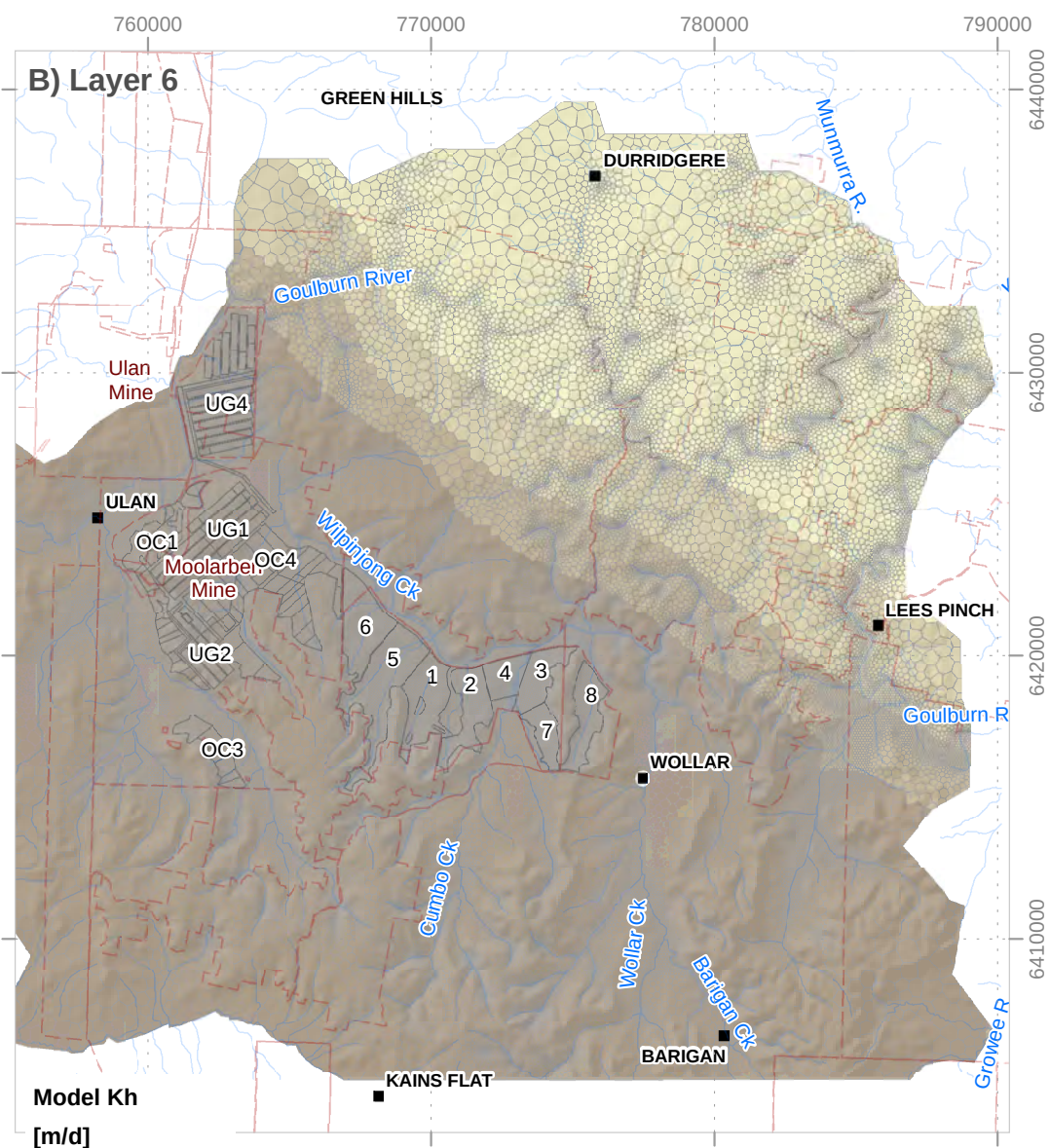
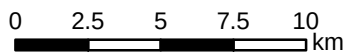
Zone

5

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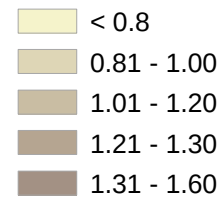
Rev: A | WMinchin | 25/10/2015

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Model Kh

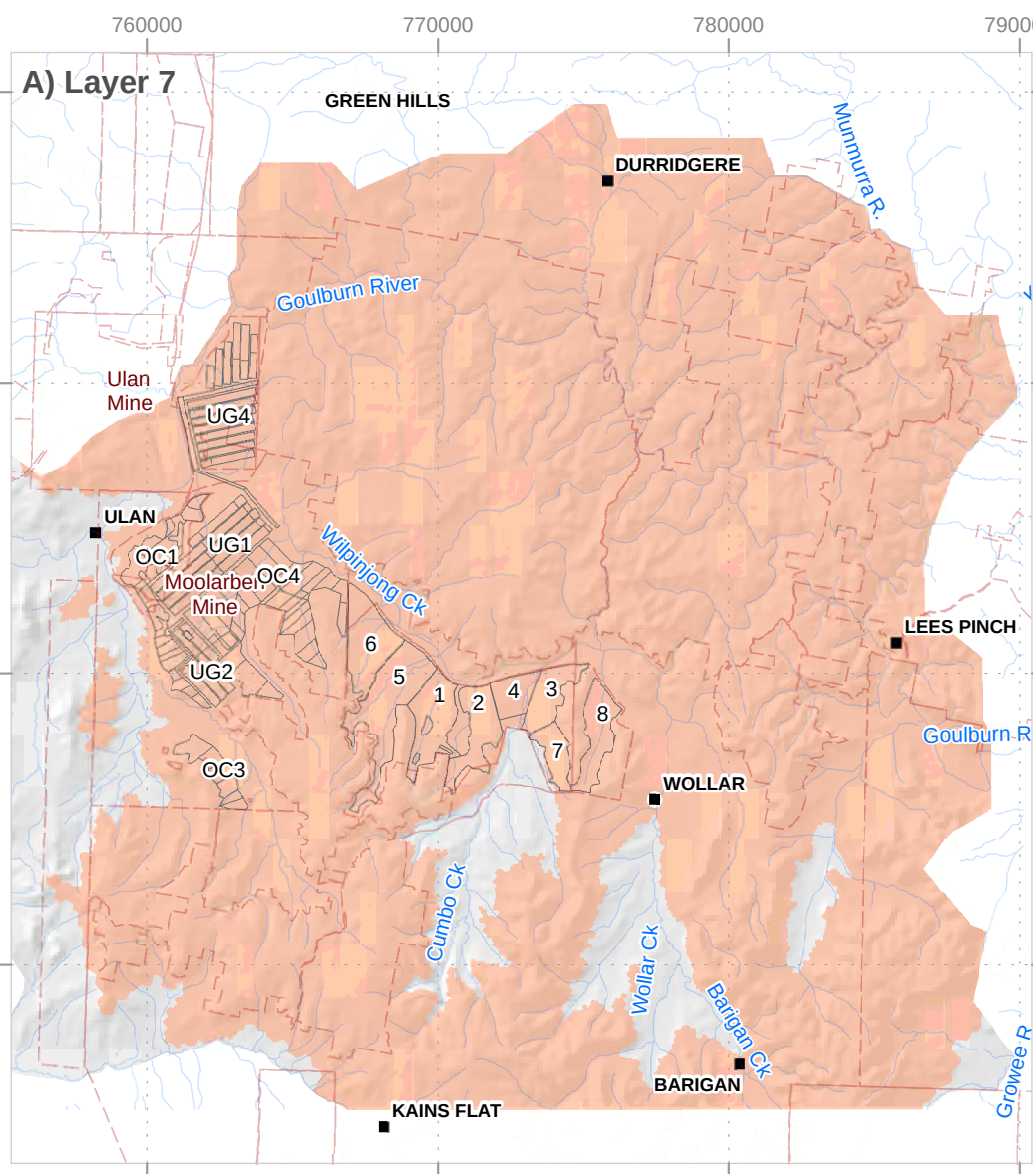
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**Hydraulic Conductivity Zones in the WEP Regional Model
Layers 5 and 6**

