SARFIIP SMM Investigations: Groundwater monitoring on Pike Floodplain and Katarapko Floodplain 2015



SARFIIP SMM Investigations:

Groundwater monitoring on Pike Floodplain and Katarapko Floodplain 2015

Ian Schneider, Adrian Costar and Daniel Wohling Department of Environment, Water and Natural Resources

December, 2015





Department of Environment, Water and Natural Resources

GPO Box 1047, Adelaide SA 5001 Telephone National (08) 8463 6946 International +61 8 8463 6946 Fax National (08) 8463 6999 International +61 8 8463 6999

Website www.environment.sa.gov.au

Disclaimer

The Department of Environment, Water and Natural Resources and its employees do not warrant or make any representation regarding the use, or results of the use, of the information contained herein as regards to its correctness, accuracy, reliability, currency or otherwise. The Department of Environment, Water and Natural Resources and its employees expressly disclaims all liability or responsibility to any person using the information or advice. Information contained in this document is correct at the time of writing.

This work is licensed under the Creative Commons Attribution 4.0 International License.

To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.

© Crown in right of the State of South Australia, through the Department of Environment, Water and Natural Resources 2015

ISBN 978-1-925369-62-5

Preferred way to cite this publication

Schneider I. & Costar A., 2015, SARFIIP SMM Investigations: Groundwater monitoring on Pike Floodplain and Katarapko Floodplain 2015, DEWNR Technical note 2015/27, Government of South Australia, through the Department of Environment, Water and Natural Resources, Adelaide

Download this document at: http://www.waterconect.sa.gov.au

Contents

Со	ontents					
1	Intro	duction	1			
	1.1	Project background	1			
	1.2	Study area	1			
	1.2.1	Pike Floodplain	1			
	1.2.2	Katarapko Floodplain	4			
2	Hydro	ogeology	6			
	2.1	Regional hydrogelogy	6			
	2.2	Floodplain hydrogeology	11			
	2.2.1	Groundwater level	11			
	2.2.2	Groundwater salinity	11			
	2.3	Groundwater well networks and monitoring	13			
3	SARF	IIP SMM groundwater monitoring	15			
	3.1	Groundwater level	15			
	3.1.1	Groundwater level monitoring methodology	21			
	3.2	Salinity monitoring	22			
4	Resul	ts	25			
	4.1	Pike Floodplain groundwater level monitoring network	25			
	4.2	Katarapko Floodplain goundwater level monitoring network	26			
	4.3	Murray Group groundwater level monitoring network	26			
	4.4	Groundwater sampling program	27			
5	Conc	usions and recommendations	37			
6	Refer	ences	39			
7	Appe	ndix A: SARFIIP 2015 groundwater monitoring wells	40			
8	Арре	ndix B: SARFIIP 2016 groundwater monitoring wells	45			
9	Appe Wate	ndix C: Instructions on how to access the state groundwater database: rConnect	51			

Figure 1 Location of Pike Floodplain and surrounding areas 3 Figure 2 Location of Katarapko Floodplain and surrounding areas 5 Figure 3 Hydrogeological cross-section of the Riverland environment (Yan et al, 2005a) 9 Figure 4 Hydrogeological conceptual processes of the Riverland environment (Yan et al, 2005a) 12 Pike Floodplain 2015 groundwater level monitoring network for the SARFIIP SMM project Figure 5 17 Figure 6 Katarapko Floodplain 2015 groundwater level monitoring network for the SARFIIP SMM project 18 Figure 7 Murray Group 2015 groundwater level monitoring network for the SARFIIP SMM project 19 Pike Floodplain 2015 groundwater level monitoring network, water level loggers and state networks Figure 8 20 Figure 9 Basic terms for groundwater level montoring 21 Figure 10 Pike Floodplain groundwater salinity sampling locations 23 Figure 11 Katarapko Floodplain groundwater salinity sampling locations 24 Figure 12 Pike Floodplain EC transect sonded wells 28 Figure 13a Pike Floodplain Site 1a-1 EC sonde data 29 Figure 13bPike Floodplain Site 1a-2 EC sonde data 29 Figure 13c Pike Floodplain Site 1a-3 EC sonde data 30 Figure 14a Pike Floodplain Site 2-1 EC sonde data 30 Figure 14bPike Floodplain Site 2-2 EC sonde data 31 Figure 14c Pike Floodplain Site 2-3 EC sonde data 31 Figure 15a Pike Floodplain Site 12-1 EC sonde data 32 Figure 15bPike Floodplain Site 12-2 EC sonde data 32 Figure 15c Pike Floodplain Site 12-3 EC sonde data 33 Figure 16 Pike Floodplain Site 1a cross-section including Sites 7, 10 and 20 34 Figure 17 Pike Floodplain Site 2 35 Figure 18 Pike Floodplain Site 2 36 46

5	•
Figure App B. 1	Pike and Katarapko Floodplains 2016 monitoring

List of tables

List of figures

Table 1	Summary of hydrostratigraphy of the investigation area (Summarised from Rogers, 1995; Rogers et al, 1995,				
	Firman 1973 and Lawrence 1966 and Cowley and Barnett, 2007).	7			
Table 2	Hydrogeological units of the study area	10			
Table 3a	Details of relevant historical (pre-2015) groundwater monitoring networks	13			
Table 3b	Details of relevant current (late-2015) groundwater monitoring networks	14			
Table 4	Summary of groundwater level monitoring networks	25			
Table 5	Summary of Pike Floodplain groundwater level monitoring	25			
Table 6	Summary of Katarapko Floodplain groundwater level monitoring	26			
Table 7	Summary of Murray Group groundwater level monitoring	26			

1 Introduction

1.1 Project background

The South Australian Riverland Floodplains Integrated Infrastructure Program (SARFIIP) is a large-scale infrastructure project to enable floodplain inundation for the South Australian Riverland region between the border and Lock 1 with particular focus on the Pike and Katarapko Floodplains. Commencing in 2012, the program aims to restore the vegetation health of floodplains at Pike and Katarapko (or Katfish Reach study area). This program will build on the investment undertaken by the Riverine Recovery Project (RRP) at these sites and allow for an integrated approach to management that will deliver regional environmental benefits.

SARFIIP is being delivered for the Australian Government's Murray–Darling Basin Authority (MDBA) by the River Murray Operations and Major Projects (RMOMP) Branch of the Department of Environment, Water and Natural Resources (DEWNR), in partnership with the Science, Monitoring and Knowledge (SMK) Branch and Natural Resources SA Murray-Darling Basin (NRSAMDB). SMK will support RMOMP through the delivery of scientific and technical services to assist with the assessment of floodplain and salinity management options, including data management, field investigations and modelling. Collectively these tasks are referred to as the SARFIIP Science Program.

The SARFIIP Science Program incorporates a number of managed projects of work including: Preliminary Investigations (Project 1), Salinity Investigations (Project 4) and Salinity Knowledge, Data Analysis and Modelling (Project 6) all of which fall under the Salinity Management Measures (SMM) project delivered by RMOMP. Salinity Investigations is focused on a number of targeted groundwater field investigations while Salinity Knowledge, Data Analysis and Modelling primarily focuses on the construction of a Pike Floodplain numerical groundwater model to support concept design options. The targeted groundwater field investigations provide baseline data, enabling greater understanding of floodplain processes and thereby informing the floodplain hydrogeological conceptual model and numerical modelling requirements.

During the Peliminary Investigations phase, SMK and RMOMP identified a number of field tasks required to support numerical groundwater modelling and development of SMM concept design options. One task implemented in Project 1 during 2014 was a bore audit that provided a stocktake of groundwater well infrastructure it's status and condition across the study area. The results of the bore audit were then used to establish Salinity Investigations project tasks were critical to implementing a groundwater level monitoring and groundwater salinity sampling program.

This document details the groundwater monitoring and salinity sampling programs of work conducted during 2015–16 under the Salinity Investigations project and provides recommendations for future monitoring requirements during the detailed design phase of SMM. While the salinity sampling program provides a baseline of groundwater quality across the study area, the groundwater level monitoring builds on baseline measurements collected during the bore audit.

1.2 Study area

1.2.1 Pike Floodplain

Pike Floodplain is located south of the township of Renmark and consists of a large anabranch system of approximately 67 sq. kilometres (Fig. 1). Lock 5 is the closest of the River Murray locks located to the north of the floodplain.

The anabrach system is fed by Deep Creek and Margaret Dowling Creek, north of Lock 5, which provide regulated inflows to the floodplain. The system is made up of several creeks or anabraches namely: Mundic Creek, Pike Lagoon, Pike River (Upper, Mid and Lower), Snake Creek, Tanyacka Creek and Rumpagunyah Creek. Mundic Creek and Pike River are the largest with Pike River providing water for one of South Australia's oldest irrigation communities. Water volume for irrigation is regulated on Pike River downstream by Col Col Embankment.

The floodplain can be broken up into the Upper Pike Floodplain and Lower Pike Floodplain. The Upper Pike Floodplain can only be accessed by road via Mundic Creek Road in the north. Until recently (mid-2015), the floodplain could also be accessed

in the east by Coombs Bridge however that bank has been removed. While technically both sections of the floodplain are islands, the Lower Pike Floodplain is considered a permanent island as access can only be achieved by water craft.

A series of levee banks or bridges allow access to the majority of the floodplain proper (i.e. Upper Pike Floodplain) which have been slowly upgraded. At present, the current and usable levee banks include: Bank B, Bank C, Bank D, Bank E, Bank F, Bank F1 and Bank G.

The Pike Floodplain is a high priority ecological and cultural area of the River Murray. The floodplain contains a variety of aquatic habitats but currently suffers from declining ecological health. Key threats to this ecosystem include highly saline groundwater close to the ground surface and altered flow regimes. Groundwater salinity impacts to the River Murray and Pike Floodplain are currently mitigated through the operation of the Pike River Salt Interception Scheme (SIS), which has four operational production wells located immediately south of the floodplain near the Lower Pike River.

Recent efforts to improve ecosystem health has included artificial inundation of Duck Hole, an adjacent wetland and the Inner Mundic Floodrunner on the north western Pike Floodplain.





DISCLAIMER: The Department of Environment, Water and Natural Resources, its employees and servants do not warrant or make any representation regarding the use, or results of use of the information contained herein as to its correctness, accuracy, currency or otherwise. The Department of Environment, Water and Natural Resources, its employees and servants expressly disclaim all liability or responsibility to any person using the information or advice contained herein.

© Government of South Australia, through the Department of Environment, Water and Natural Resources 2015. This work is copyright Apart from any use permitted under the Copyright Act 1968 (Cwlth), no part may be reproduced by any process without prior written permission obtained from the Department of Environment, Water and Natural Resources. Requests and enquires concerning reproduction and rights should be directed to the Chief Executive, Department of Environment, Water and Natural Resources, GPO Box 1047, Adelaide SA 5001.

> ced by: Science, Monitoring and Knowledge Projection: Lambert Conformal Conic Datum: Geocentric Datum of Australia 1994 December 2015

Government of South Australia Department of Environment, Water and Natural Resources

 \mathbb{Z}

Figure 1 Location of Pike Floodplain and surrounding areas

1.2.2 Katarapko Floodplain

The Katarapko Floodplain is located between the townships of Berri and Loxton covering an area of approximately 90 sq. kilometres (Fig. 2). Lock 4 is the closest of the River Murray locks located in the north of the floodplain. The name Katfish Reach was established seven years ago and stands for Katarapko Native Fish Demonstration Reach Katfish Reach, and refers to the broad project area. Katarapko Floodplain refers to the geographical location which falls within the Katfish Reach project area. Most of the area is governed under the Murray River National Park (Katarapko) but also includes private and Crown Land, and the Gerard Aboriginal Reserve.

The anabrach system is fed by Bank J, Bank K and Bank N, north of Lock 4, which provide regulated inflows through a series of anabranches namely: Northern Arm, Bank K Creek, Eckert Creek, Southern Arm. These provide flows to the bulk of the system downstream whch include Eckert Wide Water, Ngak Indau wetland, Sawmill Creek, Eckert Creek (downstream), The Splash, Katarapko Creek, Piggy Creek and Carpark Lagoons. The Berri Saline Water Disposal Basin is located in the north of the project area.

A complex system of lakes called the Gurra Gurra Lakes is located in the north east of the project area and will be the subject of further investigation in the future.

Habitats within Katfish Reach include permanent flowing creeks, freshwater complexes, saline wetlands and floodplains which support a variety of wildlife which includes a number of threatened species. River regulation and historic land management practices have impacted on the health of this ecosystem.

Groundwater salinity impacts to the River Murray and Katarapko Floodplain are currently mitigated through the operation of the Bookpurnong and Loxton SIS's, which have approximately 27 operational production wells and a highland horizontal drainage well located adjacent to the study area.

Recent efforts to improve ecosystem health has included artificial inundation trails at a number Katarapko Floodplain sites including Ngak Indau Wetland, Piggy Creek and Carpark Lagoons.



Figure 2 Location of Katarapko Floodplain and surrounding areas

2 Hydrogeology

2.1 Regional hydrogelogy

The Riverland of South Australia forms part of the Mallee region of the larger Murray Basin, a shallow geological basin that covers about 300 000 sq km, across the states of Victoria, South Australia and New South Wales. The Murray Basin is a closed groundwater basin containing Cenozoic unconsolidated sediments and sedimentary rock up to 600 metres in thickness, within which a number of regional aquifer systems have been identified (Evans and Kellett, 1989). From 65 million years ago (Pliocene) to the present, the depositional and erosional patterns of the western Murray Basin have been dominated by a combination of changing sea levels, cyclically driving sea inundation of the continent and incision of river valleys and minor tectonic movements (Drexel and Preiss, 1995).

Within South Australia and for the purposes of this report, there are four sequences of sedimentary rocks that are identified as aquifers. These include: the Renmark Group, Murray Group, Loxton Sands and lateral equivalents and the Monoman Formation (Fig. 3). Additionally, perched aquifer systems also exist within the Woorinen Formation found in some irrigation areas. A summary of the hydrostratigraphy is provided in Table 1.

Of importance to the area of investigation is that the Monoman Formation unconformably overlies the Loxton Sands near the Murray River. This depositional relationship evolved during the last glacial maximum (~65,000 years before present) in which the Loxton Sands were eroded by channel development and the Monoman Formation and later Coonambidgal Formation sediments subsequently deposited (Rogers, 1995). With respect to the regional hydrogeology, groundwater is interpreted to flow from the Loxton Sands into the Monoman Formation.

In-situ weathering and regolith development (e.g. crete-formation, mineral dissolution or oxidation or bio- or rhizoturbation) may affect the hydrogeological properties of the various hydrostratigraphic units. However, it is currently uncertain whether such processes have affected exposed strata significantly enough to warrant mapping weathering horizons as separate hydrostratigraphic entities.

Period	Group name	Formation name	Lithology description	Depositional environment	Hydrogeological characteristics
Holocene		Coonambidgal Formation	Slightly micaceous silty clay. Variable amounts of silt sand and gravel.	Floodplain alluvial. Paired terraces evident along stream channels	Aquitard. Groundwater found in sandier units
Pleistocene		Monoman Formation	Coarse grained quartz sand, silts and alluvial clay	Alluvial	Aquifer
Middle Pleistocene to Holocene		Woorinen Formation	Pale reddish brown silty and clayey quartz sand with layers of pedogenic carbonate	Dunal	Perched aquifers present
Late Pliocene to Middle		Blanchetown Clay	Greenish grey sandy clay. Thin layers of limestone and quartz sand. Gypsiferous near top. Calcareous septarian nodules	Lacustrine. (Lake Bungunnia)	Aquitard
Late Pliocene to Middle		Chowilla Sand	Fine to medium grained quartz sand	Fluvial	Aquifer. Restricted to areas upstream from Berri
Early to Late Pliocene		Loxton Sands (inc. Parilla Sand)	Glauconitic micaceous and shelly fine sand, planar to cross-bedded fine to coarse sand and fine gravel and planar-bedded calcareous and micaceous, shelly medium to coarse grained sandstone. A sequence of clay and shells is found at the base. This sequence is referred to as the "Lower Loxton Shells and Clay" in Yan et al. 2005a	Shallow water and marginal marine transitioning to beach and coastal barrier. Regressional sequence. Parilla Sand is non- marine.	Aquifer (Lower Loxton shells and clay interpreted as an aquitard)
Late Miocene to Early Pliocene		Bookpurnong Formation	Marl, silty clay and minor fine sand	Shallow marine	Aquitard
Early Miocene		Winnambool Formation	Fossiliferous marl, glauconitic marly limestone and marly clay	Shallow, restricted marine and lagoon	Aquitard
Early Miocene		Geera Clay	Black and grey-green carbonaceous, pyritic clay	Marginal marine and tidal sediments	

Table 1Summary of hydrostratigraphy of the investigation area (Summarised from Rogers, 1995;Rogers et al, 1995, Firman 1973 and Lawrence 1966 and Cowley and Barnett, 2007).