Figure G-3



Model K zones

Zone

7

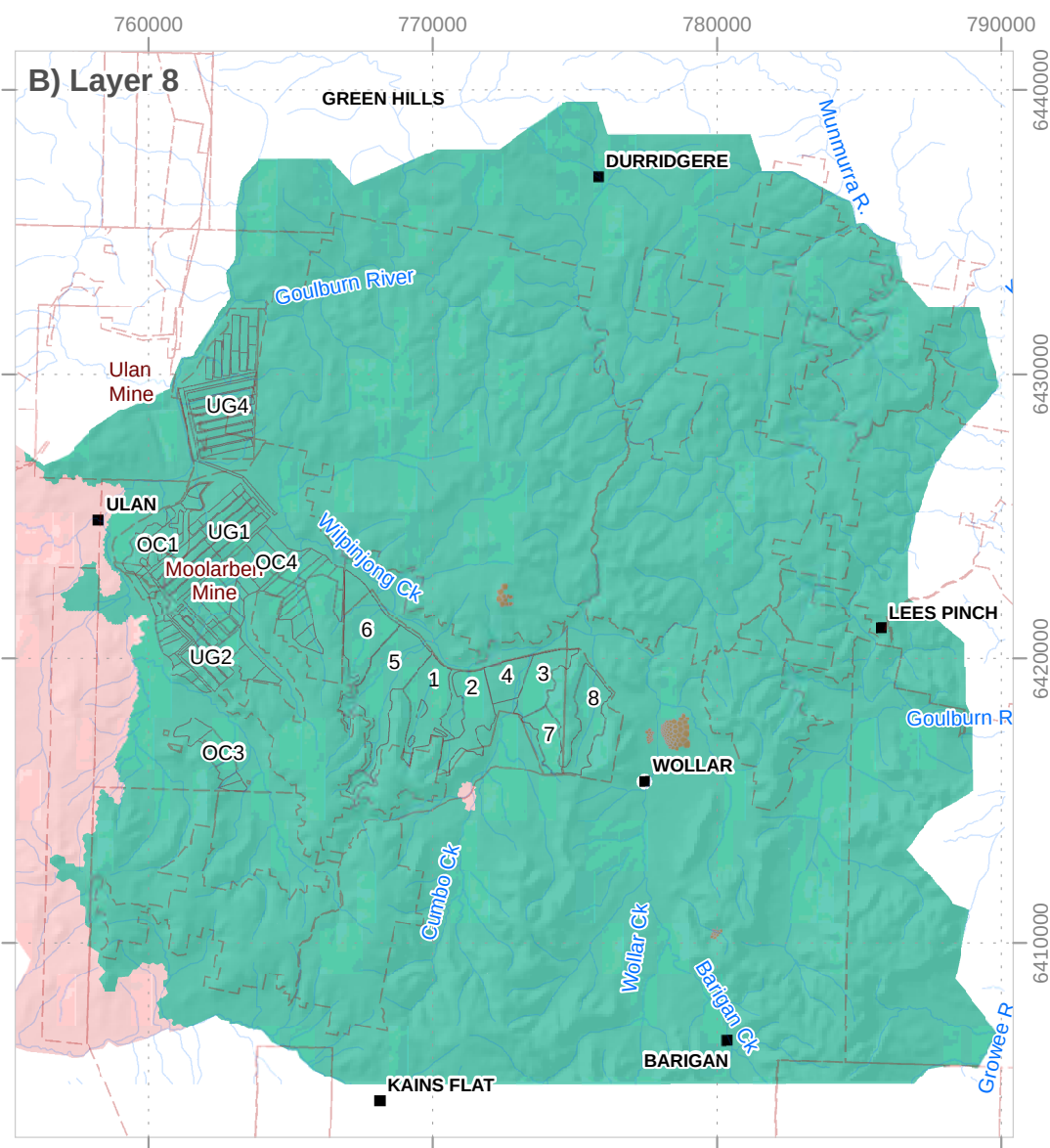
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Rev: A | WMinchin | 25/10/2015

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0 2.5 5 7.5 10 km



Model Kh

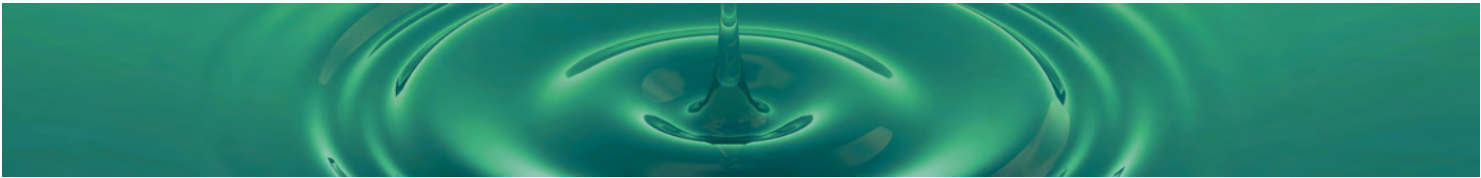
Zone

8
9
11

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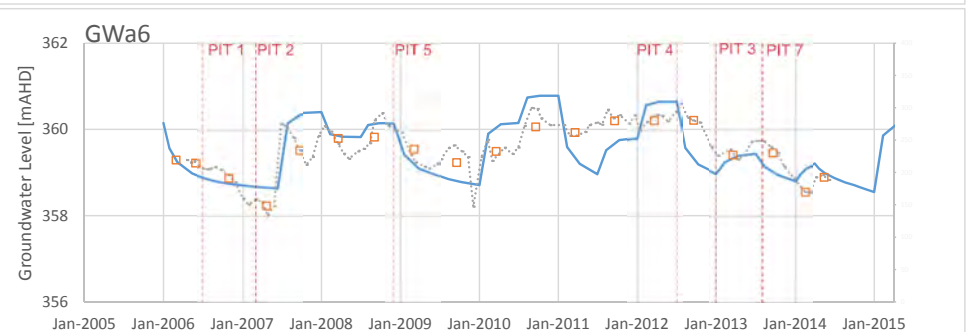
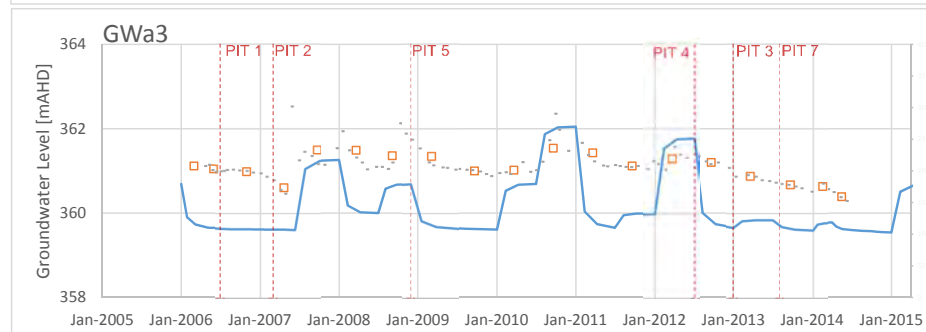
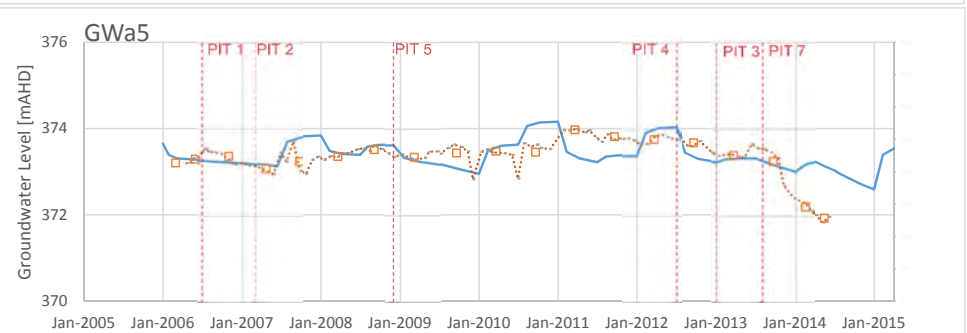
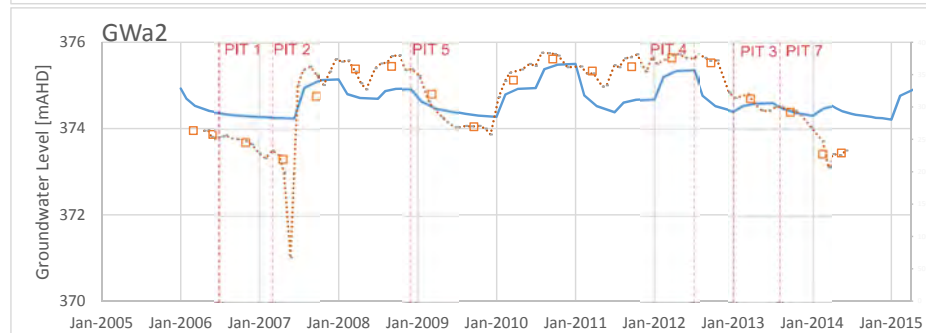
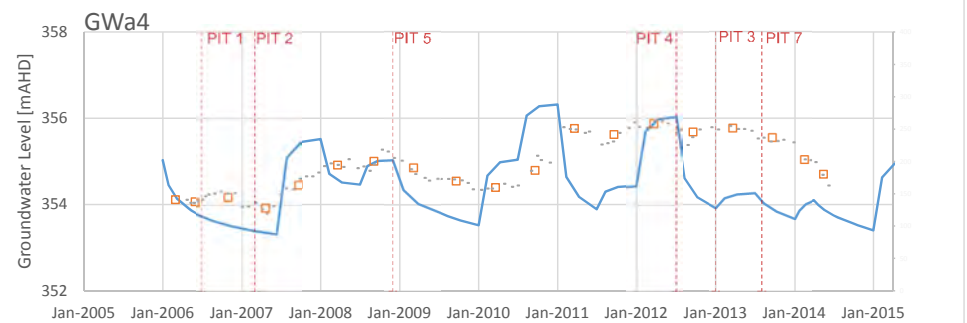
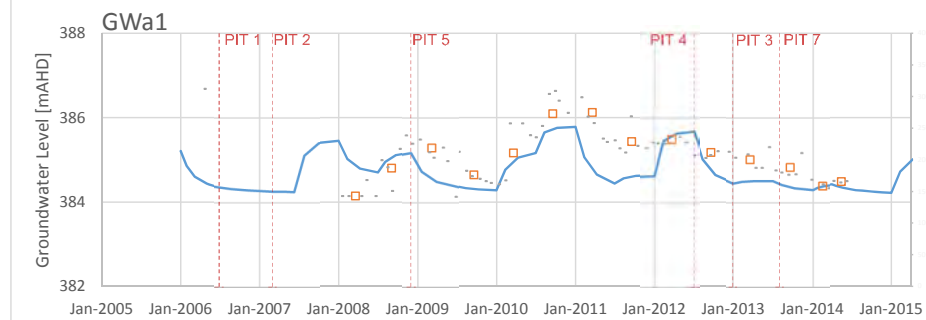
Hydraulic Conductivity Zones in the WEP Regional Model
Layers 7 and 8

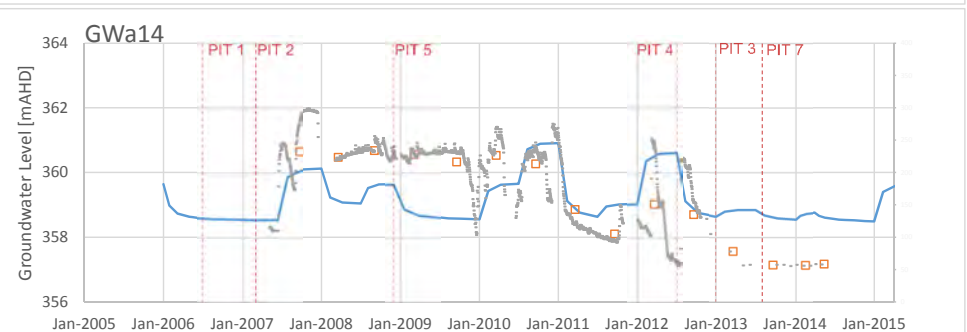
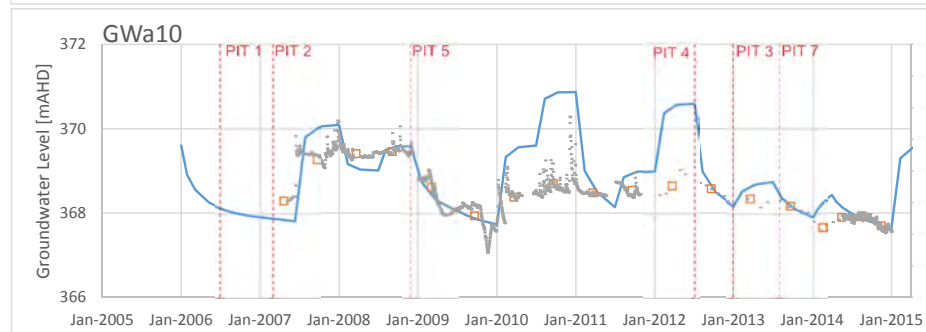
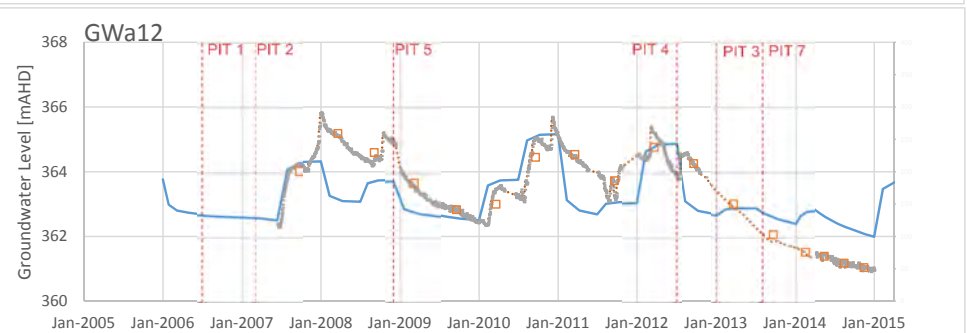
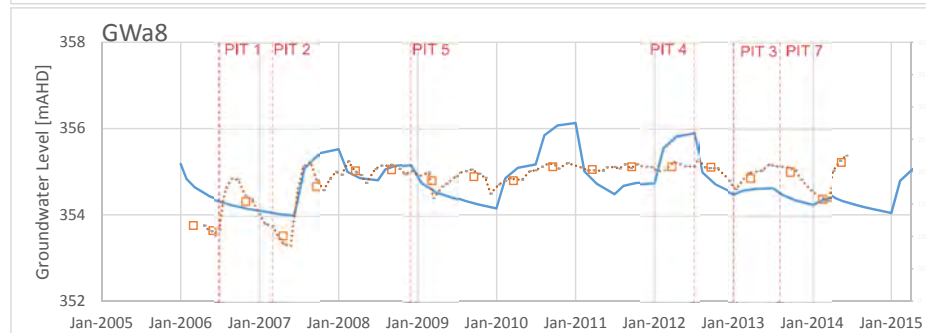
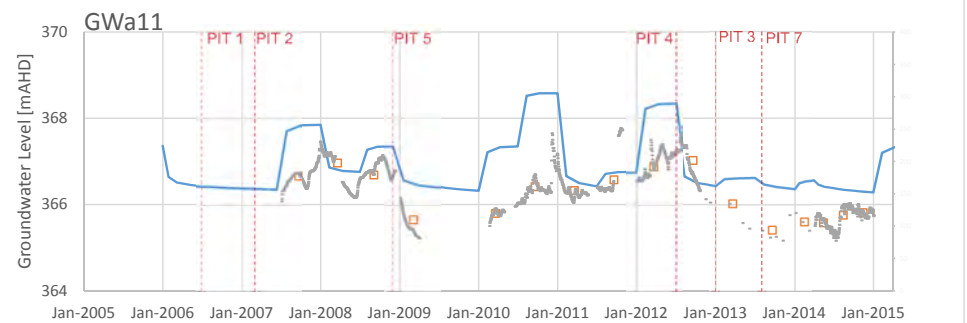
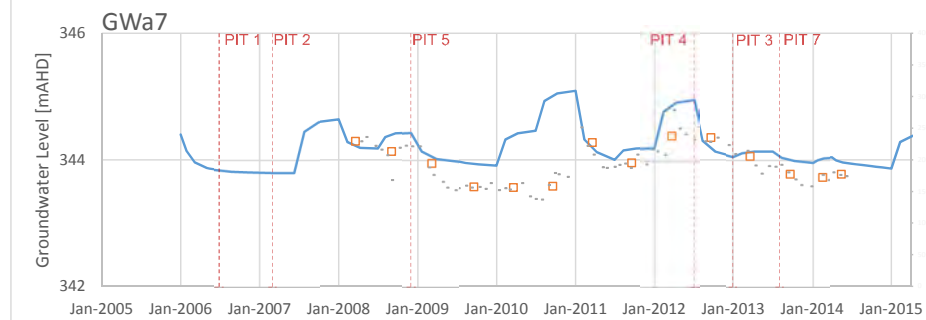
Figure G-4