Period	Group name	Formation name	Lithology description	Depositional environment	Hydrogeological characteristics	
		Pata Formation	Bryozoan limestone and marl	Marine	Aquifer	
Early Miocene	Murray Group	Morgan Subgroup	Low energy carbonate ramp sediments. Consists of the Cadell Formation (marl), Glenforslan Formation (carbonate sediments with abundant bryozoans and molluscs) and the Finniss Formation (carbonate clay)	Marine. Low energy carbonate ramp	Possible limestone aquifer. Clays may act as localised aquitards.	
		Mannum Formation (Inc. Upper and Lower Mannum Frms.	Echinoidal and bryozoal calcareous sandstone and sandy limestone.	Shallow marine	Aquifer	
Early Oligocene to Early Miocene	Murray Group	Ettrick Formation	Glauconitic and fossiliferous marl, calcareous clay and mudstone. Some silt and fine grained sand	Marine	Aquitard	
eocene to Eocene	k Group	Olney Formation	Thinly bedded carbonaceous sand, silt, clay and lignite	Fluvial, lacustrine and swamp environments	Aquifer. Basin wide.	
Late Palaeo Middle E	Renmark	Warina Sands	Medium to coarse-grained quartz sand. Minor thin lenticular inter- beds of carbonaceous silty clay	Non-marine	Aquifer. Restricted to deeper parts of the basin	





Table 2 below details the basic characteristics of each hydrogeological unit in the project area.

Table 2 Hydrogeological units of the study are	able 2	Hydrogeological units of the study a
--	--------	--------------------------------------

Hydrogeological Unit	Aquifer/Aquitard	Salinity Range (TDS mg/L)	Yield Range (L/s)
Coonambidgal Formation	Aquitard	NA	NA
Monoman Formation	Aquifer (floodplain)	7,000-60,000	0.5-10
Loxton Sand	Aquifer (highland)	7,000-40,000	0.5-5
Lower Loxton Clay	Aquitard	NA	NA
Bookpurnong Formation	Aquitard	NA	NA
Pata Formation (Murray Group)	Aquifer	10,000-30,000	0.5-1
Winnambool Formation (Murray Group)	Aquitard	NA	NA
Glenforslan Formation (Morgan Subgroup)	Aquifer	5,000-30,000	0.5-2
Finnis Formation (Morgan Subgroup)	Aquitard	NA	NA
Upper Mannum Formation (Murray Group)	Aquifer	3,000-25,000	5-10
Lower Mannum Formation (Murray Group)	Aquifer	NA	NA
Ettick Formation (Murray Group)	Aquitard	NA	NA
Renmark Group	Aquifer	NA	NA

Previously reported (Yan et. al., 2005b)

2.2 Floodplain hydrogeology

As discussed briefly in Section 2.1, the River Murray is located within a broad trench, formed during the last glacial maximum (~65,000 years BP), when sea levels were lower and the river accordingly cut deeper into the surrounding landscape. After sea levels rose, the trench gradually filled with the floodplain sediments of the Monoman Formation and Coonambidgal Formation (Rogers, 1995). The Monoman Formation is the major aquifer beneath the floodplain.

The Monoman Formation and Loxton Sands aquifers provide the majority of the salt load entering the River Murray because they are the main aquifer units in contact with surface water flow. Therefore, groundwater migration between the Loxton Sands and Monoman Formation is an important component in salt migration across the area. The hydraulic conductivity of the Loxton Sands and the hydraulic head difference between the river and nearby groundwater controls the flux of saline groundwater entering the River Murray. Consequently, these two aquifers are the primary targets for salt interception.

Figure 4 presents a schematic diagram of the conceptual hydrogeological model including a description of groundwater flow between the aquifers, the broader regional groundwater flow system, inter-aquifer flow and local recharge mechanisms.

2.2.1 Groundwater level

There is a substantial historical record of groundwater level data near the Pike Floodplain, although most data is restricted to the highland and irrigation areas where the Loxton Sands aquifer predominates. However there are still a number of observation wells completed in the Coonambidgal and Monoman Formations within the Pike Floodplain from which groundwater level data may be obtained.

On the Katarapko Floodplain, groundwater level monitoring is restricted to the eastern side of Katarapko Creek and is centred on the extensive SIS in the area. Groundwater well infrastructure itself is limited on the Katarapko Floodplain study area and where wells exist, they may be completed across both Coonambidgal and Monoman Formations.

Groundwater flow within the Monoman Formation and Loxton Sands broadly follows the stream and topographic gradient. Based on monitoring results over the past 12 months, depth to water (DTW) for the Monoman Formation/Loxton Sands aquifer has varied between 41.5 metres below ground surface (mbgs) (7029-1978) and 0.89 mbgs (702901217) within the Pike Floodplain study area. For the Katarapko Floodplain study area, water levels have ranged between 41.4 mbgs (7029-1424) and 3.01 mbgs (7029-1301) over the same period of time. Typically depth to water at the shallow end of the range is attributed to the Monoman Formation (i.e. the floodplain) where as the deeper measurements are measured on the highland and Loxton Sands aquifer. It is noted that irrigation drainage on the highlands may create perched lenses of groundwater that are not connected to the regional watertable.

Historical groundwater level measurements are stored in the state groundwater database (available online at WaterConnect).

2.2.2 Groundwater salinity

Measurements of groundwater salinity are limited and are generally only representative of salinity at the time of construction and well development. The salinity of groundwater sampled from shallow monitoring bores and drilling across the floodplain typically ranges from 7 000 to 40 000 mg/L (12 200 to 60 500 μ S/cm) but can be as high as 75 000 mg/L(107 150 μ S/cm).

Historical salinity measurements are stored in the state groundwater database (available online at WaterConnect).



Figure 4 Hydrogeological conceptual processes of the Riverland environment (Yan et al, 2005a)

2.3 Groundwater well networks and monitoring

A number of groundwater monitoring networks were active (or current) near the study area in 2014. Their primary functions were to monitor irrigation areas that are located on the highland adjacent to the floodplain or for monitoring of SIS's. Consequently, few of these monitoring networks included wells located on the Pike Floodplain. The one pre-2015 monitoring network that did include wells located on the Pike Floodplain is the Pike Murtho Irrigation Area monitoring well network. In 2015, the groundwater monitoring networks were rationalised leading to some network closure, well optimisation in remaining networks and reductions in measurement frequency.

Good quality, long term monitoring data is generally restricted to water levels collected from wells completed in shallow aquifers. Salinity data in contrast, is limited and typically consists of one sample collected during the well construction stage. Table 3a provides a collation of the known historical (pre-2015) groundwater monitoring networks in close proximity to the Pike and Katarapko Floodplains. Table 3b presents information on the current (late-2015) groundwater monitoring networks near the study areas. It should be noted that wells on the Pike Floodplain that were monitored under the (pre-2015) Pike Murtho Irrigation Areas network are no longer currently monitored.

Name	Closest Floodplain Study Area	No of Wells	Water Level Data Length of record	Salinity Data	Location Description
Pike Murtho Irrigation Areas	Pike	139	Since 1968	0	The network stretches north of Renmark along the River Murray to Murtho Forest and south to the Gurra Gurra Wetland complex.
					Some FP study area monitoring but mainly restricted to highland areas northeast and southwest of Pike. Those wells that are located on the FP monitor groundwater in both the Monoman and Coonambidgal formations.
Renmark- Cooltong Irrigation Areas	Pike	219	Since 1955	0	Centred on Renmark. The network stretches north past Cooltong and south to an area located just north of Pike FP study area. No FP study area monitoring.
Berri-Barmera Irrigation Areas	Katarapko	128	Since 1955	0	Centred on Berri and Barmera. The network stretches west to Loveday and south to the community of Gerard. No FP study area monitoring.
Bookpurnong SIS	Katarapko	31	Since 2001	0	Centred on Bookpurnong and restricted to the highland area east of the River Murray and north of Loxton. No FP study area monitoring.
Gurra Gurra Wetland Complex	Katarapko	13	Since 1983	0	Centred on the Gurra Gurra Wetland complex
Loxton Irrigation Areas	Katarapko	49		0	Restricted to highland area east of FP study area and east of Loxton.
Loxton SIS	Katarapko	119	Since 1990	0	Network extends north of Loxton to Rilli's FP and SW to Pyap. Some FP monitoring mainly Rilli's FP and limited wells west of the River Murray on Katarapko Island Also included is one well west of Katarapko Ck. No FP study area monitoring apart for two wells to the south.

Table 3a Details of relevant historical (pre-2015) groundwater monitoring networks

As available online October 2014 from the state groundwater database on <u>WaterConnect</u>. Note that changes to networks including closure and reductions in number of wells across networks occurred during 2015 as part of an optimisation project.

Name	Closest Floodplain Study Area	No of Wells	Wells with Current Water Level Status	Salinity Status	Location Description
Pike Murtho Irrigation Areas	Pike	127	57	0	Centred on Renmark. The network stretches NE of Renmark to just south of Murtho and just over the border into VIC and as far south as the Gurra Gurra Wetlands complex and Yamba. No current FP study area monitoring.
Berri and Renmark Irrigation Areas	Pike & Katarapko	341	82	0	Centred on Renmark and Berri. Network stretches north of Renmark as far as Cooltong, south of Renmark to the River Murray, north of Berri toward Monash and west of Berri toward Loveday. No current FP study area monitoring.
Loxton-Bookpurnong Irrigation Areas	Katarapko	186	77	0	Centred on Berri and Loxton. Network stretches from an area south of Berri inclusive of the Gurru Gurra Wetlands complex to Pyap. The network also extends to the south and approximately 10km east of Loxton. There is minor historical monitoring in the southern part of the Katarapko FP.
Waikerie Moorook Irrigation Areas	Katarapko	227	120	0	Centred on Waikerie. The network stretches east towards Loxton, north of Overland Corner and west toward Morgan. No current FP study area monitoring.

Table 3b Details of relevant current (late-2015) groundwater monitoring networks

3 SARFIIP SMM groundwater monitoring

3.1 Groundwater level

A key requirement for numerical groundwater modelling is having sufficient time series groundwater level (or head) and salinity data to calibrate and compare against modelled outputs. The scarcity of time series groundwater level data, and limited or absent groundwater salinity data available on the floodplains, triggered the need for targeted groundwater monitoring and salinity sampling during the concept design phase of SMM. Given the relative ease of manual groundwater level monitoring, wells located on the floodplains were targeted for monthly measurements and formed project specific interim monitoring networks called the Pike Floodplain monitoring network and Katarapko Floodplain monitoring network. Monthly monitoring started in April–May 2015 and, with the exception of a data collection break during the Phase 1 and Phase 2 drilling program, has been on-going until February 2016.

As discussed earlier in this report, a bore audit was conducted in 2014 which surveyed wells on the floodplains of Pike and Katarapko Floodplain study areas. The audit (which included a broader area than the floodplain) identified 99 wells located on the Pike Floodplain study area and 257 wells on the Katarapko Floodplain study area (excluding wells not located). Of these, 57 wells located on the Pike Floodplain and 26 wells on the Katarapko Floodplain formed the basis of the monthly floodplain monitoring network.

The initial monitoring network selection was expanded to include new wells drilled and constructed as part of Phase 1 (Sep-Oct 2015) and Phase 2 (Oct–Nov 2015) SARFIIP SMM drilling program and piezometers installed as part of the SARFIIP SMM soil survey. This expanded the Pike Floodplain monitoring network by 48 wells to 105 wells (Fig. 5) and the Katarapko Floodplain monitoring network by eight wells to 34 wells (Fig. 6). In summary, the expansion of the networks comprised the addition of:

- Twelve 50 mm floodplain piezometers (< 2 m deep)
- Five 100 mm floodplain observation wells sreening the Coonambidgal Formation (< 5 m deep)
- Thirty 80 mm floodplain observation wells screening the Monoman Formation (< 25 m deep)including one observation well penetrating the deeper Pata Formation and one highland observation well penetrating the Loxton Sands
- One 200 mm highland production well screening the Loxton Sands

Additional works were incorporated into this task shorly after it was initiated which included additional monitoring. Firstly the pre-feasibility SMM concept design options engineer suggested some additional monitoring which included the deeper Murray Group wells that surround the floodplains of Pike and Katarapko. The Murray Group monitoring network consisted of 27 wells and monitors the water level of the Murray Group Formation which forms the regional aquifer system that underlies the Monoman Formation (Fig. 7).

Then in October 2015, RMOMP advised SMK of an artificial watering or inundation trial in the Duck Hole Wetland located adjacent to Mundic Creek on the Pike Floodplain. A request was made to monitor groundwater levels on a weekly basis before, during and for some time after the trail. Wells selected for this weekly monitoring included the recently drilled wells constructed in September 2015 as part of the Phase 1 drilling works.

A local groundwater monitoring network of 11 wells was created to monitor groundwater response to a localised pumping and inundation event on the north western Pike Floodplain. This event saw the Duck Hole waterbody, an adjacent wetland and the Inner Mundic Flood Runner inundated with water from Mundic Creek for environmental purposes. While all monitored wells exist within the broader Pike Floodplain monitoring network, a targeted weekly monitoring frequency was identified for the duration of the inundation and recession.

The SARFIIP SMM design engineer (concept design options and detailed design), Australian Water Environments (AWE), also monitored a selection of wells across the Pike Floodplain and adjacent highland, only five of which had not included in the Pike Floodplain monitoring network. Of those five, four are included in the Pike and Murtho Irrigation Areas state monitoring

network (Fig. 8). In addition, a number of groundwater level loggers were temporarily installed by the SARFIIP SMM design engineer to assist with SMM concept design options reporting.



Figure 5 Pike Floodplain 2015 groundwater level monitoring network for the SARFIIP SMM project



Figure 6 Katarapko Floodplain 2015 groundwater level monitoring network for the SARFIIP SMM project



Figure 7 Murray Group 2015 groundwater level monitoring network for the SARFIIP SMM project





3.1.1 Groundwater level monitoring methodology

Groundwater levels are monitored using a groundwater level probe. The probe has an electronic sensor attached to a measured tape and sounds when water is detected. The groundwater level probe is lowered into the well and a water level is measured from a reference point which the is typically the top of the casing (TOC) and the measured level is referred to as depth to water (DTW). It is imperative that the same reference point is used for measurement each time a well is visited. Once an accurate x, y and z location survey has been completed or the measurement of the reference point above ground (or below ground in some circumstances) this vertical measurement can be applied to the DTW to produce a standing water level (SWL). If the locational survey is measured to metres Australian Height Datum (m AHD) then a reduced SWL (or RSWL) can be generated which gives the elevation of the water level (Fig. 9).



Figure 9 Basic terms for groundwater level montoring

All water levels are uploaded to the state groundwater database for project and public use, available at <u>WaterConnect</u> (see Appendix C for instructions on use)

The relevant frequency for each monitoring network was selected to provide a useful density of water level information to support groundwater model development and infrastructure programs. A target monthly monitoring frequency was selected for the groundwater monitoring networks, with the exception of the Duck Hole monitoring network where weekly frequency was required. Data from the regular groundwater monitoring provides:

- Condition and status of that data point/well
- Improved resolution of groundwater response to seasonal and local influences
- Confidence when planning and designing a drilling and sampling programs
- Baseline data to underpin development and refinement of potentiometric surfaces to aid initial groundwater modelling.

3.2 Salinity monitoring

Sampling an aquifer for groundwater quality (including salinity) is a more involved process than measuring groundwater level. Collection of a representative sample typically requires the purging of a minimum of three casing volumes of groundwater from the well and the stabilisation of parameters including EC, pH, DO, ORP and temperature.

In October 2015 following the completion of Phase 1 drilling works, a groundwater sampling program was implemented on the 24 new groundwater monitoring wells (nineteen on Pike Floodplain, Fig. 10; five on Katarapko Floodplain, Fig. 11) and an additional five existing wells located around the eastern edge of the Pike Floodplain (Fig. 10). Purging of a minimum three casing volumes was carried out and sampling took place when parameters had stabilised. The five existing wells located on the highland adjacent the Pike Floodplain were selected to provide representative salinity conditions for the Loxton Sands aquifer, whereas the nineteen floodplain locations aimed to provide representative salinity condition for the Coonambidgal Formation, Monoman Formation and Pata Formation (of the Murray Group).