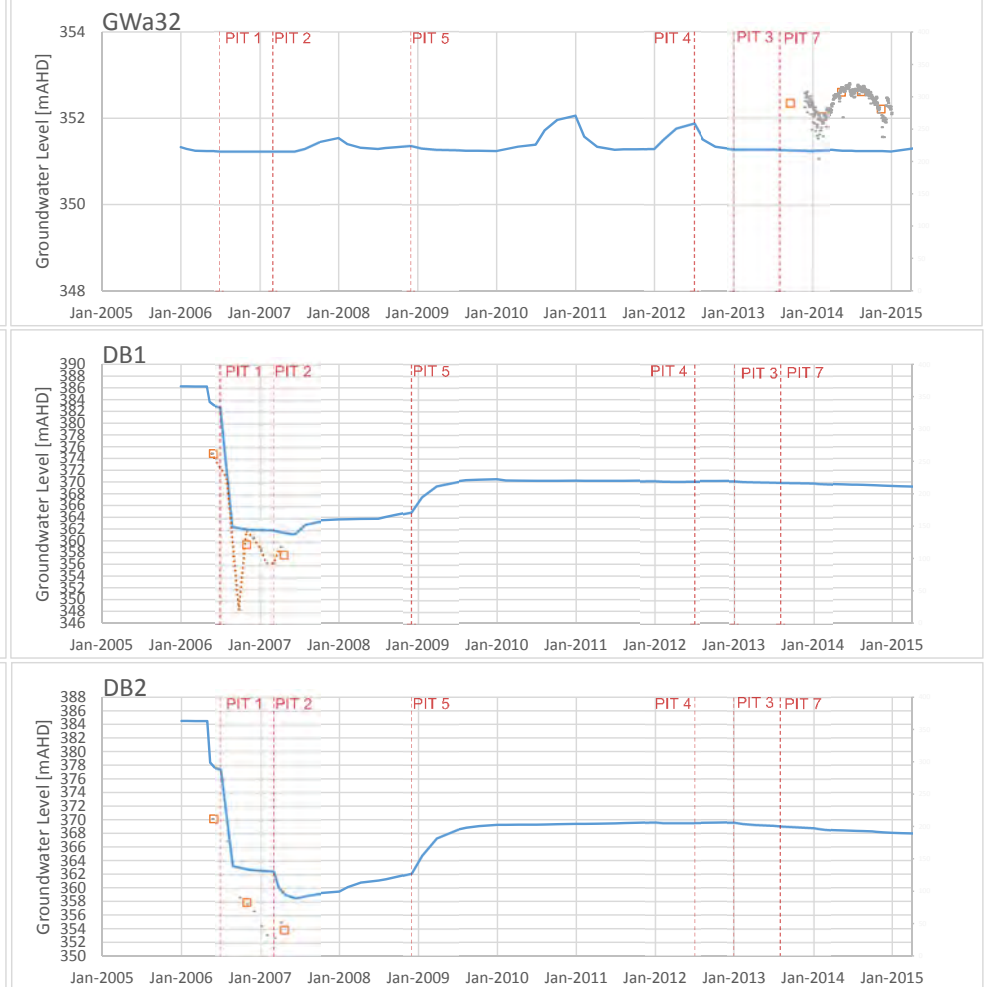
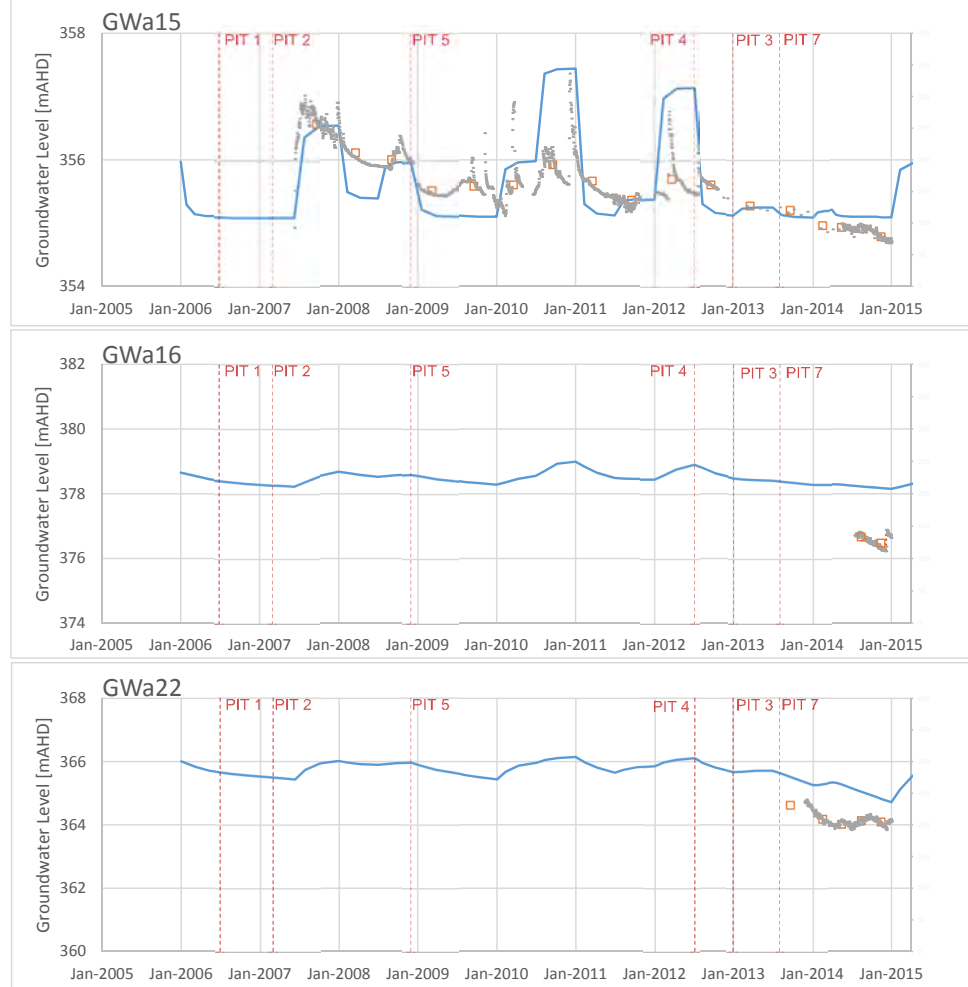


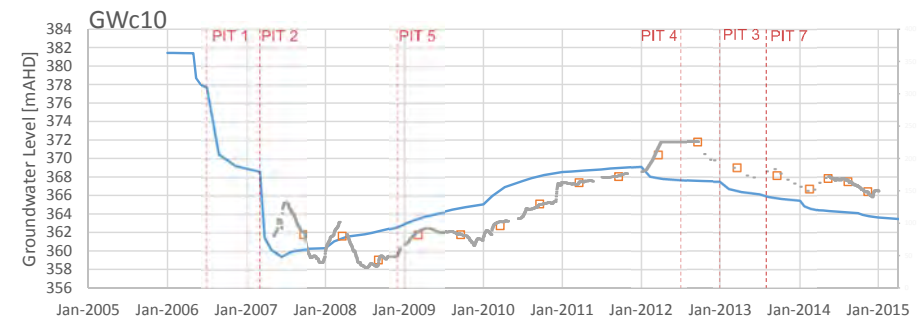
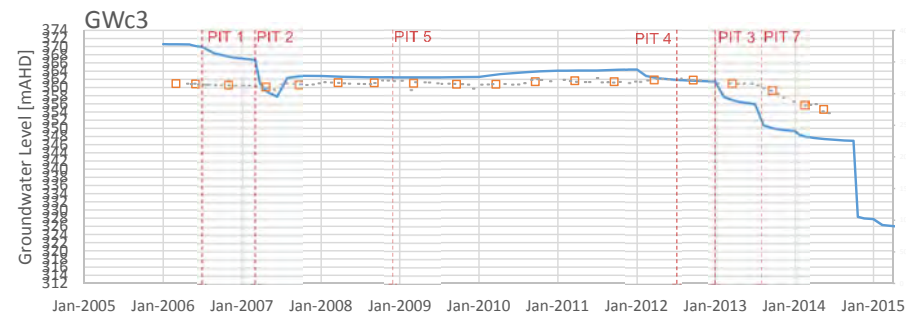
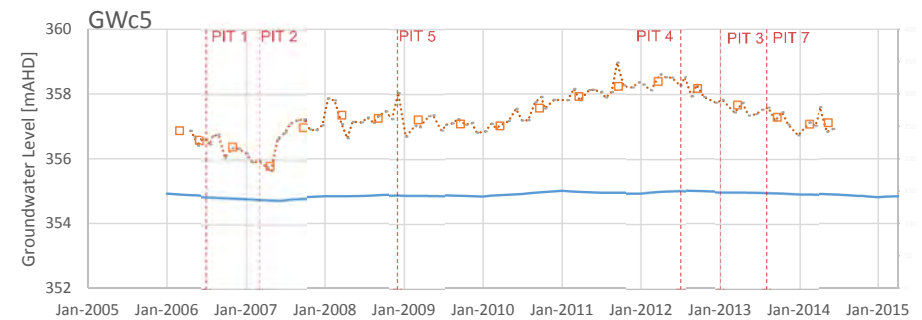
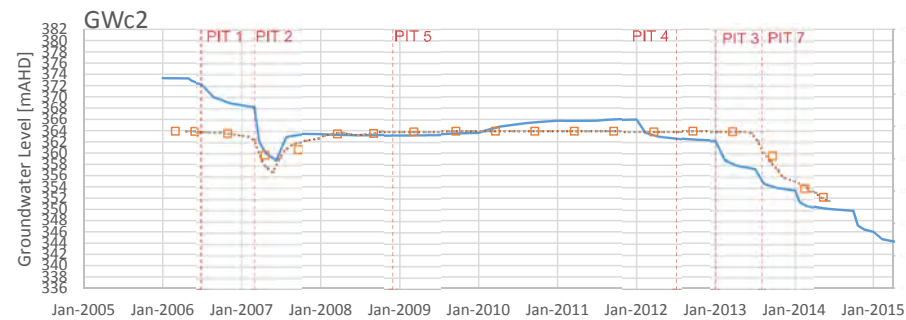
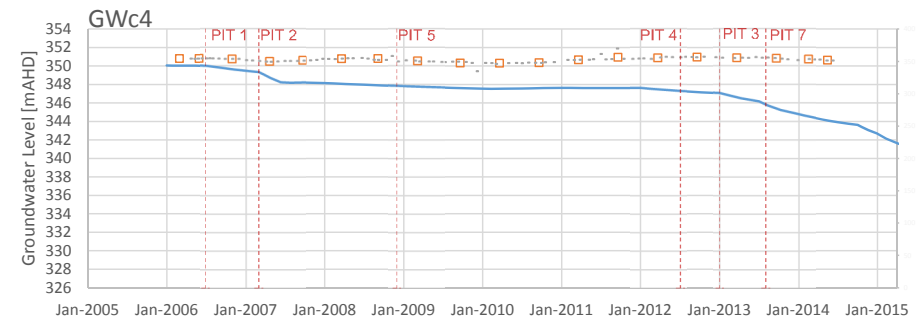
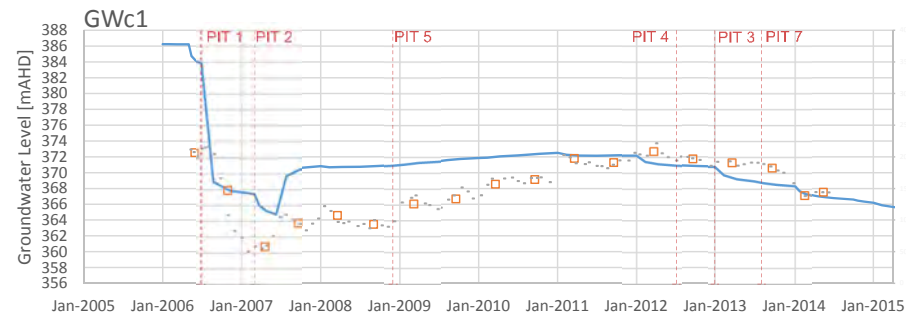
APPENDIX H – MODELLED GROUNDWATER LEVELS

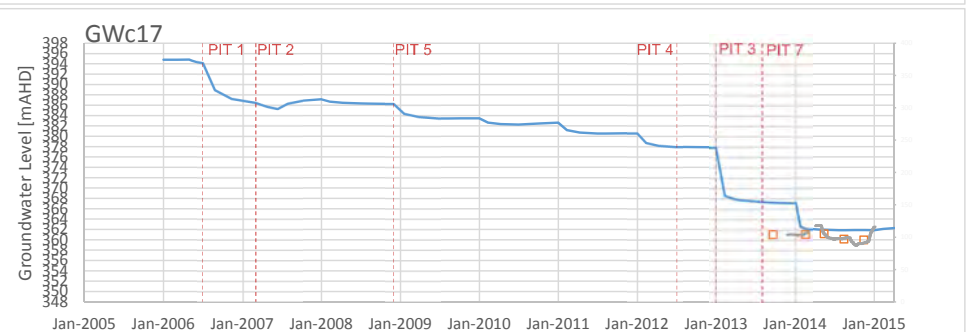
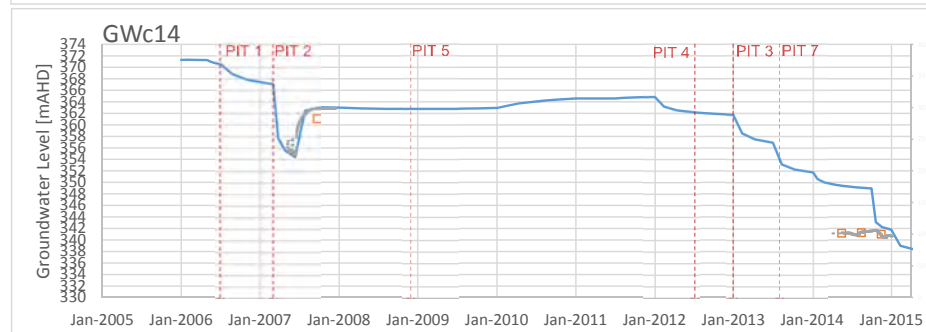
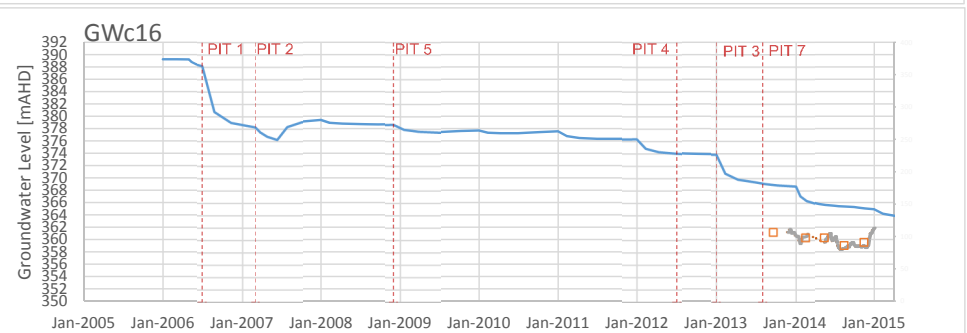
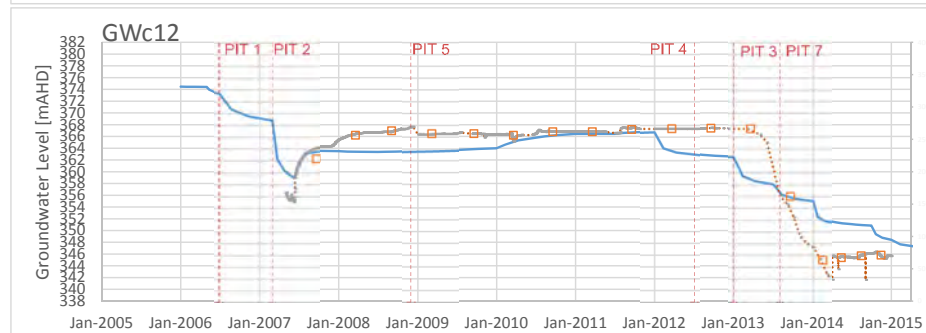
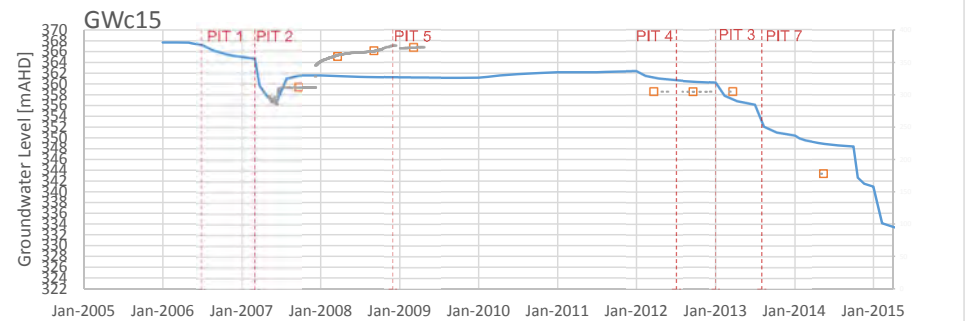
Modelled groundwater level hydrographs