Samples collected for salinity analysis are delivered to the DEWNR laboratory located in Regency Park, Adelaide where the sample was analysed and the measurement uploaded to the state groundwater database and available at <u>WaterConnect</u> (see Appendix C for instructions on use)

The sampling program primarly collected samples for salinity analysis, but also provided samples for the ARC Linkage Project which is a three year research project between Flinders University (SA), Monash University (Vic) and DEWNR that investigates freshwater lens dynamics on floodplains.

Manual groundwater sonding measuring electrical conductivity (a proxy for salinity) was also conducted on selected wells that were designed with long (> 10 metre) screens. This data was useful for targeted sampling of the groundwater column in these wells so that a sample of the freshwater lens (typically located at the top) could be sampled discretely along with background groundwater (typically towards the bottom of the profile).







Figure 11 Katarapko Floodplain groundwater salinity sampling locations

4 Results

A total of 166 wells are being monitored for groundwater level (or DTW) across four networks: Pike Floodplain network, Katarapko Floodplain network, deeper Murray Group network and Duck Hole Wetland network. Data was collected on average each month and a summary is provided below in Table 4. Individual well details are provided in Appendix A.

Table 4	Summary of	groundwater	level r	nonitoring	networks

Monitoring Network	No Monitoring Wells	No Wells Located on Island	Target Monitoring Frequency
Pike Floodplain (expanded)	57 (105)	4	1 month
Katarapko Floodplain (expanded)	26 (34)		1 month
Murray Group	27	1	1 month
Duck Hole Wetland	11		1 week

Note: Duck Hole Wetland network is a subset of the Pike Flooplain monitoring network

4.1 Pike Floodplain groundwater level monitoring network

A summary of groundwater level monitoring activity undertaken for the Pike Floodplain network is provided below in Table 5. In total, six monitoring rounds have been undertaken for the Pike Floodplain to date.

Monitoring Rounds 2015	Monitoring Dates	No Wells Monitored	Island Wells Monitored	Comment
February	11/2/15 – 12/2/15	57	4	
March	-	-	-	Deferred due to EM-31 survey
April	27/4/15 – 29/4/15	53	-	Delayed due to weather delay. Boat not available to access island wells
May	-	-	-	Weather delay, rescheduled to 1/6/15
June	1/6/15 -16/6/15	53	-	Boat not available to access island wells
July	-	-	-	Deferred due to Phase 1 drilling
August	19/8/15	8	-	Deferred due to Phase 1 drilling
September	-	-	-	Deferred due to Phase 1 drilling
October	-	-	-	Deferred due to Phase 2 drilling
November	9/11/15 - 10/11/15	61	-	Incomplete adhoc monitoring due to Phase 2 drilling
December	9/12/15 - ongoing	57	-	In progress

 Table 5
 Summary of Pike Floodplain groundwater level monitoring

Four groundwater wells are located on the island (Lower Pike Floodplain). Due to access constraints, these wells have not been monitored since February 2015. Wells located on the island include: 7029-1187, 7029-1188, 7029-1189 and 7029-1190

Groundwater monitoring post June 2015 was impacted by resources being used for the Phase 1 and Phase 2 drilling preparation and supervision.

An artificial inundation trial to Duck Hole and the adjacent wetland commenced on 19 October 2015 and continued for Duck Hole until 5 November 2015 and until 20 November 2015 for the wetland. Pumping to the Inner Mundic Flood Runner commenced on 17 November and continued until 20 November. Monitoring groundwater level for the 11 selected wells occurred on a weekly basis where possible.

4.2 Katarapko Floodplain goundwater level monitoring network

A summary of groundwater level monitoring activity undertaken for the Katarapko Floodplain network is provided below in Table 6. In total, four monitoring rounds were undertaken for the Katarapko Floodplain.

Monitoring Rounds 2015	Monitoring Dates	No Wells Monitored	Island Wells Monitored	Comment
May	5/5/15 – 6/5/15	25	0	Initial well selection + new well
June	26/6/15	25		7029-653 not monitored
August	20/8/15 – 21/8/15	28	0	Commenced monitoring P1 piezometers
December	17/12/15 – ongoing	25		In progress

Table 6 Summary of Katarapko Floodplain groundwater level monitoring

During the initial monitoring round, a new well was located and surveyed. Survey details have been incorporated into the Katarapko bore audit report, details registered in the state groundwater database and the well has been incorporated into the Katarapko Floodplain groundwater level monitoring network for regular monitoring.

Existing well 7029-653 was monitored during the May round and the water in this well was found to be oily and pungent. Monitoring of this well ceased following the May monitoring round and remedial options are being considered to allow continued monitoring of this well.

Well 7029-2107 is located within the Lock 4 compound and may have incurred additional damage since the bore audit. The well has bent PVC casing and is blocked. Whilst level appears to fluctuate, the depth of the blockage has changed from 4.21 mbTOC at the time of the audit to the current depth of 3.71 mbTOC.

4.3 Murray Group groundwater level monitoring network

A summary of groundwater monitoring activity undertaken for the Murray Group monitoring network is provided below in Table 7. The initial monitoring round was completed on 30 March 2015.

Monitoring Rounds 2015	Monitoring Dates	No Wells Monitored	Island Wells Monitored	Comment
March/April	27/3/15 - 31/3/15	27	1	Boat not available to access island wells
Iviay		26		weather delays, rescrieduled to 1/8/15
June	2/6/15 - 12/6/15	26		Scheduled to commence 29/6/15
August	21/8/15 – 24/8/15	4		
December	16/12/15 - ongoing	3		In progress

Table 7 Summary of Murray Group groundwater level monitoring

The initial Murray Group monitoring was integrated with initial capture of well survey data, to be completed during the second round, scheduled to commence on 1 June, 2015. The scheduled May monitoring of the Pike Floodplain monitoring network was postponed until June because of weather delays, with 10 mm of rain recorded at the proposed monitoring time.

Well 7028-628 was confirmed to be blocked during the intial monitoring round and was removed from the Murray Group monitoring network.

Island well 7029-796 was opportunitstically monitored in March 2015 with the assistance of DEWNR's Resource Monitoring Unit during a routine surface water monitoring activity near the site. Ongoing monitoring of this well is subject to boat access constraints.

A partial monitoring round commenced during August 2015 but was discontinued due to resourcing comitments associated with the SARFIIP drilling programs.

4.4 Groundwater sampling program

In October 2015, a groundwater sampling program was undertaken to collect groundwater samples primarily for groundwater salinity analysis, however (as discussed above) the event was coupled with the ARC Linkage Project which also collected samples for major ion, stable isotopes of water, radiocarbon and tritium analysis.

One rationale for construction of groundwater wells under Phase 1 of the drilling program was to target and monitor freshwater lenses particularly their boundaries. On the Pike Floodplain, Sites 1a, 2 and 12 were set up as multi well sites along transects away from known freshwater lens areas (Fig. 12) coupled with a Cooonambidgal Formation well constructed adjacent to each Monoman Formation well. At these sites the Monoman Formation wells were constructed with long screens (typically > 10 m), which are ideal for profiling groundwater salinity, enabling detection of the freshwater lens which are thought to exist at the very top of the Monoman Formation aquifer.

Prior to sampling these multi site wells, an electrical conductivity (EC) sonde was used to profile groundwater EC against depth (Figs. 13a, b, c; 14a, b, c; 15a, b, c). Note that these figures show groundwater EC with depth relative to the watertable i.e. not absolute depth. Once the freshwater lens interface was detected, groundwater sampling targeted both the freshwater lens and the deeper more regionally characteristic saline groundwater.



Figure 12Pike Floodplain EC transect sonded wells



Figure 13a Pike Floodplain Site 1a-1 EC sonde data



Figure 13b Pike Floodplain Site 1a-2 EC sonde data



Figure 13c Pike Floodplain Site 1a-3 EC sonde data



Figure 14a Pike Floodplain Site 2-1 EC sonde data



Figure 14b Pike Floodplain Site 2-2 EC sonde data



Figure 14c Pike Floodplain Site 2-3 EC sonde data



Figure 15a Pike Floodplain Site 12-1 EC sonde data



Figure 15b Pike Floodplain Site 12-2 EC sonde data



Figure 15c Pike Floodplain Site 12-3 EC sonde data

A summary of sonde EC to sampled EC is provided for each of the transects below (Figs. 16, 17 and 18).



Figure 16 Pike Floodplain Site 1a cross-section including Sites 7, 10 and 20

		(close t	o water body)	(mi	ddle v	vell)	(further fr	om w	ater body)	
			P1a-1		P1a-	2		P1a-	3	
North	Natural Surfa	се								South
		0.62								
			28500			37500				
			(EC sonde)			(EC sonde)			33800	
		4	l,				4.4		(EC sonde)	
			hry .	5						
					Ч					
		31300 (EC)					35700			
		(EC sample)		41200			(EC sample)			
				(EC sample)						
			46500							
			(EC sonde)						53500	
						47500			(EC sonde)	
						(EC sonde)				
		17								
				19.5						
					,,					
							23			
Кеу										
	Coonambidga	I Formation								
	Monoman For	rmation								
🗅 GW level	Water levels	shown for Mo	noman Formation	ONLY in metre	s belo	w natural surf	face (mBNS)			
Depths	metres below	/ natural surfa	ace (mBNS)							
EC	uS/cm									

Figure 17 Pike Floodplain Site 2

		(close t	o wat	er body)	(mi	ddle v	vell)	(further fr	om w	ater body)	
			P12-:	1		P12-	2		P12-	3	
North	Natural Surfa	се									South
				44000							
		2.75	Ĺ	(EC sonde)	3.04 仚		48500			51600	
					4.3	\mathbf{h}	(EC sonde)	4.5	5	(EC sonde)	
				49900							
				(EC sonde)		$ \rangle$					
		47800 (EC)						54600			
		(EC sample)	5		48100			(EC sample)			
					(EC sample)						
				57500							
				(EC sonde)						60500	
							61000			(EC sonde)	
		16					(EC sonde)				
								16.8			
					18		_				
Кеу											
	Coonambidga	I Formation									
	Monoman For	rmation									
GW level	Water levels	shown for Mo	noma	n Formation C	ONLY in metres	s belo	w natural surf	ace (mBNS)			
Depths	metres below	natural surfa	ice (m	BNS)							
EC	uS/cm										

Figure 18 Pike Floodplain Site 2

5 Conclusions and recommendations

Curently, 166 wells are included in SARFIIP SMM Salinity Investigations project specific monitoring networks to support numerical floodplain modelling and the SMM concept design options. The monitoring networks include:

- Pike Floodplain monitoring network
- Katarapko Floodplain monitoring network
- Murray Group monitoring network.

All data, both water level and salinity, was uploaded into the state groundwater database within a few days of collection and available online at <u>WaterConnect</u>.

Planned groundwater network monitoring during March and April was impacted due to resourcing issues with other program elements (ground-based geophysical, soil and cultural surveys and Phase 1 and Phase 2 drilling programs) and inclement weather, resulting in the re-scheduling of monitoring activities. A number of scheduled monitoring rounds were not completed during times of heavy resource commitment.

Significant expansion of the Pike Floodplain and Katarapko Floodplain monitoring networks has occurred through the drilling programs, with the addition of 56 new wells.

In order to capture short to medium term monitoring requirements (to the end of 2016) of the detailed design phase of SMM, it is recommended that:

- Groundwater level monitoring continues until the end of February 2016 (end of summer)
- Following the review of monitoring requirements with the SMM design engineer where an initial rationalisation of groundwater level monitoring occurred (Appendix B), monitoring frequency for this groundwater level network be reduced from monthly to three-monthly enabling the capture of seasonal trends. Given the lack of water level variation in the Murray Group, frequency of monitoring Murray Group wells be reduced to six-monthly.
- A second groundwater salinity sampling program planned for early 2016 proceeds in order to capture baseline salinity conditions for the Phase 2A wells, and to establish a length of record for wells sampled during October 2015.
- Groundwater salinity sampling occurs at six monthly intervals to capture pre and post winter conditions of Phase 1 and Phase 2 wells (and any additional wells identified by the ecology team or design contractor) to inform conceptual understanding through time series data collection
- Manual sonding of wells with long (>10 m) screens must occur prior to sampling, followed by discrete sampling of stratified groundwater (if required) since groundwater salinity sampling conducted during October 2015 identified that salinity stratification occurs within the floodplain. Due to this stratification, it is also recemmended that sonding be conducted at regular times through out the year to monitor movement and stratification of lenses
- Groundwater level loggers installed by the SMM design engineer be downloaded to assess the condition of each logger and the interpreted data used to inform a rationalisation of logger network distribution for the project
- Groundwater level loggers installed by the SMM design engineer be replaced with state assets prior to the commencement of inundation trials
- Pike Floodplain groundwater monitoring be aligned with routine surface water monitoring activities undertaken by RMU to enable efficient access to monitoring island wells
- Resources are provisioned to conduct groundwater network monitoring activities to ensure adequate data for SMM detailed design.

In addition, all monitoring activities should be reviewed in early 2016 to ensure the requirements for the detailed design phase of SMM can be met. Considerations will include proposed inundation extents, SMM design options, numerical groundwater modelling requirements and state monitoring needs. The networks should then be reviewed on a continual basis. Furthermore, such reviews should incorporate sensitivity analyses from the Pike Floodplain numerical groundwater model to

assess where data is needed to reduce model uncertainty. The optimistation metholodolgy employed by SMK for all state groundwater monitoring networks should also be used where appropriate.

6 References

Cowley, WM and Barnett, SR, 2007. Revision of Oligcene-miocene Murray Group stratigraphy for geological and groundwater studies in South Australia. MESA Journal 047. pp. 017-020.

Drexel, J.F. & Preiss, W.V. (Eds., 1995): The geology of South Australia. Vol.2, The Phanerozoic. South Australia Geological Survey, Bulletin 54.

Ecological Associates and Australian Water Environments, 2008. Pike River Floodplain Management Plan. Reprot AQ006-1-B prepared for the South Australian Murray-Darling Basin Natural Resources Management Board, Berri.

Evans, W.R. & Kellett, J.R., 1989. The hydrogeology of the Murray Basin, southeastern Australia. BMR Journal of Australian Geology and Geophysics 11:2-3:147-166. Bureau of Mineral Resources, Geology and Geophysics, Canberra.

Firman, JB, 1973. Regional stratigraphy of surficial deposits in the Murray Basin and Gambier Embayment. South Australian Geological Survey. Report Book No. 71/1.

Lawrence, CR, 1966. Cainozoic stratigraphy and structure of the Mallee region, Victoria. Proceedings of the Royal Society of Victoria. Vol. 79 (Part 2). Melbourne. pp. 517-554.

Rogers, PA, 1995. Continental sediments of the Murray Basin. In: Drexel, JF and Preiss, WV (eds.). The geology of South Australia. Vol. 2, The Phanerozoic. South Australian Geological Survey. Bulletin 54. pp. 252-256.

Rogers, PA, Lindsay, JM, Alley, NF, Barnett, SR, Lablack, KL and Kwitko, G, 1995. Murray Basin. In: Drexel, JF and Preiss, WV (eds.). The geology of South Australia. Vol. 2, The Phanerozoic. South Australian Geological Survey. Bulletin 54. pp. 157-161.

Yan W., Howles S., Howe B. and Hill T. 2005a. Loxton – Bookpurnong Numerical Groundwater Model 2005. South Australia. Department of Water, Land and Biodiversity Conservation. DWLBC Report 2005/15.

Yan W., Howles S.R., and Hill A.J. 2005b. Loxton Numerical Groundwater Model 2005. South Australia. Department of Water, Land and Biodiversity Conservation. DWLBC Report 2005/16.