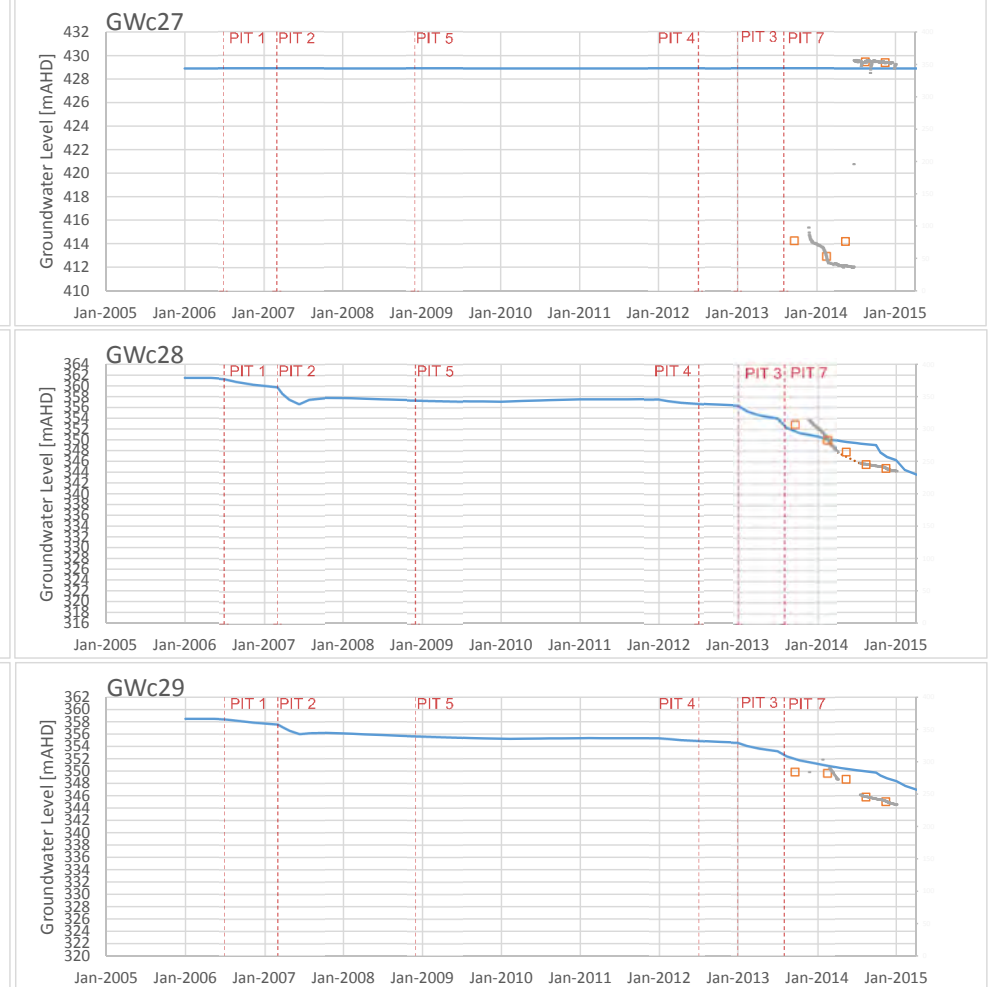
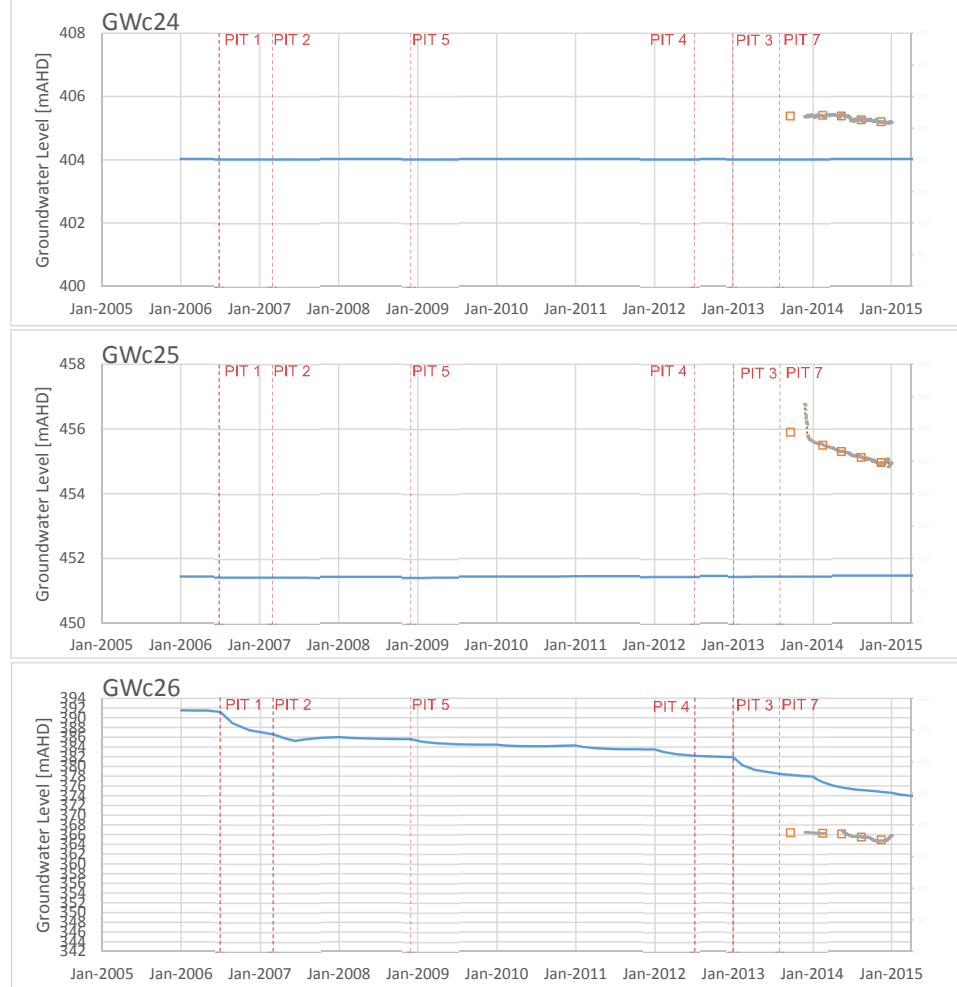


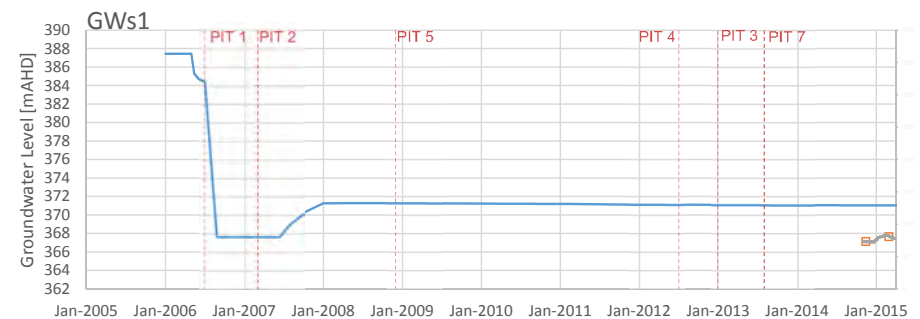
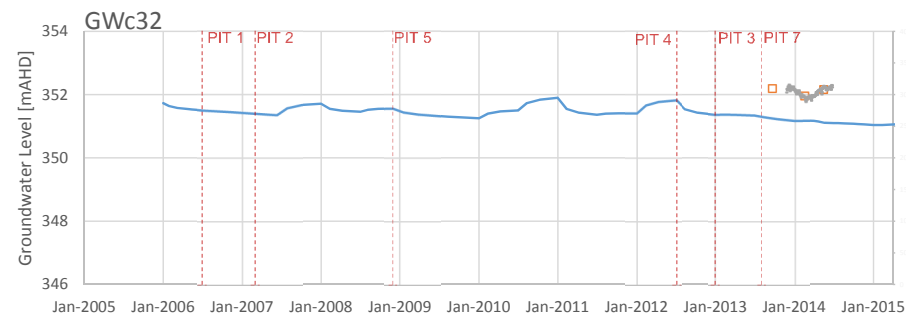
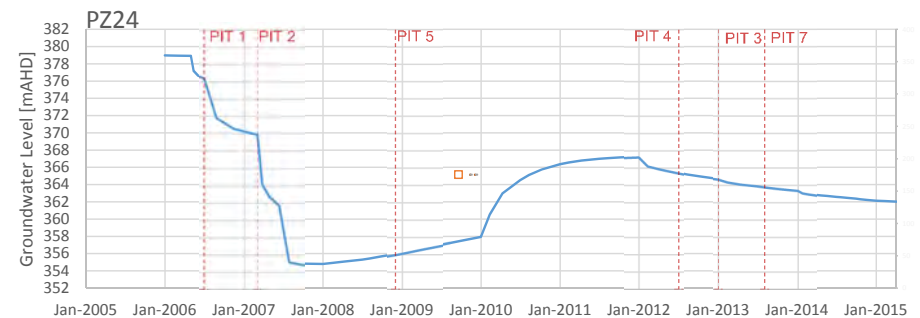
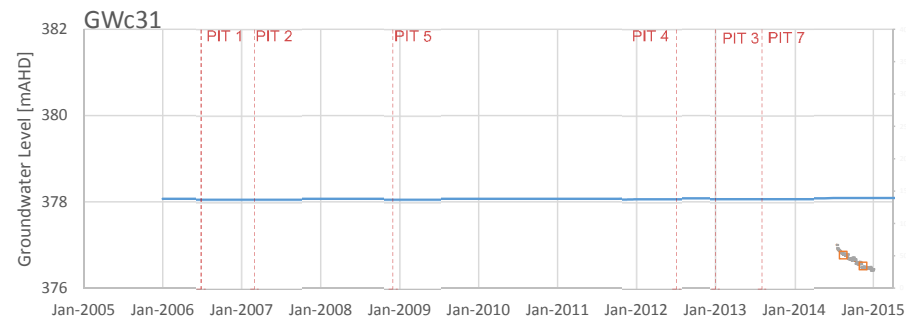
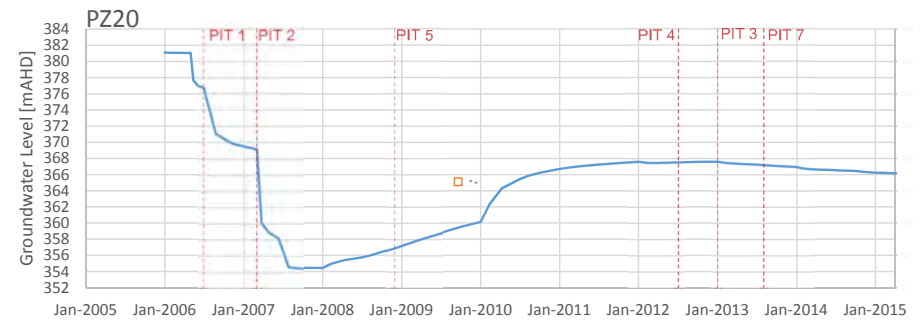
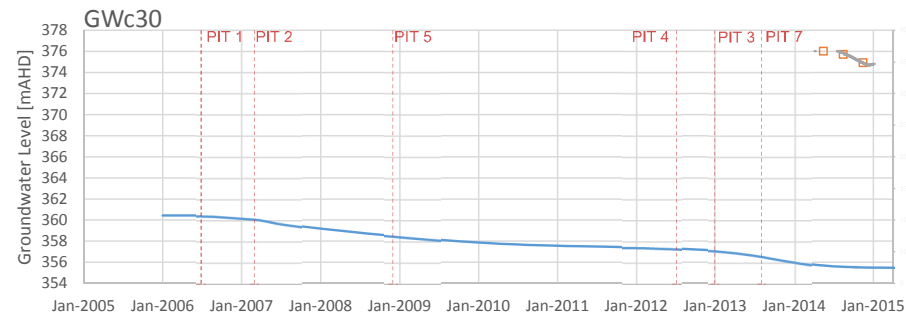


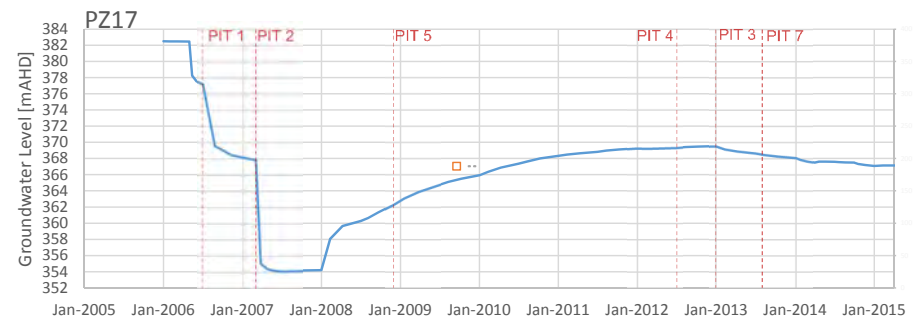
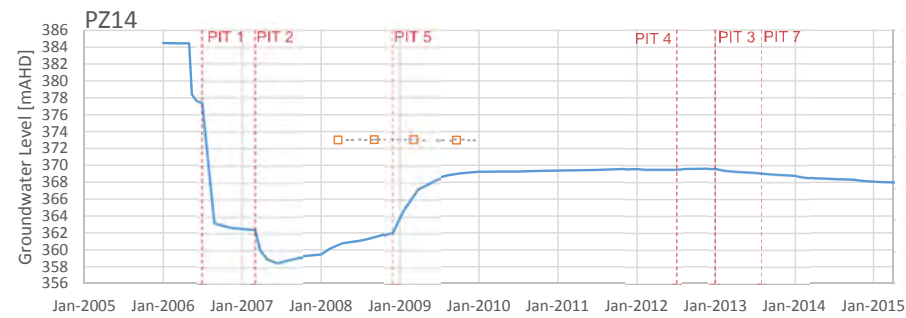
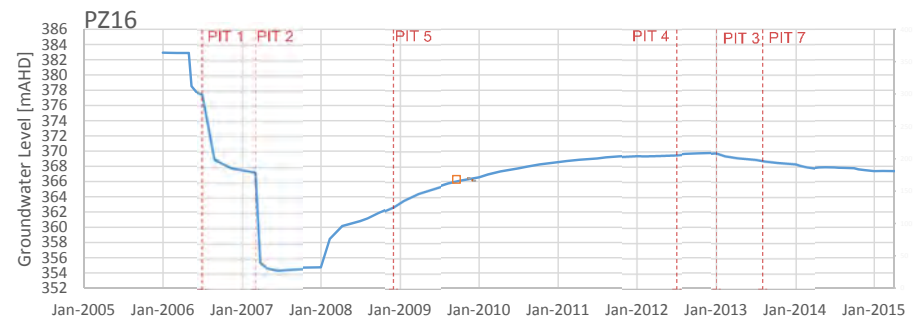
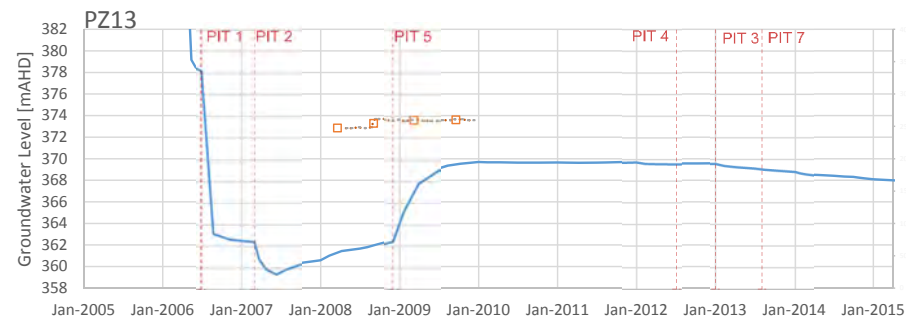
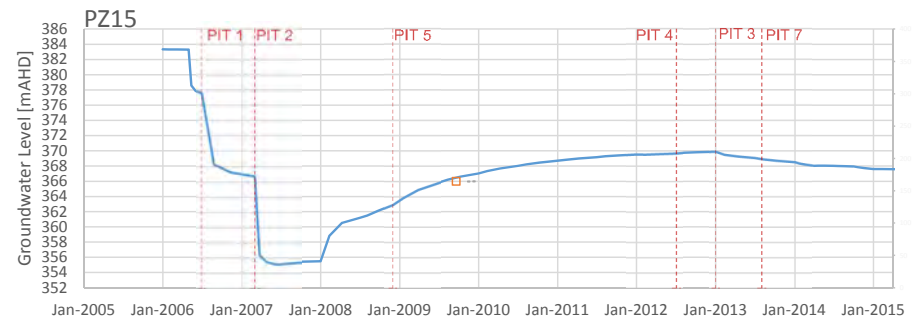
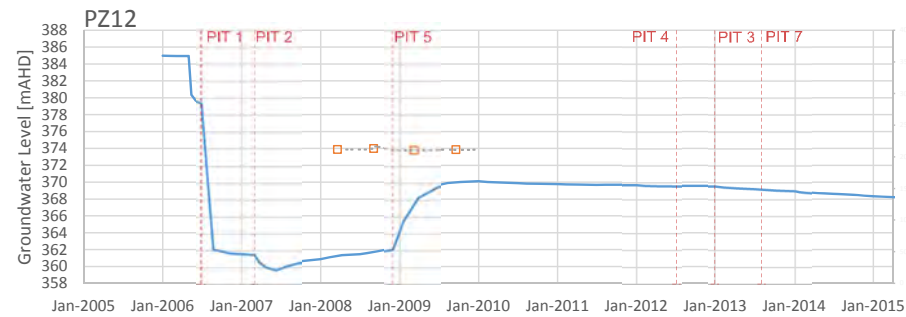