7 Appendix A: SARFIIP 2015 groundwater monitoring wells

Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (μS/cm)
692900370	54	448413	6184951	22-Dec-15	14.31	23-May-80	14838
702900616	54	455938	6200173	17-Dec-15	13.95	26-Sep-80	25367
702900617	54	466662	6198942	22-Dec-15	16.01	06-Jun-94	61900
702900619	54	455907	6193602	17-Dec-15	12.75	12-Sep-80	30211
702900621	54	457342	6186262	22-Dec-15	15.2	21-Jun-85	6516
702900622	54	457174	6182586	22-Dec-15	15.34	17-Jun-80	29493
702900626	54	482746	6214556	21-Dec-15	22.67	09-Jun-94	32800
702900627	54	471528	6216119	21-Dec-15	20.86	15-Oct-84	27421
702900628	54	459715	6213829	30-Aug-11	17.94	01-Oct-80	27604
702900653	54	457579	6196146	05-May-15	15.77	10-Sep-80	60100
702900796	54	460620	6189413	20-Apr-15	9.96	14-Feb-89	18000
702900955	54	462383	6190195	22-Dec-15	11.3	14-Aug-84	16301
702900960	54	465198	6209963	21-Dec-15	17.14	23-Mar-86	30100
702901009	54	462355	6191057	22-Dec-15	11.5	14-Jan-88	41900
702901010	54	467350	6189130	22-Dec-15	19.47	26-Aug-91	43600
702901040	54	476164	6207178	22-Dec-15	13.5	16-Nov-88	70627
702901043	54	463868	6191295	22-Dec-15	16.79	11-Oct-88	35000
702901045	54	464221	6194564	22-Dec-15	16.26	21-Oct-88	40000
702901128	54	475041	6207156	22-Dec-15	12.83	28-Mar-90	10000
702901129	54	474710	6207211	22-Dec-15	13.29	30-Mar-90	45000
702901130	54	475865	6207102	22-Dec-15	13.17		
702901131	54	473609	6207258	22-Dec-15	13.47	04-Apr-90	11000
702901132	54	473157	6207392	22-Dec-15	14.09	05-Apr-90	11000
702901133	54	472054	6207880	22-Dec-15	13.29	10-Apr-90	28000
702901134	54	472502	6207676	22-Dec-15	13.85	10-Jan-91	41000
702901136	54	471119	6208585	22-Dec-15	13.74	03-May-90	26000
702901184	54	478652	6208758	21-Dec-15	13.67	30-Jan-92	49300
702901185	54	478438	6208671	21-Dec-15		30-Jan-92	48100
702901186	54	478176	6209184	21-Dec-15	13.38	30-Jan-92	51100
702901187	54	476928	6209047	26-Sep-14	13.27	30-Jan-92	42500
702901188	54	477167	6210065	26-Sep-14			
702901189	54	476565	6209784	26-Sep-14	13.18	30-Jan-92	47900
702901190	54	475723	6210978	26-Sep-14		30-Jan-92	40400
702901192	54	480368	6213384	09-Dec-15		30-Jan-92	49600
702901193	54	479836	6212143	09-Dec-15		30-Jan-92	47000
702901194	54	478992	6211778	09-Dec-15		30-Jan-92	42700
702901195	54	478609	6210711	09-Dec-15		30-Jan-92	14760
702901196	54	481497	6211985	09-Dec-15	13.96	30-Jan-92	46700
702901197	54	482037	6210632	09-Dec-15		30-Jan-92	48800
702901198	54	482022	6214628	21-Dec-15	14.65	30-Jan-92	39400
702901199	54	481739	6214650	21-Dec-15	14.57	30-Jan-92	45000
702901200	54	478755	6216678	16-Dec-15		30-Jan-92	1650
702901201	54	478792	6216046	16-Dec-15		16-Sep-05	45000
702901208	54	482695	6208053	21-Dec-15	14.05	16-Oct-15	77800
702901222	54	477841	6206125	22-Dec-15	21.37		
702901231	54	470025	6207163	22-Dec-15	18.01	14-Oct-02	28009
702901310	54	465292	6203892	22-Dec-15	14.23	14-Oct-02	37394
702901324	54	460073	6203214	23-Dec-15	12.55	07-May-02	80778
702901328	54	459842	6203183	23-Dec-15	12.68	07-May-02	65440
702901354	54	470025	6207157	22-Dec-15	17.8	25-Nov-01	28100
702901355	54	482691	6208059	21-Dec-15	17.58	18-Nov-01	108700
702901541	54	484847	6210593	21-Dec-15	20.56		
702901425	54	463205	6201443	22-Dec-15	16.77	15-Mar-02	21500
702901429	54	463206	6201444	22-Dec-15	15.34	16-Mar-02	23100