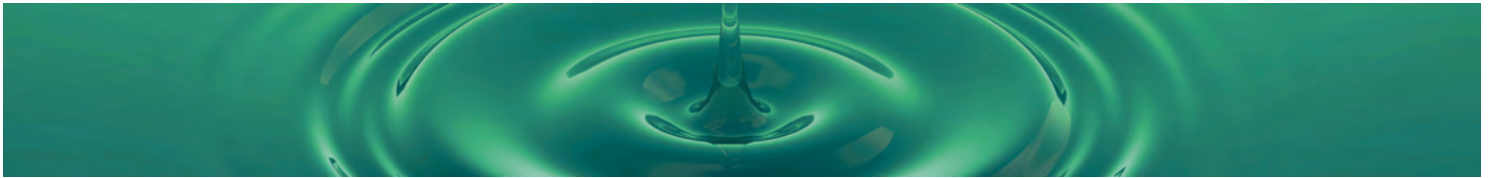












APPENDIX I - DRAWDOWN ASSESSMENT

Impact assessment (predicted drawdown) at registered bores

Bore Drawdown Assessment - Census bores

								Predicted Max. Drawdown [m]			
BoreID	LocalID	Easting	Northing	DrillDep_m	In GW works list?	Assess	Aquifer	Cumulative	WCM/WEP	Owner / Location description	
GW053859	"Keylah"	769590	6419785	31		0 WCPL, other	Ulan	31		30 WILPINJONG COAL PTY LTD	
GW024779	ERUL77	772725	6419860	41		0 WCPL, other	Marrangaroo	35		30 WILPINJONG COAL PTY LTD	
GW024775	ERUL27	768725	6420790	45		0 WCPL, other	Marrangaroo	38		28 WILPINJONG COAL PTY LTD	
GW024778	ERUL72	771760	6419700	32		0 WCPL, other	Ulan	29		approx 19m from Peabody Energy owned land (Lot 12/DP 755425)	
GW024776	"Badgers Bend"	769750	6420875	49		0 WCPL, other	Marrangaroo	37		24 WILPINJONG COAL PTY LTD	
GW024777	ERUL67	770640	6419500	26		0 WCPL, other	Marrangaroo	24		22 WILPINJONG COAL PTY LTD	
GW052223	0	767660	6421210	54		1 WCPL, other	Marrangaroo	44		21 WILPINJONG COAL PTY LTD	
GW060562	0	770625	6418800	41		0 WCPL, other	Shoalhaven Grp	15		10 WILPINJONG COAL PTY LTD	
GW034640	0	765059	6422109	70		1 WCPL, other	Marrangaroo	40		9 ULAN COAL MINES LIMITED	
GW024774	0	765310	6423700	91		0 WCPL, other	Marrangaroo	56		9 ULAN COAL MINES LIMITED	
GW052937	0	777610	6416668	43		1 WCPL, other	Shoalhaven Grp	10		7 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW051430	0	769410	6417510	46		1 WCPL, other	Shoalhaven Grp	6		4 WILPINJONG COAL PTY LTD	
GW051150	0	778750	6416130	31		1 WCPL, other	Ulan	6		4 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW051582	0	777481	6415887	38		1 WCPL, other	Shoalhaven Grp	6		4 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW051252	0	777355	6415774	34		1 WCPL, other	Shoalhaven Grp	4		3 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW059034	0	760820	6429050	89		0 WCPL, other	Marrangaroo	78		2.0 ULAN COAL MINES LIMITED	
GW059038	0	760550	6429290	73		0 WCPL, other	Marrangaroo	74		1.9 ULAN COAL MINES LIMITED	
GW054254	"Batey Hirons"	778690	6417680	35		1 WCPL, other	Permian Coal Me	3		1.7 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW080412	"Batey Hirons"	778116	6417714	6		0 WCPL, other	Permian Coal Me	3		1.6 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW080408	"Badgers Bend"	769551	6420978	5		0 WCPL, other	Permian Coal Me	3		1.5 WILPINJONG COAL PTY LTD	
GW080413	"Batey Hirons"	778096	6417643	9		0 WCPL, other	Permian Coal Me	2		1.4 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW080411	"Keylah"	770522	6419618	5		0 WCPL, other	Regolith	1		1.1 WILPINJONG COAL PTY LTD	
GW056057	0	778350	6414110	55		0 WCPL, other	Shoalhaven Grp	1		0.7 PEABODY PASTORAL HOLDINGS PTY LIMITED	
GW080405	"Castleview"	770593	6417807	4		0 WCPL, other	Permian Coal Me	1		0.4 WILPINJONG COAL PTY LTD	
GW080409	"Badgers Bend"	769766	6420693	2		0 WCPL, other	Regolith	1		0.4 WILPINJONG COAL PTY LTD	
GW080407	"Castleview"	770489	6417970	3		0 WCPL, other	Regolith	0		0.3 WILPINJONG COAL PTY LTD	
GW080127	"Wandoona"	777810	6415503	0		0 Private	Regolith	0		0.15 Wollar Road (east of township)	
GW080410	"Badgers Bend"	769811	6420808	5		0 WCPL, other	Regolith	0		0.13 WILPINJONG COAL PTY LTD	
GW059559	0	777561	6415829	0		1 WCPL, other	Regolith	0		0.11 PEABODY PASTORAL HOLDINGS PTY LTD	

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Bore Drawdown Assessment - Registered bores

Acre Drawdown Assessment - Registered Bores									Predicted Max. Drawdown [m]		
WORK_NO	LICENSE	HOLDER_SUR	LICENSED_P	East_z55	Nort_z55	Depth	InBoreCensus	Aquifer	Cumulative	WCM/WEP only	
GW052223	0 20BL167719	WILPINJONG COAL PTY LIMITED	DOMESTIC,STOCK	769790	6420052	36	No	Permian Coal Me	19.7	16.3	
	20BL115642	WILPINJONG COAL PTY LTD	DOMESTIC,STOCK	767784	6421391	2	Yes	Marrangaroo	44.1	20.9	
	0 20BL166292	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	775624	6417904	0	No	Permian Coal Me	14.0	12.9	
GW201929	20BL171912	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	777614	6418848	34	No	Ulan	21.2	16.1	
	0 20WA211157	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	777625	6418602	22	No	Permian Coal Me	13.8	9.8	
	0 20BL137593	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	777822	6418413	1	No	Permian Coal Me	13.2	9.3	
GW034640	20BL027911	ULAN COAL MINES LIMITED	DOMESTIC,STOCK	765164	6422292	28	Yes	Marrangaroo	40.5	9.1	
	0 20BL171686	PEABODY PASTORAL HOLDINGS PTY LTD	DOMESTIC,STOCK	779110	6417824	5	No	Permian Coal Me	10.0	6.5	
	0 20BL168604	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	780193	6417206	0	No	Permian Coal Me	8.6	5.2	
GW052937	0 20BL171054	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	780193	6417206	0	No	Permian Coal Me	8.6	5.2	
	20BL112342	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC	779676	6416844	0	Yes	Permian Coal Me	7.7	4.7	
	0 20BL168136	PEABODY PASTORAL HOLDINGS PTY LTD	DOMESTIC	778875	6417165	36	No	Permian Coal Me	5.8	3.6	
GW051430	20BL115862	WILPINJONG COAL PTY LTD	STOCK	769483	6417743	0	Yes	Shoalhaven Grp	6.4	4.0	
	Wollar Schoc	20BL173431	RECREATION (GROUNDWATER)	777508	6416200	44	No	Shoalhaven Grp	6.2	4.0	
	20BL113573	PEABODY PASTORAL HOLDINGS PTY LIMITED	STOCK	778876	6416311	15	Yes	Ulan	6.3	3.8	
GW051582	20BL111698	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC	777587	6416069	0	Yes	Shoalhaven Grp	5.5	3.5	
	GW059559	20BL131333	PEABODY PASTORAL HOLDINGS PTY LTD	DOMESTIC	777663	6416005	0	Yes	Shoalhaven Grp	5.2	3.2
	GW051252	20BL111924	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	777479	6415949	0	Yes	Shoalhaven Grp	4.4	2.7
GW054254	20BL114935	PEABODY PASTORAL HOLDINGS PTY LIMITED	STOCK	778814	6417854	0	Yes	Permian Coal Me	2.9	1.7	
	GW019567	20BL012964	PEABODY PASTORAL HOLDINGS PTY LIMITED	STOCK	784206	6416933	41	No	Marrangaroo	1.7	1.7
	0 20BL168698	WILPINJONG COAL PTY LIMITED	STOCK	770424	6416373	0	No	Tertiary?	1.6	1.6	
GW066420	20BL143078	PEABODY PASTORAL HOLDINGS PTY LIMITED	DOMESTIC,STOCK	779431	6416511	52	Yes	Permian Coal Me	2.1	0.8	
	GW029980	20BL023347	PEABODY PASTORAL HOLDINGS PTY LIMITED	CONSERVATION OF WATER,STOCK	786779	6417199	9	No	Marrangaroo	1.3	0.8
	GW019568	20BL012963	PEABODY PASTORAL HOLDINGS PTY LIMITED	STOCK	783606	6415161	0	No	Shoalhaven Grp	0.8	0.5
GW078729	20BL167518	MOOLARBEN COAL MINES PTY LTD	DOMESTIC,FARMING,STOCK	762932	6417482	0	No	Shoalhaven Grp	1.5	0.3	
	GW800279	80BL236762	IMRIE	DOMESTIC,STOCK	765208	6431971	0	No	Narrabeen Grp	1.4	0.2
	GW200546	20BL168271	MOOLARBEN COAL MINES PTY LTD	DOMESTIC,STOCK	764600	6415831	0	No	Shoalhaven Grp	0.8	0.14

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