702901440 54 461633 6198362 22-Dec-15 12.78 09-Apr-02 42400 702901569 54 458393 6187736 23-Dec-15 15.04 13-Dec-01 17060 702901581 54 461500 6202890 23-Dec-15 18-Nov-02 25860 702901582 54 461278 6202057 23-Dec-15 18-Nov-02 66700 702901585 54 460279 6202984 23-Dec-15 12.93 17-Nov-02 66700 702901582 54 470383 6209105 21-Dec-15 12.93 17-Nov-02 58200 702901596 54 457541 6197562 17-Dec-15 10.08 21-Nov-02 2670 702901597 54 457541 619762 17-Dec-15 9.14 19-Nov-02 2670 702901596 54 45093 6199782 17-Dec-15 9.14 19-Nov-02 2670 702901606 54 457983 6199782 17-Dec-15 13.79	Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (μS/cm)
702901569 54 458393 6187736 23-Dec-15 15.04 13-Dec-01 17060 702901580 54 457900 6202964 17-Dec-15 18-Nov-02 5860 702901582 54 461278 6202057 23-Dec-15 11.56 19-Nov-02 39500 702901582 54 460279 6202944 23-Dec-15 11.95 18-Nov-02 68700 702901592 54 473083 6199273 17-Dec-15 9.65 20-Nov-02 2230 702901595 54 458687 6199273 17-Dec-15 9.65 20-Nov-02 2200 702901597 54 457547 6199517 17-Dec-15 9.14 19-Nov-02 3070 702901600 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 3070 702901600 54 460516 6199680 17-Dec-15 14.04 19-Nov-02 2070 702901600 54 477809 6213104 21-Dec-15 14.76 17-Nov-02 2070 702901600 54 478599	702901440	54	461633	6198362	22-Dec-15	12.78	09-Apr-02	42400
702901580 54 457900 6202964 17-Dec-15 19-Nov-02 25300 702901581 54 461278 6202890 23-Dec-15 11.56 19-Nov-02 69500 702901582 54 460279 620297 23-Dec-15 11.95 18-Nov-02 66700 702901589 54 460279 6202984 23-Dec-15 11.95 18-Nov-02 62020 702901595 54 45867 6199273 17-Dec-15 9.65 20-Nov-02 2300 702901595 54 45867 6199571 17-Dec-15 9.14 19-Nov-02 25100 702901595 54 450674 619651 17-Dec-15 9.14 19-Nov-02 2670 702901502 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 2070 702901605 54 475983 6199782 17-Dec-15 13.79 17-Nov-02 2270 702901605 54 473916 6210433 09-Dec-15 13.86 17-Nov-02 29300 702901615 54 473915	702901569	54	458393	6187736	23-Dec-15	15.04	13-Dec-01	17060
702901581 54 461500 6202890 23-Dec-15 115.6 19-Nov-02 39500 702901582 54 461278 6202057 23-Dec-15 11.95 18-Nov-02 66700 702901588 54 460279 6202984 23-Dec-15 11.95 18-Nov-02 68200 702901592 54 473083 6209105 21-Dec-15 12.93 17-Nov-02 58200 702901595 54 458687 6199273 17-Dec-15 9.66 20-Nov-02 22300 702901598 54 458297 6196517 17-Dec-15 10.08 21-Nov-02 3070 702901600 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 3070 702901600 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 22700 702901600 54 475593 6121304 21-Dec-15 13.79 17-Nov-02 28400 702901601 54 478509 621150 09-Dec-15 13.66 17-Nov-02 2300 702901611 54 <td>702901580</td> <td>54</td> <td>457900</td> <td>6202964</td> <td>17-Dec-15</td> <td></td> <td>19-Nov-02</td> <td>5860</td>	702901580	54	457900	6202964	17-Dec-15		19-Nov-02	5860
702901582 54 461278 6202057 23-Dec-15 11.56 19-Nov-02 69700 702901588 54 457076 6201179 17-Dec-15 6.88 19-Nov-02 64200 702901589 54 473083 620105 21-Dec-15 12.93 17-Nov-02 2230 702901595 54 473083 620105 21-Dec-15 10.80 21-Nov-02 2230 702901597 54 45541 6199752 17-Dec-15 9.65 20-Nov-02 2260 702901598 54 458297 6199680 17-Dec-15 9.14 19-Nov-02 4970 702901602 54 460541 6199680 17-Dec-15 7.140 19-Nov-02 4970 702901605 54 478783 6199782 17-Dec-15 13.64 17-Nov-02 22700 702901610 54 48167 6210453 09-Dec-15 13.79 17-Nov-02 28000 702901610 54 48169 62116263 21-D	702901581	54	461500	6202890	23-Dec-15		18-Nov-02	25300
702901588 54 457076 6201179 17-Dec:15 6.88 19-Nov-02 66700 702901589 54 460279 6202984 23-Dec:15 11.95 18-Nov-02 62200 702901592 54 473083 6209105 21-Dec:15 12.93 17-Nov-02 2230 702901597 54 455687 6199273 17-Dec:15 10.08 21-Nov-02 251000 702901598 54 458297 6196517 17-Dec:15 9.14 19-Nov-02 2670 702901602 54 460561 6199680 17-Dec:15 14.04 19-Nov-02 4970 702901602 54 478509 6213104 21-Dec:15 14.76 17-Nov-02 22700 702901601 54 478109 6211150 09-Dec:15 13.86 17-Nov-02 28000 702901612 54 481167 6210453 21-Dec:15 14.64 17-Nov-02 2900 702901612 54 471926 6210272 <	702901582	54	461278	6202057	23-Dec-15	11.56	19-Nov-02	39500
702901589 54 460279 6202984 23-Dec-15 11.95 18-Nov-02 64200 702901592 54 473083 6209105 21-Dec-15 12.93 17-Nov-02 58200 702901597 54 458687 6199573 17-Dec-15 9.065 21-Nov-02 51000 702901597 54 457541 619517 17-Dec-15 9.065 21-Nov-02 2670 702901500 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 3070 702901600 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 2070 702901609 54 478509 6213104 21-Dec-15 14.76 17-Nov-02 22700 702901610 54 481167 6210453 09-Dec-15 13.86 17-Nov-02 2800 702901612 54 473915 6210130 21-Dec-15 14.23 04-Feb-04 43050 702901625 54 473915 6210130 <t< td=""><td>702901588</td><td>54</td><td>457076</td><td>6201179</td><td>17-Dec-15</td><td>6.88</td><td>19-Nov-02</td><td>66700</td></t<>	702901588	54	457076	6201179	17-Dec-15	6.88	19-Nov-02	66700
702901592 54 473083 6209105 21-Dec-15 12.93 17-Nov-02 2230 702901596 54 456687 6199273 17-Dec-15 9.65 20-Nov-02 2230 702901597 54 457541 6197562 17-Dec-15 9.16 21-Nov-02 2670 702901600 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 4970 702901602 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 4970 702901609 54 478509 6213104 21-Dec-15 14.76 17-Nov-02 84600 702901610 54 481167 6210453 09-Dec-15 13.79 17-Nov-02 86000 702901612 54 481649 621263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 473915 6210130 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 473915 6211526 21-Dec-15 14.64 17-Nov-02 2300 702901625 54	702901589	54	460279	6202984	23-Dec-15	11.95	18-Nov-02	64200
702901596 54 458687 6199273 17-Dec-15 9.65 20-Nov-02 2230 702901597 54 457541 6197562 17-Dec-15 10.08 21-Nov-02 2670 702901598 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 3070 702901602 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 4970 702901606 54 457983 6199782 17-Dec-15 14.76 17-Nov-02 22700 702901601 54 481167 6210453 09-Dec-15 13.86 17-Nov-02 84600 702901611 54 481169 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901612 54 47985 6211910 21-Dec-15 14.64 17-Nov-02 2300 702901612 54 479085 6211920 21-Dec-15 14.61 22-Jan-04 45914 702901809 54	702901592	54	473083	6209105	21-Dec-15	12.93	17-Nov-02	58200
702901597 54 457541 6197562 17-Dec-15 10.08 21-Nov-02 2670 702901598 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 3070 702901602 54 460561 6199680 17-Dec-15 9.14 19-Nov-02 4007 702901606 54 457983 6199782 17-Dec-15 7.35 19-Nov-02 22000 702901606 54 478509 6213104 21-Dec-15 14.76 17-Nov-02 22000 702901610 54 481167 6210453 09-Dec-15 13.86 17-Nov-02 84600 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 477692 621727 21-Dec-15 14.23 04-Feb-04 43050 702901799 54 477692 621727 21-Dec-15 14.23 04-Feb-04 43050 702901799 54 479085 6215126 2	702901596	54	458687	6199273	17-Dec-15	9.65	20-Nov-02	2230
702901598 54 458297 6196517 17-Dec-15 21-Nov-02 2670 702901600 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 3070 702901602 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 4970 702901606 54 457983 61917 17-Dec-15 14.76 17-Nov-02 22700 702901605 54 478509 6213104 21-Dec-15 14.76 17-Nov-02 28600 702901610 54 481167 6210453 09-Dec-15 13.86 17-Nov-02 68000 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 477682 621732 21-Dec-15 14.23 04-Feb-04 43050 70290170 54 477682 621790 21-Dec-15 14.23 04-Feb-04 49073 70290180 54 479926 621130 21-Dec-15	702901597	54	457541	6197562	17-Dec-15	10.08	21-Nov-02	51000
702901600 54 460074 6200674 17-Dec-15 9.14 19-Nov-02 4970 702901602 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 60600 702901606 54 478509 6213104 21-Dec-15 7.35 19-Nov-02 86000 702901610 54 481167 6214150 09-Dec-15 13.79 17-Nov-02 84600 702901611 54 481193 621150 09-Dec-15 13.86 17-Nov-02 68000 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 59300 702901625 54 473915 6210130 21-Dec-15 14.23 04-Feb-04 43050 702901799 54 477682 6217272 21-Dec-15 14.19 22-Jan-04 7572 702901810 54 480740 6215857 21-Dec-15 14.01 22-Jan-04 49473 702902181 54 460927 6199850 23-Dec-15 19-May-05 31000 702902181 54 459793 </td <td>702901598</td> <td>54</td> <td>458297</td> <td>6196517</td> <td>17-Dec-15</td> <td></td> <td>21-Nov-02</td> <td>2670</td>	702901598	54	458297	6196517	17-Dec-15		21-Nov-02	2670
702901602 54 460561 6199680 17-Dec-15 14.04 19-Nov-02 4970 702901606 54 457983 6199782 17-Dec-15 7.35 19-Nov-02 22700 702901609 54 478509 6213104 21-Dec-15 14.76 17-Nov-02 22700 702901610 54 481193 6210453 09-Dec-15 13.79 17-Nov-02 68000 702901612 54 481193 6216263 21-Dec-15 14.64 17-Nov-02 59300 702901625 54 473915 6210130 21-Dec-15 14.23 04-Feb-04 43050 702901625 54 477682 6217272 21-Dec-15 14.19 22-Jan-04 57572 702901809 54 479926 6214990 21-Dec-15 14.01 22-Jan-04 49473 702901810 54 480740 6215857 21-Dec-15 19-May-05 34600 702902107 54 460927 6199850 23-Dec-15 19-May-05 34600 702902180 54 459768 6201	702901600	54	460074	6200674	17-Dec-15	9.14	19-Nov-02	3070
702901606 54 457983 6199782 17-Dec-15 7.35 19-Nov-02 22700 702901609 54 478509 6213104 21-Dec-15 14.76 17-Nov-02 22700 702901610 54 481167 6210453 09-Dec-15 13.79 17-Nov-02 84600 702901612 54 481193 621150 09-Dec-15 13.86 17-Nov-02 68000 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 473915 6210130 21-Dec-15 14.23 04-Feb-04 43050 702901799 54 47985 621526 21-Dec-15 14.19 22-Jan-04 57572 702901810 54 479085 621526 21-Dec-15 14.01 22-Jan-04 49473 702901811 54 460927 6199850 23-Dec-15 10.54 19-May-05 34600 702902180 54 460927 6199850 23-Dec-15 10.54 19-May-05 31000 702902180 54 <td>702901602</td> <td>54</td> <td>460561</td> <td>6199680</td> <td>17-Dec-15</td> <td>14.04</td> <td>19-Nov-02</td> <td>4970</td>	702901602	54	460561	6199680	17-Dec-15	14.04	19-Nov-02	4970
702901609 54 478509 6213104 21-Dec-15 14.76 17-Nov-02 22700 702901610 54 481167 6210453 09-Dec-15 13.79 17-Nov-02 84600 702901611 54 481649 621150 09-Dec-15 13.86 17-Nov-02 68000 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 473915 6210130 21-Dec-15 14.23 04-Feb-04 43050 702901799 54 477682 621722 21-Dec-15 14.13 22-Jan-04 57572 702901809 54 479085 6215126 21-Dec-15 14.01 22-Jan-04 76914 702901811 54 460927 6199850 23-Dec-15 10.54 19-May-05 34600 702902107 54 460969 6199670 17-Dec-15 8.96 19-May-05 31000 702902180 54 459766 620127 17-Dec-15 7.99 19-May-05 31000 702902180 54 <td>702901606</td> <td>54</td> <td>457983</td> <td>6199782</td> <td>17-Dec-15</td> <td>7.35</td> <td>19-Nov-02</td> <td>60600</td>	702901606	54	457983	6199782	17-Dec-15	7.35	19-Nov-02	60600
702901610 54 481167 6210453 09-Dec-15 13.79 17-Nov-02 84600 702901611 54 481193 6211150 09-Dec-15 13.86 17-Nov-02 59300 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 473915 6210130 21-Dec-15 11.32 17-Nov-02 2300 702901809 54 477682 6217272 21-Dec-15 14.19 22-Jan-04 57572 702901809 54 479085 621587 21-Dec-15 14.01 22-Jan-04 49473 702901810 54 480740 6215857 21-Dec-15 10.54 19-May-05 34600 702902107 54 460927 6199850 23-Dec-15 10.54 19-May-05 31000 702902179 54 459783 6201157 17-Dec-15 8.96 19-May-05 31000 702902180 54 459756 6201257 17-Dec-15 7.99 11-11 19-May-05 31000 702902181	702901609	54	478509	6213104	21-Dec-15	14.76	17-Nov-02	22700
702901611 54 481193 6211150 09-Dec-15 13.86 17-Nov-02 68000 702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 473915 6210130 21-Dec-15 11.32 17-Nov-02 2300 702901799 54 477682 6217272 21-Dec-15 14.23 04-Feb-04 43050 702901809 54 479926 6214990 21-Dec-15 14.19 22-Jan-04 7572 702901810 54 479085 621526 21-Dec-15 14.01 22-Jan-04 49473 702901811 54 480740 6215857 21-Dec-15 14.01 22-Jan-04 49473 702902107 54 460927 6199850 23-Dec-15 10.54 19-May-05 34600 702902108 54 459837 6201157 17-Dec-15 8.96 170290218 54 459756 6201257 17-Dec-15 8.88 100 702902180 54 459756 6201257 17-Dec-15 13.5	702901610	54	481167	6210453	09-Dec-15	13.79	17-Nov-02	84600
702901612 54 481649 6216263 21-Dec-15 14.64 17-Nov-02 2300 702901625 54 473915 6210130 21-Dec-15 11.32 17-Nov-02 2300 702901799 54 477682 6217272 21-Dec-15 14.23 04-Feb-04 43050 702901809 54 479926 6214990 21-Dec-15 14.19 22-Jan-04 7572 702901810 54 479085 6215126 21-Dec-15 14.01 22-Jan-04 49473 702901811 54 480740 6215857 21-Dec-15 10.54 19-May-05 34600 702902107 54 460927 619850 23-Dec-15 10.54 19-May-05 31000 702902108 54 460959 6199670 17-Dec-15 10.54 19-May-05 31000 702902180 54 459788 6201317 17-Dec-15 7.99 11.10 11.10 11.10 11.10 11.10 11.10 11.10 11.10 11.10 11.10 11.10 11.10 11.10 11.10	702901611	54	481193	6211150	09-Dec-15	13.86	17-Nov-02	68000
702901625 54 473915 6210130 21-Dec-15 11.32 17-Nov-02 2300 702901799 54 477682 6217272 21-Dec-15 14.23 04-Feb-04 43050 702901809 54 479926 6214990 21-Dec-15 14.19 22-Jan-04 75722 702901810 54 479085 6215126 21-Dec-15 14.01 22-Jan-04 49473 702901811 54 480740 6215857 21-Dec-15 10.54 19-May-05 34600 702902107 54 460927 6199850 23-Dec-15 10.54 19-May-05 31000 702902108 54 460969 6199670 17-Dec-15 8.96 1702902180 54 459768 6201157 17-Dec-15 8.96 1702902181 54 459768 6201257 17-Dec-15 8.88 1702902182 54 459756 6201257 17-Dec-15 7.95 14.29 06-Jun-06 96500 281000 281000 281000 281000 281000 281000 281000 281000 281000 281000	702901612	54	481649	6216263	21-Dec-15	14.64	17-Nov-02	59300
702901799 54 477682 6217272 21-Dec-15 14.23 04-Feb-04 43050 702901809 54 479926 6214990 21-Dec-15 14.19 22-Jan-04 7572 702901810 54 479085 6215126 21-Dec-15 14.01 22-Jan-04 49473 702901811 54 480740 6215857 21-Dec-15 14.01 22-Jan-04 49473 702902107 54 460927 6199850 23-Dec-15 19-May-05 34600 702902108 54 460969 6199670 17-Dec-15 8.96 19-May-05 31000 702902180 54 459768 6201157 17-Dec-15 8.96 14.19 14.19 14.19 14.19 14.19 14.19 14.10 <	702901625	54	473915	6210130	21-Dec-15	11.32	17-Nov-02	2300
70290180954479926621499021-Dec-1514.1922-Jan-045757270290181054479085621512621-Dec-1514.0122-Jan-047691470290181154480740621585721-Dec-1514.0122-Jan-044947370290210754460927619985023-Dec-1510-May-053460070290210854460969619967017-Dec-158.963100070290218054459783620115717-Dec-158.963100070290218154459768620121217-Dec-158.8830070290218254459756620125717-Dec-157.9936070290227654477607621549721-Dec-1513.506-Jun-06965070290227854477607621229621-Dec-1513.2804-Sep-072055070290233054477121621423021-Dec-1513.6304-Sep-072055070290233354477375621400321-Dec-1513.6304-Sep-07409007029023315447874662247916-Dec-1523.423427029023315447874662142021-Dec-1514.8944.99	702901799	54	477682	6217272	21-Dec-15	14.23	04-Feb-04	43050
70290181054479085621512621-Dec-1514.0122-Jan-047691470290181154480740621585721-Dec-1519-May-053460070290210754460969619967017-Dec-1510.5419-May-053100070290217954459837620115717-Dec-158.961000000000000000000000000000000000000	702901809	54	479926	6214990	21-Dec-15	14.19	22-Jan-04	57572
702901811 54 480740 6215857 21-Dec-15 22-Jan-04 49473 702902107 54 460927 6199850 23-Dec-15 19-May-05 34600 702902108 54 460969 6199670 17-Dec-15 10.54 19-May-05 31000 702902179 54 459837 6201157 17-Dec-15 8.96 10000 10000 10000 10000 10000 10000 1	702901810	54	479085	6215126	21-Dec-15	14.01	22-Jan-04	76914
70290210754460927619985023-Dec-1519-May-053460070290210854460969619967017-Dec-1510.5419-May-053100070290217954459837620115717-Dec-158.961170290218054459768620131717-Dec-157.991170290218154459793620122217-Dec-158.881170290218254459756620125717-Dec-157.951170290217654477607621549721-Dec-1513.506-Jun-06965070290227754475347621316221-Dec-1513.3506-Jun-062810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621401721-Dec-1513.6304-Sep-07166070290233354477375621400321-Dec-1513.6304-Sep-07409007029023315447874662247916-Dec-1523.42117029023115448092562247916-Dec-1514.8911	702901811	54	480740	6215857	21-Dec-15		22-Jan-04	49473
70290210854460969619967017-Dec-1510.5419-May-053100070290217954459837620115717-Dec-158.9619-May-053100070290218054459768620131717-Dec-157.9919-May-0510-1419-May-0510-1470290218154459768620121217-Dec-158.8810-1419-May-0510-1419-May-0510-1470290218254459756620125717-Dec-157.9510-1419-May-06965070290227654477607621549721-Dec-1513.506-Jun-06965070290227754475347621316221-Dec-1513.3506-Jun-066810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.4214.8970290242054478746621742021-Dec-1514.8914.89	702902107	54	460927	6199850	23-Dec-15		19-May-05	34600
70290217954459837620115717-Dec-158.9670290218054459768620131717-Dec-157.9970290218154459793620121217-Dec-158.8870290218254459756620125717-Dec-157.9570290227654477607621549721-Dec-1513.506-Jun-06965070290227754475347621316221-Dec-1513.3506-Jun-062810070290227854477452621229621-Dec-1513.2804-Sep-072055070290233054477532621401721-Dec-1513.6304-Sep-07166070290233154477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.4214.8914.89	702902108	54	460969	6199670	17-Dec-15	10.54	19-May-05	31000
70290218054459768620131717-Dec-157.9970290218154459793620121217-Dec-158.8870290218254459756620125717-Dec-157.9570290227654477607621549721-Dec-1513.506-Jun-06965070290227754475347621316221-Dec-1514.2906-Jun-062810070290227854474452621229621-Dec-1513.3506-Jun-066810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621400321-Dec-1513.6304-Sep-074090070290233154480925622247916-Dec-1523.4214.8914.8970290242054478746621742021-Dec-1514.8914.89	702902179	54	459837	6201157	17-Dec-15	8.96)	
70290218154459793620121217-Dec-158.8870290218254459756620125717-Dec-157.9570290227654477607621549721-Dec-1513.506-Jun-06965070290227754475347621316221-Dec-1514.2906-Jun-062810070290227854474452621229621-Dec-1513.3506-Jun-066810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621401721-Dec-1513.6304-Sep-074090070290233154480925622247916-Dec-1523.42480925622247916-Dec-1523.4270290242054478746621742021-Dec-1514.89480925622247916-Dec-1523.42	702902180	54	459768	6201317	17-Dec-15	7.99		
70290218254459756620125717-Dec-157.9570290227654477607621549721-Dec-1513.506-Jun-06965070290227754475347621316221-Dec-1514.2906-Jun-062810070290227854474452621229621-Dec-1513.3506-Jun-066810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621401721-Dec-1513.6304-Sep-07166070290233354477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.4214.8970290242054478746621742021-Dec-1514.8914.89	702902181	54	459793	6201212	17-Dec-15	8.88		
70290227654477607621549721-Dec-1513.506-Jun-06965070290227754475347621316221-Dec-1514.2906-Jun-062810070290227854474452621229621-Dec-1513.3506-Jun-066810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621401721-Dec-1513.6304-Sep-07166070290233354477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.4254.23.4254.23.4270290242054478746621742021-Dec-1514.8954.23.4254.23.42	702902182	54	459756	6201257	17-Dec-15	7.95		
70290227754475347621316221-Dec-1514.2906-Jun-062810070290227854474452621229621-Dec-1513.3506-Jun-066810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621401721-Dec-1513.6304-Sep-07166070290233354477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.4214.8970290242054478746621742021-Dec-1514.89	702902276	54	477607	6215497	21-Dec-15	13.5	06-Jun-06	9650
70290227854474452621229621-Dec-1513.3506-Jun-066810070290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621401721-Dec-1504-Sep-07166070290233354477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.425454478746621742021-Dec-1514.89	702902277	54	475347	6213162	21-Dec-15	14.29	06-Jun-06	28100
70290233054477121621423021-Dec-1513.2804-Sep-072055070290233254477532621401721-Dec-1504-Sep-07166070290233354477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.425454478746621742021-Dec-1514.89	702902278	54	474452	6212296	21-Dec-15	13.35	06-Jun-06	68100
70290233254477532621401721-Dec-1504-Sep-07166070290233354477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.4248092554478746621742021-Dec-1514.89	702902330	54	477121	6214230	21-Dec-15	13.28	04-Sep-07	20550
70290233354477375621400321-Dec-1513.6304-Sep-074090070290239154480925622247916-Dec-1523.4270290242054478746621742021-Dec-1514.89	702902332	54	477532	6214017	21-Dec-15		04-Sep-07	1660
70290239154480925622247916-Dec-1523.4270290242054478746621742021-Dec-1514.89	702902333	54	477375	6214003	21-Dec-15	13.63	04-Sep-07	40900
702902420 54 478746 6217420 21-Dec-15 14.89	702902391	54	480925	6222479	16-Dec-15	23.42		
	702902420	54	478746	6217420	21-Dec-15	14.89		
702902615 54 475856 6206917 22-Dec-15 18.6 13-May-10 75900	702902615	54	475856	6206917	22-Dec-15	18.6	13-May-10	75900
702902702 54 471684 6209419 21-Dec-15	702902702	54	471684	6209419	21-Dec-15			
702902705 54 472981 6209608 21-Dec-15 12.95	702902705	54	472981	6209608	21-Dec-15	12.95		
702902706 54 473316 6210261 21-Dec-15 12.98	702902706	54	473316	6210261	21-Dec-15	12.98		
702902707 54 473516 6210225 21-Dec-15 13.06	702902707	54	473516	6210225	21-Dec-15	13.06		
702902708 54 473202 6211267 21-Dec-15 12.95	702902708	54	473202	6211267	21-Dec-15	12.95		
702902709 54 473535 6211208 21-Dec-15 12.94	702902709	54	473535	6211208	21-Dec-15	12.94		
702902733 54 475334 6207131 22-Dec-15 05-Feb-12 87200	702902733	54	475334	6207131	22-Dec-15		05-Feb-12	87200
702902734 54 474152 6207206 22-Dec-15 06-Feb-12 59800	702902734	54	474152	6207206	22-Dec-15		06-Feb-12	59800
702902735 54 476284 6207838 22-Dec-15	702902735	54	476284	6207838	22-Dec-15			
702902736 54 474906 6207316 22-Dec-15 03-Feb-12 73300	702902736	54	474906	6207316	22-Dec-15		03-Feb-12	73300
702902704 54 472935 6209147 21-Dec-15 12.95	702902704	54	472935	6209147	21-Dec-15	12.95		
702902792 54 472916 6208641 21-Dec-15 -0.83	702902792	54	472916	6208641	21-Dec-15	-0.83		
702902794 54 460616 6202391 23-Dec-15	702902794	54	460616	6202391	23-Dec-15	0.00		
702902795 54 457929 6201189 17-Dec-15	702902795	54	457929	6201189	17-Dec-15			
702902807 54 459563 6202111 23-Dec-15	702902807	54	459563	6202111	23-Dec-15			
702902808 54 457443 6196927 17-Dec-15	702902808	54	457443	6196927	17-Dec-15			

Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (µS/cm)
702902857	54	480729	6213611	09-Dec-15	14.15	13-Oct-15	54000
702902858	54	480684	6213495	09-Dec-15	14.12	13-Oct-15	54600
702902859	54	480685	6213492	09-Dec-15	14.12	13-Oct-15	56900
702902809	54	457874	6202635	17-Dec-15			
702902819	54	481598	6213862	09-Dec-15	14.34		
702902820	54	481558	6213803	09-Dec-15	15.12		
702902821	54	481510	6213715	09-Dec-15	14.48		
702902822	54	479279	6214390	21-Dec-15	15.73		
702902823	54	479346	6214463	21-Dec-15			
702902854	54	479270	6214387	21-Dec-15	14.13	13-Oct-15	48200
702902824	54	479403	6214496	21-Dec-15			
702902825	54	479450	6213348	15-Dec-15	13.92		
702902826	54	480680	6213501	09-Dec-15			
702902827	54	480719	6213756	09-Dec-15	14.22		
702902828	54	480729	6213609	09-Dec-15			
702902829	54	479190	6209897	09-Dec-15	14.23		
702902831	54	457133	6199961	17-Dec-15			
702902832	54	456864	6198376	17-Dec-15			
702902833	54	458304	6195831	17-Dec-15	10.99		
702902836	54	459232	6200090	17-Dec-15	10.43	12-Oct-15	44000
702902837	54	458303	6195810	17-Dec-15	9.87	12-Oct-15	38400
702902838	54	458304	6195815	17-Dec-15	9.77	12-Oct-15	51200
702902839	54	457129	6199953	17-Dec-15	10.16	12-Oct-15	12400
702902840	54	456869	6198381	17-Dec-15	9.91	12-Oct-15	47200
702902841	54	477561	6213030	09-Dec-15	13.13	15-Oct-15	45400
702902842	54	477962	6212650	09-Dec-15	13.17	15-Oct-15	48800
702902843	54	479452	6213341	15-Dec-15	13.92	14-Oct-15	38000
702902844	54	479178	6209897	09-Dec-15	13.43	15-Oct-15	71000
702902845	54	479526	6212632	09-Dec-15	13.49	24-Sep-15	61600
702902846	54	481513	6213719	09-Dec-15	14.43	13-Oct-15	35700
702902847	54	481509	6213721	09-Dec-15	14.42	13-Oct-15	48900
702902848	54	481562	6213810	09-Dec-15	14.43	13-Oct-15	41200
702902849	54	481557	6213806	09-Dec-15	14.39	13-Oct-15	52800
702902850	54	481597	6213863	09-Dec-15	14.48	13-Oct-15	31300
702902851	54	481594	6213863	09-Dec-15	14.36	13-Oct-15	75200
702902852	54	479343	6214473	21-Dec-15	14.11	13-Oct-15	52700
702902853	54	479403	6214492	21-Dec-15	14.12	13-Oct-15	55400
702902856	54	480732	6213613	09-Dec-15	14.14	13-Oct-15	48100
702902818	54	458527	6199779	17-Dec-15	-3.72		
702902867	54	478505	6212310	09-Dec-15	13.31	02-Nov-15	61800
702902830	54	482081	6209316	09-Dec-15	14.44		
702902880	54	482134	6207850	21-Dec-15	14.91	29-Oct-15	76300
702902855	54	480719	6213757	09-Dec-15	14.25	13-Oct-15	47800
702902864	54	482028	6207865	21-Dec-15	14.87	29-Oct-15	82400
702902865	54	478604	6212443	09-Dec-15	13.29	01-Nov-15	65600
702902866	54	480352	6211076	09-Dec-15	13.72	02-Nov-15	67500
702902868	54	482223	6210262	09-Dec-15	13.99	01-Nov-15	80600
702902869	54	482282	6208601	09-Dec-15	13.92	01-Nov-15	89900
702902870	54	483797	6211998	09-Dec-15	14.78	01-Nov-15	48500
702902871	54	480596	6209253	09-Dec-15	13.69	31-Oct-15	78000
702902872	54	478508	6213133	21-Dec-15	13.41	02-Nov-15	59200
702902873	54	477576	6210934	09-Dec-15	13.05	31-Oct-15	81600
702902874	54	478554	6214213	21-Dec-15	13.89	02-Nov-15	33000
702902875	54	482158	6208194	21-Dec-15	13.57	29-Oct-15	82900

Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (μS/cm)
702902876	54	477919	6213982	21-Dec-15	13.11	02-Nov-15	51400
702902877	54	483304	6210020	09-Dec-15	14.22	02-Nov-15	92500
702902878	54	478969	6211835	09-Dec-15	13.33	30-Oct-15	67600
702902879	54	477669	6208822	21-Dec-15	13.44	30-Oct-15	86500

8 Appendix B: SARFIIP 2016 groundwater monitoring wells



Figure App B. 1 Pike and Katarapko Floodplains 2016 monitoring

662900829 54 45312 620173 27122015 15.5 240071990 23367 702900519 54 455907 6133602 17/12/2015 12.75 12/09/1980 30211 702900520 54 455917 6136622 12/12/2015 12.75 12/09/1980 30211 702900526 54 457742 616462 22112/2015 2.267 9/06/1994 61010 702900528 54 457797 616946 6205122 4/01/1990 2.35 6/11/1979 2209 702900528 54 456006 6203132 31/01/1965 2.012 6/11/1979 2209 702900562 54 456006 6203134 31/01/1965 2.012 6/11/1979 2629 702900562 54 455949 6203134 31/01/1960 2.012 6/11/1979 2629 702900766 54 455949 6203134 31/01/1960 2.132 15/06/1984 3000 702900763 54 476511	Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (μS/cm)
702200616 54 455907 6139002 17/12/2015 13/9 26/09/19/0 23/01 702200619 54 455907 6139002 17/12/2015 12/75 12/09/19/0 20/21 702200621 54 457342 616662 22/12/2015 15.2 21/06/19/9 53/80 702200625 54 445776 6166146 5/05/2015 15.77 10/09/19/9 60100 702200650 54 456006 6201382 31/01/19/96 20.17 6/11/19/79 21.000 702200664 54 456048 6201316 31/01/19/96 20.02 6/11/19/79 26.02 702200665 54 454949 6202313 4/01/19/90 30.02 12.2 15/08/19/91 18.50 702200674 54 454694 621417 8/01/19/81 12.82 15/08/19/91 18.50 702200079 54 476431 621417 8/01/19/98 18.00 10/00/19/91 14.60 14/02/19/91 10/00 10/00/19/91 <td>692900829</td> <td>54</td> <td>453122</td> <td>6201478</td> <td>20/03/2014</td> <td>15.5</td> <td>24/03/1999</td> <td>43700</td>	692900829	54	453122	6201478	20/03/2014	15.5	24/03/1999	43700
7022000219 54 45507 6130763 17/12/2015 12.27 12/09/198 21454 702200620 54 457342 6180262 22/12/2015 15.2 21/06/198 2155 702200625 54 457579 6186146 52/05/2015 15.77 10/09/1980 60100 702200653 54 454640 6205152 4/01/1990 20.35 6/11/1979 2530 702200654 54 456046 6205152 31/01/1996 20.02 6/11/1979 2629 702200665 54 456943 6203176 31/01/1996 20.02 6/11/1979 2629 702200664 54 455949 6201492 1890 12/22 15/08/1979 1850 702200675 54 476311 6214417 8/01/1988 18.95 17 12/00/1988 18.95 12/2 15/08/1979 1850 702200759 54 476311 6214471 7/11/2006 13/77 13/77 17 12/02/1988 <	702900616	54	455938	6200173	17/12/2015	13.95	26/09/1980	25367
702000620 54 45514 6106763 11/06/2014 11.44 270/1/981 6216 702000621 54 457342 616662 22/12/2015 15.7 210/06/1985 6516 70200063 54 457579 6166146 5/05/2015 15.7 10/09/1980 60110 70200065 54 456066 6205132 31/01/1996 20.17 6/11/1979 2629 702900664 54 456843 6203176 31/01/1996 20.02 6/11/1979 5062 702900665 54 454949 621213 4/01/1980 30.02 702 70200066 54 454952 623309 4/01/1980 30.02 702 70200076 54 455674 621422 18/01/1986 18.85 702 70200076 54 476411 6221417 7/11/2006 70200076 54 466620 618413 20/04/1975 13.77 70200076 54 466620 618413 20/04/1975 13.79 70200076 54	702900619	54	455907	6193602	17/12/2015	12.75	12/09/1980	30211
70200021 54 44742 618622 22/12/2015 12.2 21/06/1984 6316 702000628 54 4482748 6214558 21/12/2015 22.67 9/06/1994 60100 70200063 54 445404 6205152 4/01/1990 20.33 6/11/1979 21000 70200064 54 45606 6205152 31/01/1996 20.02 6/11/1979 26.29 70290066 54 456843 6203176 31/01/1996 30.02 70290066 54 455949 620132 4/01/1990 12.32 15/08/1979 1850 702900676 54 476511 6215881 7/11/2006 70200775 54 476631 6215481 7/11/2006 70200775 54 47651 6215481 7/11/2006 70200775 54 476626 6180413 20/0/2015 13.37 70200775 54 476521 6215881 7/11/2006 70200071 54 </td <td>702900620</td> <td>54</td> <td>455914</td> <td>6190763</td> <td>11/06/2014</td> <td>11.44</td> <td>27/01/1981</td> <td>21454</td>	702900620	54	455914	6190763	11/06/2014	11.44	27/01/1981	21454
702900626 54 482746 6214556 21/2/2015 22.67 906/01944 32800 702900653 54 457579 6196146 5/05/2015 15.77 10/09/1980 60100 702900654 54 456006 6205152 31/0/1/1996 20.17 6/11/1379 22.00 702900654 54 456843 6203176 31/0/1/1996 20.02 6/11/1379 25.02 702900656 54 455499 6203230 4/01/1990 21.32 15/08/1979 1850 702900674 54 476431 6214417 7/11/2006 - - - - 702900762 54 474641 6214177 7/11/2006 - - 702900770 54 477055 6216682 23/04/1975 13.77 - 702900782 54 454862 62072788 2/11/2015 17.83 10/05/1984 7600 702900705 54 476623 6207351 2/11/2015 1.33 1.0/05/1984 7600 <tr< td=""><td>702900621</td><td>54</td><td>457342</td><td>6186262</td><td>22/12/2015</td><td>15.2</td><td>21/06/1985</td><td>6516</td></tr<>	702900621	54	457342	6186262	22/12/2015	15.2	21/06/1985	6516
702900653 54 456460 6205152 4/01/1990 20.35 6/11/1979 2530 70290053 54 456460 6205152 4/01/1990 20.35 6/11/1979 2530 702900562 54 460882 6207169 8/01/1985 21.5 6/11/1979 2629 702900665 54 455849 6203213 4/01/1990 21.32 15/08/1979 1850 702900665 54 45592 6203309 4/01/1990 21.32 15/08/1979 1850 702900763 54 476451 6215881 7/11/2006 -	702900626	54	482746	6214556	21/12/2015	22.67	9/06/1994	32800
70290058 54 45640 6205152 400,1490 20.35 61,17379 2530 702900659 54 456006 6205182 31,00,1796 20.17 6,111,1379 2500 702900654 54 456843 6203176 31,00,1796 20.02 6,111,1379 5062 702900656 54 455492 6203309 4/01,1990 21.32 15/08/1979 1850 702900656 54 456574 6201492 18/01,1988 1895 - 702900762 54 476431 6214187 7/11/2006 - <td>702900653</td> <td>54</td> <td>457579</td> <td>6196146</td> <td>5/05/2015</td> <td>15.77</td> <td>10/09/1980</td> <td>60100</td>	702900653	54	457579	6196146	5/05/2015	15.77	10/09/1980	60100
702200659 54 45006 6205182 31/01/1996 20.17 6/11/1979 21000 702900642 54 460882 6207169 810/11/985 21.3 6/11/1979 2629 702900645 54 455499 6203309 4/01/1990 30.02 - 702900674 54 455674 6201492 18/01/1988 18/95 - - 702900759 54 474611 621417 7/11/2006 - - - - 702900763 54 476251 6215881 7/11/2006 -	702900658	54	454640	6205152	4/01/1990	20.35	6/11/1979	2530
702900662 54 460882 6207169 8/01/1985 21.5 6/11/1979 2629 702900664 54 45549 6203176 31/01/1990 30.02 702900665 54 45549 6203309 4/01/1990 31.02 702900764 54 45549 6203309 4/01/1998 18.95 702900759 54 476431 6214177 7/11/2006 702900763 54 476251 6215682 23/04/1975 13.77 702900770 54 477305 6216682 23/04/1975 13.77 702900790 54 456620 6207288 2/11/2015 18.898 702900730 54 456620 6207288 2/11/2015 17.83 105/1984 30255 702900930 54 456620 6207178 2/01/2003 13.27 15/06/1984 30255 702900942 54 463730 6206174 4/01/1990 14.63 19/06/1984 40000 70290042 54 462355 6191057 22/1/2015 13.51 14/01/1988	702900659	54	456006	6205182	31/01/1996	20.17	6/11/1979	21000
702200664 54 456843 6203176 31/01/1996 20.02 6/11/1979 5062 702200665 54 455949 6203213 4/01/1990 21.32 15/08/1979 1850 702200664 54 455674 6201492 18/01/1988 18.95 18/01 702200759 54 476431 6214417 7/11/2006 18/01/1988 18.95 702200762 54 4776251 6215881 7/11/2006 18/00 18/00 702200770 54 4766251 6215881 7/11/2005 18.98 18/00 702200929 54 459169 6207351 2/11/2015 18.88 1 7/020033 12/05/1984 4000 702200938 54 451977 6205177 30/06/2003 13.27 15/06/1984 30255 702200939 54 462383 6190195 2/1/2/015 11.3 14/01/1988 4000 702200104 54 462383 6190197 2/1/2/015 11.3 <	702900662	54	460882	6207169	8/01/1985	21.5	6/11/1979	2629
702900665 54 455949 6203213 4/01/1990 30.02 702900666 54 45567 6201309 4/01/1990 21.32 15/08/1979 1850 702900759 54 476431 6214417 8/01/1998 18.95 1 1 702900760 54 476251 6215881 7/11/2006 1	702900664	54	456843	6203176	31/01/1996	20.02	6/11/1979	5062
702200666 54 454592 6203309 4/01/1980 21.32 15/08/1979 1850 70290074 54 456574 6201492 18/0/1/388 18.95 18.95 702900752 54 476431 6214177 7/11/2006 7 7 7 14.07 7 14.02 18.95 18.95 18.95 18.95 18.95 18.95 18.95 19.95 14.07/17.05 18.96 19.95 14.07/17.05 18.96 19.95 14.07/17.05 18.96 19.95 14.07/17.05 19.95 14.07/17.08 14.02/17.089 18.000 17.05/19.94 18.000 19.05/19.94 14.000 19.05/19.94 4.000 19.05/19.94 4.000 19.05/19.94 4.000 19.05/19.94 4.000 19.05/19.94 4.000 19.05/19.94 4.000 19.05/19.94 4.000 19.06/19.94 4.000 14.63 19.06/19.94 4.000 19.05/19.94 4.000 19.05/19.94 4.000 19.05/19.94 14.001 19.06/19.94 14.001 19.05/19.95	702900665	54	455949	6203213	4/01/1990	30.02		
702900674 54 45674 6201492 18/01/1988 18.95 702900759 54 474431 6214417 8/01/1998 702900763 54 474631 6214417 7/11/2006 702900763 54 476251 6215881 7/11/2006 702900705 54 476251 6215881 7/11/2005 702900705 54 460620 6189413 20/04/2015 9.96 14/02/1989 18000 702900929 54 459169 6207351 2/11/2015 18.98 - - 702900931 54 45812 6205282 1/07/2003 -	702900666	54	454592	6203309	4/01/1990	21.32	15/08/1979	1850
702900759 54 476431 6214177 8/01/1998 702900762 54 474651 6214177 7/11/2006 702900763 54 476521 6215881 7/11/2006 702900765 54 476620 6189413 20/04/2015 9.96 14/02/1999 18000 702900930 54 45916 6207381 2/11/2015 17.83 1/05/1984 7600 702900931 54 458112 620528 1/07/2003 14.63 19/06/1984 4000 702900935 54 4623730 6206174 4/01/1990 14.63 19/06/1984 4000 702900955 54 4623730 6206174 4/01/1990 14.63 19/06/1984 16301 702901095 54 4623735 619/057 2/12/2015 11.3 14/01/988 16901 702901040 54 476164 6207178 2/12/2015 13.5 16/11/988 70627 702901130 54 476164 6207382	702900674	54	455674	6201492	18/01/1988	18.95		
702900762 54 474461 6214177 7/11/2006 702900763 54 476251 6215881 7/11/2006 702900770 54 476250 6216882 23/4/4/1975 13.77 702900796 54 460620 6189413 20/04/2015 9.96 14/02/1989 18000 702900939 54 459169 6207351 2/11/2015 1.783 1/05/1984 7600 702900931 54 458112 620528 1/07/2003 1 15/06/1984 30255 702900942 54 462333 6190195 22/12/2015 11.3 14/08/1984 16301 702900405 54 462383 6190195 22/12/2015 11.5 16/11/988 70627 702901045 54 464221 6194564 22/12/2015 13.37 16/01/984 40000 702901130 54 47565 6207102 22/12/2015 13.47 4/04/1990 11000 702901131 54 472054 <t< td=""><td>702900759</td><td>54</td><td>476431</td><td>6214417</td><td>8/01/1998</td><td></td><td></td><td></td></t<>	702900759	54	476431	6214417	8/01/1998			
702900763 54 476251 6215881 7/11/2006 702900770 54 477305 6216682 23/04/1975 13.77 702900796 54 45060 6189413 20/04/2015 9.96 14/02/1989 18000 702900930 54 454862 6207288 2/11/2015 17.83 1/05/1984 7600 702900931 54 454862 6207278 2/11/2015 17.83 1/05/1984 4000 702900931 54 463730 6206174 4/01/1990 14.63 19/06/1984 4000 702900955 54 462335 6190195 2/12/2015 11.5 14/01/1988 41900 702901045 54 462355 6191057 2/12/2015 13.5 16/11/1988 4000 702901045 54 476164 6207128 2/12/2015 13.6 16/11/1988 40627 702901045 54 473659 620728 2/12/2015 13.47 4/04/1990 11000 <td< td=""><td>702900762</td><td>54</td><td>474461</td><td>6214177</td><td>7/11/2006</td><td></td><td></td><td></td></td<>	702900762	54	474461	6214177	7/11/2006			
702900770 54 477305 6216682 23/04/1975 13.77 702900796 54 460620 6189413 20/04/2015 9.96 14/02/1989 18000 702900930 54 458462 6207381 2/11/2015 18.98 702900931 54 458462 6207382 2/11/2015 17.83 1/05/1984 7600 702900931 54 463770 6205177 30/06/2003 13.27 15/06/1984 4000 702900942 54 463730 6205174 4/01/1990 1463 19/06/1984 16301 702900095 54 462355 6191057 22/12/2015 11.3 14/08/1984 16301 702901045 54 464221 6194564 22/12/2015 13.57 11.15 16/11/1988 70627 702901045 54 473605 6207102 22/12/2015 13.47 4/04/1990 11000 702901131 54 473605 6207328 22/12/2015 13.47 4/04/1990 1100	702900763	54	476251	6215881	7/11/2006			
702900796 54 460620 6189413 20/04/2015 9.96 14/02/1989 18000 702900929 54 459169 6207351 2/11/2015 18.98 702900930 54 45862 6207228 2/11/2015 18.98 702900931 54 458112 6205228 1/07/2003 13.27 15/06/1984 30255 702900932 54 463730 6206174 4/01/1990 14.63 19/06/1984 40000 702900955 54 462383 6191057 22/12/2015 11.5 14/01/1988 41900 702901040 54 46221 6194564 22/12/2015 13.5 16/11/1988 70627 702901045 54 46221 6194564 22/12/2015 13.27 1/0/0/1980 11000 702901130 54 47665 6207102 22/12/2015 13.29 1/0/0/1900 10000 702901131 54 473609 6207288 2/12/2015 13.37 2/0/0/1990 18000 70290	702900770	54	477305	6216682	23/04/1975	13.77		
702900929 54 459169 6207351 2/11/2015 18.98 702900930 54 45462 6207288 2/11/2015 17.33 1/05/1984 7600 702900931 54 451977 6205177 30/06/2003 13.27 15/06/1984 30255 702900955 54 463730 6206174 4/01/1990 14.63 19/06/1984 16001 702900955 54 462385 6190157 22/12/2015 11.5 14/08/1984 16001 702901040 54 476164 6207178 22/12/2015 16.26 21/10/1988 40000 702901045 54 445221 6194564 22/12/2015 13.47 4/04/1990 11000 702901130 54 473609 6207282 22/12/2015 13.47 4/04/1990 11000 702901132 54 473157 6207392 22/12/2015 13.47 4/04/1990 11000 702901133 54 478652 6208758 21/12/2015 13.37 </td <td>702900796</td> <td>54</td> <td>460620</td> <td>6189413</td> <td>20/04/2015</td> <td>9.96</td> <td>14/02/1989</td> <td>18000</td>	702900796	54	460620	6189413	20/04/2015	9.96	14/02/1989	18000
702900930 54 454862 6207288 2/11/2015 17.83 1/05/1984 7600 702900931 54 458112 6205228 1/07/2003 13.27 15/06/1984 30255 702900942 54 463730 6205177 30/06/2003 13.27 15/06/1984 4000 702900955 54 4623730 6205174 4/01/1990 14.63 19/06/1984 4000 702900955 54 462355 6191057 22/12/2015 11.5 14/01/1988 41900 702901040 54 44221 6194564 22/12/2015 13.5 16/11/1988 40000 702901045 54 44221 6194564 22/12/2015 13.47 4/04/1990 11000 702901130 54 473609 6207182 22/12/2015 13.47 4/04/1990 11000 702901132 54 473057 6207392 22/12/2015 13.29 10/04/1900 28000 702901137 54 47024 6206730	702900929	54	459169	6207351	2/11/2015	18.98		
702900931 54 458112 6205228 1/07/2003 702900938 54 461977 6205177 30/06/2003 13.27 15/06/1984 302255 702900955 54 462383 6190157 22/12/2015 11.3 14/08/1984 16301 702900955 54 462385 6191057 22/12/2015 11.5 14/01/1988 41900 702901040 54 476164 6207178 22/12/2015 13.5 16/11/1988 40000 702901045 54 464221 6194564 22/12/2015 13.47 4/04/1990 11000 702901130 54 473609 6207258 22/12/2015 13.47 4/04/1990 11000 702901133 54 473157 6207392 22/12/2015 13.29 10/04/1990 28000 702901135 54 474161 6206176 26/03/1992 13.37 25/01/1991 45100 702901176 54 460328 6205176 26/03/1992 13.57 30	702900930	54	454862	6207288	2/11/2015	17.83	1/05/1984	7600
702900938 54 461977 6205177 30/06/2003 13.27 15/06/1984 30255 702900942 54 463730 6206174 4/01/1990 14.63 19/06/1984 4000 702900955 54 462383 6190195 22/12/2015 11.3 14/08/1984 14901 702901040 54 476164 6207178 22/12/2015 13.5 16/11/1988 70627 702901040 54 476164 6207178 22/12/2015 13.47 4/04/1980 11000 702901131 54 473609 6207288 22/12/2015 13.47 4/04/1990 11000 702901132 54 473157 6207392 22/12/2015 13.29 10/04/1990 28000 702901133 54 472054 6205102 26/03/1992 13.37 25/01/1991 45100 702901176 54 461028 6205176 26/03/1992 13.33 25/01/1991 69500 702901177 54 476652 62087	702900931	54	458112	6205228	1/07/2003		, ,	
702900942 54 463730 6206174 4/01/1990 14.63 19/06/1984 4000 702900955 54 462383 6190195 22/12/2015 11.3 14/08/1984 16301 702901009 54 462355 6191057 22/12/2015 11.5 14/01/1988 41900 702901045 54 464221 6194564 22/12/2015 13.5 16/11/1988 40000 702901045 54 464221 6194564 22/12/2015 13.47 4/04/1990 11000 702901130 54 473609 6207258 22/12/2015 13.47 4/04/1990 11000 702901132 54 473157 6207392 22/12/2015 13.29 10/04/1990 28000 702901133 54 474161 6206421 10/07/2015 14.7 62091191 13.67 30/01/1991 45100 702901176 54 460328 6205176 26/03/1992 13.37 25/01/1991 45100 702901185 </td <td>702900938</td> <td>54</td> <td>461977</td> <td>6205177</td> <td>30/06/2003</td> <td>13.27</td> <td>15/06/1984</td> <td>30255</td>	702900938	54	461977	6205177	30/06/2003	13.27	15/06/1984	30255
702900955 54 462383 6190195 22/12/2015 11.3 14/08/1984 16301 702901009 54 462355 6191057 22/12/2015 11.5 14/01/1988 41900 702901040 54 476164 6207178 22/12/2015 13.5 16/11/1988 70627 702901030 54 46221 6194564 22/12/2015 13.37 70290130 54 473665 6207102 2/12/2015 13.47 4/04/1990 11000 702901131 54 473699 6207258 22/12/2015 14.37 4/04/1990 11000 702901132 54 473157 6207392 22/12/2015 13.37 2/07/41/990 1800 702901137 54 47061 6206421 10/07/2015 14.7 7 702901176 54 460328 6205320 26/03/1992 13.33 25/01/1991 45100 702901177 54 461028 6208671 21/12/2015 30/01/1992 48100	702900942	54	463730	6206174	4/01/1990	14.63	19/06/1984	4000
702901009 54 462355 6191057 22/12/2015 11.5 14/01/1988 41900 702901040 54 476164 6207178 22/12/2015 13.5 16/11/1988 70627 702901045 54 464221 6194564 22/12/2015 16.26 21/10/1988 40000 702901131 54 473669 6207102 22/12/2015 13.47 4/04/1990 11000 702901132 54 473669 6207392 22/12/2015 13.47 4/04/1990 1000 702901133 54 472054 6207880 22/12/2015 13.7 25/01/1990 28000 702901137 54 47016 6206780 26/03/1992 13.33 25/01/1991 45100 702901177 54 460328 6205176 26/03/1992 13.53 25/01/1991 45100 702901175 54 478438 6208671 21/12/2015 13.67 30/01/1992 49300 702901186 54 478176 620878	702900955	54	462383	6190195	22/12/2015	11.3	14/08/1984	16301
702901040 54 476164 6207178 22/12/2015 13.5 16/11/1988 70627 702901045 54 464221 6194564 22/12/2015 16.26 21/10/1988 40000 702901130 54 475865 6207102 22/12/2015 13.17	702901009	54	462355	6191057	22/12/2015	11.5	14/01/1988	41900
702901045 54 464221 6194564 22/12/2015 16.26 21/10/1988 40000 702901130 54 475865 6207102 22/12/2015 13.17 1000 702901131 54 473609 6207258 22/12/2015 13.47 4/04/1990 11000 702901132 54 473157 6207392 22/12/2015 13.29 10/04/1990 28000 702901137 54 474161 6206421 10/07/2015 14.7 145100 702901176 54 460328 6205320 26/03/1992 13.37 25/01/1991 45100 702901177 54 461028 6205176 26/03/1992 13.33 25/01/1991 49300 702901184 54 478652 6208758 21/12/2015 13.367 30/01/1992 48100 702901185 54 478438 6208671 21/12/2015 30/01/1992 47000 702901185 54 478438 6208758 21/12/2015 30/01/1992 <t< td=""><td>702901040</td><td>54</td><td>476164</td><td>6207178</td><td>22/12/2015</td><td>13.5</td><td>16/11/1988</td><td>70627</td></t<>	702901040	54	476164	6207178	22/12/2015	13.5	16/11/1988	70627
702901130 54 475865 6207102 22/12/2015 13.17 702901131 54 473609 6207258 22/12/2015 13.47 4/04/1990 11000 702901132 54 473157 6207392 22/12/2015 13.47 4/04/1990 11000 702901133 54 472054 6207880 22/12/2015 13.29 10/04/1990 28000 702901137 54 474161 6206421 10/07/2015 14.7 702901176 54 460328 6205320 26/03/1992 13.37 25/01/1991 45100 702901177 54 461028 6205176 26/03/1992 13.53 25/01/1991 49300 702901185 54 478652 6208758 21/12/2015 13.67 30/01/1992 49300 702901186 54 478176 6209184 21/12/2015 30/01/1992 47000 702901191 54 478969 6212143 9/12/2015 30/01/1992 47000 702901193 <	702901045	54	464221	6194564	22/12/2015	16.26	21/10/1988	40000
702901131 54 473609 6207258 22/12/2015 13.47 4/04/1990 11000 702901132 54 473157 6207392 22/12/2015 13.29 10/04/1990 28000 702901133 54 472054 6207880 22/12/2015 13.29 10/04/1990 28000 702901176 54 460328 6205320 26/03/1992 13.37 25/01/1991 45100 702901176 54 460328 6205176 26/03/1992 13.53 25/01/1991 49300 702901184 54 478652 6208758 21/12/2015 13.67 30/01/1992 48100 702901185 54 478176 6209184 21/12/2015 13.38 30/01/1992 49600 702901192 54 478036 621143 9/12/2015 30/01/1992 47000 702901193 54 478920 6211778 9/12/2015 30/01/1992 47000 702901194 54 482037 6216632 9/12/2015 <	702901130	54	475865	6207102	22/12/2015	13.17		
702901132 54 473157 6207392 22/12/2015 14.09 5/04/1990 11000 702901133 54 472054 6207880 22/12/2015 13.29 10/04/1990 28000 702901137 54 474161 6206421 10/07/2015 14.7 1 702901176 54 460328 6205320 26/03/1992 13.37 25/01/1991 45100 702901177 54 461028 6205176 26/03/1992 13.53 25/01/1991 69500 702901184 54 478652 6208758 21/12/2015 13.67 30/01/1992 49300 702901185 54 478438 6208671 21/12/2015 13.38 30/01/1992 48100 702901186 54 478176 6209184 21/12/2015 30/01/1992 49600 702901192 54 480368 6213384 9/12/2015 30/01/1992 47000 702901193 54 478609 6210711 9/12/2015 30/01/1992	702901131	54	473609	6207258	22/12/2015	13.47	4/04/1990	11000
702901133 54 472054 6207880 22/12/2015 13.29 10/04/1990 28000 702901137 54 474161 6206421 10/07/2015 14.7 702901176 54 460328 6205320 26/03/1992 13.37 25/01/1991 45100 702901177 54 461028 6205176 26/03/1992 13.53 25/01/1991 69500 702901184 54 478652 6208758 21/12/2015 13.67 30/01/1992 48100 702901185 54 478438 6208671 21/12/2015 30/01/1992 48100 702901186 54 478176 6209184 21/12/2015 30/01/1992 49600 702901192 54 480368 6213384 9/12/2015 30/01/1992 47000 702901193 54 478609 6210711 9/12/2015 30/01/1992 42700 702901195 54 481497 6211985 9/12/2015 13.96 30/01/1992 46700	702901132	54	473157	6207392	22/12/2015	14.09	5/04/1990	11000
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	702901133	54	472054	6207880	22/12/2015	13.29	10/04/1990	28000
702901176 54 460328 6205320 26/03/1992 13.37 25/01/1991 45100 702901177 54 461028 6205176 26/03/1992 13.53 25/01/1991 69500 702901184 54 478652 6208758 21/12/2015 13.67 30/01/1992 49300 702901185 54 478438 6208671 21/12/2015 13.38 30/01/1992 48100 702901186 54 478176 6209184 21/12/2015 13.38 30/01/1992 49600 702901192 54 480368 6213384 9/12/2015 30/01/1992 47000 702901193 54 478992 6211778 9/12/2015 30/01/1992 42700 702901195 54 478609 6210711 9/12/2015 30/01/1992 46700 702901196 54 481497 6211985 9/12/2015 13.96 30/01/1992 48800 702901197 54 482037 6216632 21/12/2015 14.65	702901137	54	474161	6206421	10/07/2015	14.7		
702901177 54 461028 6205176 26/03/1992 13.53 25/01/1991 69500 702901184 54 478652 6208758 21/12/2015 13.67 30/01/1992 49300 702901185 54 478438 6208671 21/12/2015 13.67 30/01/1992 48100 702901186 54 478176 6209184 21/12/2015 13.38 30/01/1992 49600 702901192 54 480368 6213384 9/12/2015 30/01/1992 49600 702901193 54 479836 6212143 9/12/2015 30/01/1992 47000 702901194 54 478609 6210711 9/12/2015 30/01/1992 42700 702901195 54 478609 6210711 9/12/2015 13.96 30/01/1992 46700 702901196 54 481497 6211985 9/12/2015 13.96 30/01/1992 48800 702901197 54 482037 6210632 9/12/2015 14.05 <t< td=""><td>702901176</td><td>54</td><td>460328</td><td>6205320</td><td>26/03/1992</td><td>13.37</td><td>25/01/1991</td><td>45100</td></t<>	702901176	54	460328	6205320	26/03/1992	13.37	25/01/1991	45100
702901184 54 478652 6208758 21/12/2015 13.67 30/01/1992 49300 702901185 54 478438 6208671 21/12/2015 13.38 30/01/1992 48100 702901186 54 478176 6209184 21/12/2015 13.38 30/01/1992 49600 702901192 54 480368 6213384 9/12/2015 30/01/1992 47000 702901193 54 479836 6212143 9/12/2015 30/01/1992 47000 702901194 54 478992 6211778 9/12/2015 30/01/1992 4700 702901195 54 478609 6210711 9/12/2015 30/01/1992 46700 702901196 54 481497 6211985 9/12/2015 13.96 30/01/1992 48800 702901197 54 482037 6216632 9/12/2015 14.65 30/01/1992 48800 702901198 54 482022 6214628 21/12/2015 14.65 30/01/1992 45000 702901200 54 478755 6216678 16/12/20	702901177	54	461028	6205176	26/03/1992	13.53	25/01/1991	69500
702901185 54 478438 6208671 21/12/2015 30/01/1992 48100 702901186 54 478176 6209184 21/12/2015 13.38 30/01/1992 51100 702901192 54 480368 6213384 9/12/2015 30/01/1992 49600 702901193 54 479836 6212143 9/12/2015 30/01/1992 47000 702901194 54 47809 6211778 9/12/2015 30/01/1992 42700 702901195 54 47809 6210711 9/12/2015 30/01/1992 46700 702901196 54 481497 6211985 9/12/2015 13.96 30/01/1992 46700 702901196 54 482037 6210632 9/12/2015 14.65 30/01/1992 48800 702901197 54 482022 6214628 21/12/2015 14.65 30/01/1992 48000 702901198 54 481739 6216678 16/12/2015 14.57 30/01/1992 45000 702901200 54 478755 6216678 16/12/2015 16/0	702901184	54	478652	6208758	21/12/2015	13.67	30/01/1992	49300
702901186 54 478176 6209184 21/12/2015 13.38 30/01/1992 51100 702901192 54 480368 6213384 9/12/2015 30/01/1992 49600 702901193 54 479836 6212143 9/12/2015 30/01/1992 47000 702901194 54 478992 6211778 9/12/2015 30/01/1992 42700 702901195 54 478609 6210711 9/12/2015 30/01/1992 46700 702901196 54 481497 6211985 9/12/2015 13.96 30/01/1992 46700 702901197 54 482037 6210632 9/12/2015 13.96 30/01/1992 48800 702901198 54 482037 621632 9/12/2015 14.65 30/01/1992 48800 702901198 54 482022 6214628 21/12/2015 14.65 30/01/1992 45000 702901199 54 478755 6216678 16/12/2015 16/09/2005 45000 702901200 54 478792 6216046 16/12/2015 16/0	702901185	54	478438	6208671	21/12/2015		30/01/1992	48100
7029011925448036862133849/12/201530/01/1992496007029011935447983662121439/12/201530/01/1992470007029011945447899262117789/12/201530/01/1992427007029011955447860962107119/12/201530/01/1992427007029011965448149762119859/12/201513.9630/01/1992467007029011975448203762106329/12/201513.9630/01/19924880070290119854482022621462821/12/201514.6530/01/19923940070290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201516/09/20054500070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012115448396262099026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201515.8613/11/1992450007029012145448346562075814/11/201515.8613/11/1992450007029012165448240162066094/11/201515.8314/11/1	702901186	54	478176	6209184	21/12/2015	13.38	30/01/1992	51100
7029011935447983662121439/12/201530/01/1992470007029011945447899262117789/12/201530/01/1992427007029011955447860962107119/12/201530/01/1992147607029011965448149762119859/12/201513.9630/01/1992467007029011975448203762106329/12/201530/01/19924880070290119854482022621462821/12/201514.6530/01/19923940070290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201514.5730/01/19924500070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012125447865762053436/11/201515.5112/11/1992700007029012125448387262063864/11/201515.5112/11/1992650007029012135448346562075814/11/201515.8613/11/1992450007029012165448420162066094/11/201515.8313/11/199245000	702901192	54	480368	6213384	9/12/2015		30/01/1992	49600
7029011945447899262117789/12/201530/01/1992427007029011955447860962107119/12/201530/01/1992147607029011965448149762119859/12/201513.9630/01/1992467007029011975448203762106329/12/201530/01/19924880070290119854482022621462821/12/201514.6530/01/19923940070290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201514.5730/01/1992165070290120154478792621604616/12/201514.0516/09/2005450007029012085448896262099026/11/201515.4916/10/2015778007029012115447865762053436/11/201515.5112/11/1992700007029012125447865762063664/11/201515.5112/11/1992650007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/1992450007029012165448240162066094/11/201515.8315.8315.83	702901193	54	479836	6212143	9/12/2015		30/01/1992	47000
7029011955447860962107119/12/201530/01/1992147607029011965448149762119859/12/201513.9630/01/1992467007029011975448203762106329/12/201530/01/19924880070290119854482022621462821/12/201514.6530/01/19923940070290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201516/09/20054500070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012115448396262099026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/199245000702901216544842016206094/11/201515.8314.0115.83	702901194	54	478992	6211778	9/12/2015		30/01/1992	42700
7029011965448149762119859/12/201513.9630/01/1992467007029011975448203762106329/12/201530/01/19924880070290119854482022621462821/12/201514.6530/01/19923940070290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201514.5730/01/1992165070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012115448396262099026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/1992450007029012165448420162066094/11/201515.8315.8315.83	702901195	54	478609	6210711	9/12/2015		30/01/1992	14760
7029011975448203762106329/12/201530/01/19924880070290119854482022621462821/12/201514.6530/01/19923940070290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201530/01/1992165070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/201577800702901211544839626209026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/199245000702901216544820162066094/11/201515.8315.8315.83	702901196	54	481497	6211985	9/12/2015	13.96	30/01/1992	46700
70290119854482022621462821/12/201514.6530/01/19923940070290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201530/01/1992165070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012115448396262099026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/1992450007029012165448420162066094/11/201515.8314.0514.05	702901197	54	482037	6210632	9/12/2015		30/01/1992	48800
70290119954481739621465021/12/201514.5730/01/19924500070290120054478755621667816/12/201530/01/1992165070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012115448396262099026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/1992450007029012165448420162066094/11/201515.8315.8314.01	702901198	54	482022	6214628	21/12/2015	14.65	30/01/1992	39400
70290120054478755621667816/12/201530/01/1992165070290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012115448396262099026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/1992450007029012165448420162066094/11/201515.8315.8316.84	702901199	54	481739	6214650	21/12/2015	14.57	30/01/1992	45000
70290120154478792621604616/12/201516/09/20054500070290120854482695620805321/12/201514.0516/10/2015778007029012115448396262099026/11/201515.4916/10/2015579007029012125447865762053436/11/201515.5112/11/1992700007029012135448387262063864/11/201516.5424/11/1992650007029012145448346562075814/11/201515.8613/11/1992450007029012165448420162066094/11/201515.8315.83	702901200	54	478755	6216678	16/12/2015		30/01/1992	1650
702901208 54 482695 6208053 21/12/2015 14.05 16/10/2015 77800 702901211 54 483962 6209002 6/11/2015 15.49 16/10/2015 57900 702901212 54 478657 6205343 6/11/2015 15.51 12/11/1992 70000 702901213 54 483872 6206386 4/11/2015 16.54 24/11/1992 65000 702901214 54 483465 6207581 4/11/2015 15.86 13/11/1992 45000 702901216 54 484201 6206609 4/11/2015 15.83 15.83	702901201	54	478792	6216046	16/12/2015		16/09/2005	45000
702901211 54 483962 6209902 6/11/2015 15.49 16/10/2015 57900 702901212 54 478657 6205343 6/11/2015 15.51 12/11/1992 70000 702901213 54 483872 6206386 4/11/2015 16.54 24/11/1992 65000 702901214 54 483465 6207581 4/11/2015 15.86 13/11/1992 45000 702901216 54 484201 6206609 4/11/2015 15.83 15.83	702901208	54	482695	6208053	21/12/2015	14.05	16/10/2015	77800
702901212 54 478657 6205343 6/11/2015 15.51 12/11/1992 70000 702901213 54 483872 6206386 4/11/2015 16.54 24/11/1992 65000 702901214 54 483465 6207581 4/11/2015 15.86 13/11/1992 45000 702901216 54 484201 6206609 4/11/2015 15.83	702901211	54	483962	6209902	6/11/2015	15.49	16/10/2015	57900
702901213 54 483872 6206386 4/11/2015 16.54 24/11/1992 65000 702901214 54 483465 6207581 4/11/2015 15.86 13/11/1992 45000 702901216 54 484201 6206609 4/11/2015 15.83	702901212	54	478657	6205343	6/11/2015	15.51	12/11/1992	70000
702901214 54 483465 6207581 4/11/2015 15.86 13/11/1992 45000 702901216 54 484201 6206609 4/11/2015 15.83	702901213	54	483872	6206386	4/11/2015	16.54	24/11/1992	65000
702901216 54 484201 6206609 4/11/2015 15.83	702901214	54	483465	6207581	4/11/2015	15.86	13/11/1992	45000
	702901216	54	484201	6206609	4/11/2015	15.83		

70220123 54 44/226 6204262 6112013 15.2 702201324 54 441634 619870 30/0/2014 9.92 4/0/0/98 40700 702901351 54 448060 6219068 5/11/2015 16.58 12/11/201 108700 702901355 54 4482691 6201444 2/12/2015 15.34 16/08/2002 21500 702901425 54 4483205 6201444 2/12/2015 15.34 16/08/2002 21500 702901441 54 461630 6198358 30/10/2014 14.4 2/0/10/201 42100 702901549 54 458393 6187736 2/212/2015 154 18/11/2002 3660 702901580 54 45790 6202954 2/212/2015 158 19/11/2002 28000 702901581 54 461276 620179 17/12/2015 158 19/11/2002 3800 702901581 54 450276 620179 17/12/2015 158 <td< th=""><th>Unit No</th><th>Zone</th><th>Easting</th><th>Northing</th><th>Latest RSWL Date</th><th>RSWL (mAHD)</th><th>Lastest EC Date</th><th>EC (μS/cm)</th></td<>	Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (μS/cm)
70201132 54 446133 6198270 30/14/2014 9.92 4/10/298 49770 702901351 54 460073 6203214 23/12/2015 1255 7/06/2002 280778 702901425 54 442021 6201443 22/12/2015 15.34 16/03/2002 21500 702901425 54 4423205 6201444 22/12/2015 15.34 16/03/2002 24000 702901429 54 4421306 6198358 30/10/2014 14.4 24/00/2002 4400 702901441 54 4451630 6198358 30/12/2014 14.4 24/01/2001 42100 702901580 54 453036 6202954 17/12/2015 15.64 13/12/2001 1208 702901581 54 445100 6202974 27/12/2015 11.56 19/11/2002 25300 702901582 54 451076 6201179 17/12/2015 11.95 18/11/2002 25300 702901582 54 453076 62011	702901225	54	474226	6204626	6/11/2015	15.25		
702901324 54 460073 6232058 5/11/2015 12.55 7.05/2002 80778 702901355 54 4482691 6228058 5/11/2015 16.58 12/11/2001 108700 702901425 54 4482691 6201443 22/12/2015 15.34 16.03/2002 21500 702901425 54 4461230 6198383 201/0/2014 14.4 24/0/2001 42100 702901440 54 4461530 6198383 201/0/2014 14.4 42100 702901540 54 445130 6202890 23/12/2015 15.04 13/12/2001 42100 702901581 54 4451276 6202057 23/12/2015 15.85 19/11/2002 5860 702901582 54 4451276 6202057 23/12/2015 15.86 19/11/2002 5860 702901592 54 4450276 620117 17/12/2015 16.88 19/11/2002 5800 702901592 54 450621 17/12/2015 1	702901302	54	461634	6198370	30/10/2014	9.92	4/10/1998	49700
702901351 54 48060 6219088 5/11/2015 16.58 12/11/2015 20230 702901429 54 482205 6201443 22/12/2015 15.34 16/03/2002 21500 702901429 54 482305 6201444 22/12/2015 15.34 16/03/2002 24000 702901429 54 482105 6211444 22/12/2015 15.34 16/03/2002 44000 702901441 54 461630 6193858 30/10/2014 14.4 24/00 42000 702901580 54 4458393 6187736 23/12/2015 15.64 13/12/2001 17060 702901581 54 445120 620297 23/12/2015 11.95 18/11/2002 66700 702901581 54 461279 620294 23/12/2015 11.95 18/11/2002 64200 702901589 54 460279 620294 23/12/2015 11.95 18/11/2002 64200 702901589 54 4530974 619973 </td <td>702901324</td> <td>54</td> <td>460073</td> <td>6203214</td> <td>23/12/2015</td> <td>12.55</td> <td>7/05/2002</td> <td>80778</td>	702901324	54	460073	6203214	23/12/2015	12.55	7/05/2002	80778
702901355 54 446205 6201443 22/12/2015 17.58 18/11/2001 10700 702901425 54 465205 6201444 22/12/2015 16.77 15/03/2002 21100 702901425 54 465103 6198358 2011/2014 14.4 24/01/2001 42100 70290141 54 446163 6198358 2011/2015 20.56 70 702901569 54 453939 21/12/2015 13/01/2002 5860 702901580 54 45700 6202869 23/12/2015 18/11/2002 25860 702901581 54 461276 6202179 17/12/2015 156 19/11/2002 25800 702901589 54 4560276 6201179 17/12/2015 158 19/11/2002 25200 702901589 54 456027 6209105 17/12/2015 16.88 19/11/2002 2200 702901596 54 456027 61/21/2015 11.95 18/11/2002 20000	702901351	54	480860	6219068	5/11/2015	16.58	12/11/2001	20230
702901425 54 462205 6201443 22/12/2015 15.34 16/03/2002 21500 702901440 54 461630 6198362 22/12/2015 15.34 16/03/2002 23100 702901441 54 461630 6198368 30/10/2014 14.4 24/001 42100 702901541 54 461630 6202960 21/12/2015 15.04 13/12/2001 17060 702901580 54 458933 6187736 23/12/2015 15.04 13/11/2002 25300 702901581 54 461278 620297 23/12/2015 15.04 13/11/2002 6420 702901582 54 460279 6202984 23/12/2015 19.95 13/11/2002 6420 702901585 54 460674 6199273 17/12/2015 12.93 17/11/2002 5670 702901597 54 459667 17/32/1015 1.08 21/11/2002 2670 702901507 54 460561 6199674 17/12/2015	702901355	54	482691	6208059	21/12/2015	17.58	18/11/2001	108700
702901429 54 463266 6201444 22/12/2015 15.34 16/03/002 23100 702901441 54 461633 6198352 22/12/2015 12.78 9/04/2002 42400 70290141 54 461630 6198353 21/12/2015 20.55 - 702901580 54 459303 6187736 22/12/2015 16/11/2002 5860 702901581 54 461500 6202964 17/12/2015 18/11/2002 5860 702901582 54 461276 6202179 17/12/2015 18/11/2002 66700 702901582 54 450207 6202179 17/12/2015 12.93 17/11/2002 58200 702901592 54 450667 6199273 17/12/2015 12/11/2002 23100 702901592 54 450541 6195517 17/12/2015 12/11/2002 2670 702901505 54 450521 6195601 17/12/2015 14.04 19/11/2002 2670 7029016	702901425	54	463205	6201443	22/12/2015	16.77	15/03/2002	21500
702901440 54 461633 6198362 22/12/2015 12.78 9/04/2002 42400 702901541 54 461630 6198358 30/0/2014 14.4 240/2001 42100 702901541 54 458933 6187736 23/12/2015 15.04 13/12/2001 5680 702901580 54 45500 6202860 23/12/2015 18/11/2002 25800 702901581 54 461500 6202890 23/12/2015 11.95 19/11/2002 5800 702901582 54 460279 6202944 23/12/2015 11.95 19/11/2002 64200 702901582 54 450876 6199273 17/12/2015 10.08 21/11/2002 51000 702901582 54 455647 6195752 17/12/2015 1.04 19/11/2002 3070 702901600 54 460074 6206674 17/12/2015 1.40 19/11/2002 2670 702901601 54 450596 6219172 1.40	702901429	54	463206	6201444	22/12/2015	15.34	16/03/2002	23100
702901441 54 461630 619358 30/10/2014 14.4 24/01/2001 42100 702901560 54 458393 21/12/2015 20.56 15/12/2001 17/12/2002 5860 702901580 54 457900 6202964 17/12/2015 19/11/2002 5860 702901582 54 461278 6202057 23/12/2015 11.56 19/11/2002 5870 702901582 54 460279 6202984 23/12/2015 11.95 19/11/2002 66700 702901582 54 470076 6201179 17/12/2015 12.93 17/11/2002 2300 702901592 54 459576 6199732 17/12/2015 21/11/2002 2670 702901503 54 459297 6196517 17/12/2015 9.14 19/11/2002 2670 702901601 54 46024 620674 17/12/2015 9.14 19/11/2002 2670 702901601 54 459596 6119972 17/12/2015 13	702901440	54	461633	6198362	22/12/2015	12.78	9/04/2002	42400
702201541 54 448447 6210593 21/12/2015 20.56 702901569 54 458393 6187736 23/12/2015 19/11/2002 5860 702901581 54 461500 6202964 17/12/2015 118/11/2002 25300 702901582 54 461078 6202177 11/12/2015 18/11/2002 66700 702901589 54 460279 6202984 23/12/2015 11.95 18/11/2002 66700 702901589 54 460279 6202984 23/12/2015 12.93 17/11/2002 5820 702901596 54 473083 6291027 12/12/2015 12.93 17/11/2002 2670 702901597 54 45887 6199571 17/12/2015 1.00.8 21/11/2002 2670 702901600 54 460074 6200674 17/12/2015 1.404 19/11/2002 4970 702901601 54 459222 6199680 17/12/2015 1.404 19/11/2002 4970	702901441	54	461630	6198358	30/10/2014	14.4	24/01/2001	42100
702901569 54 458393 6187736 23/12/2015 15.04 13/12/2001 17060 702901581 54 4457900 6202964 17/12/2015 18/11/2002 25300 702901582 54 461278 6202057 23/12/2015 11.56 19/11/2002 66700 702901582 54 4507076 6201179 17/12/2015 16.88 19/11/2002 66200 702901592 54 473083 6209105 21/12/2015 10.85 70/11/2002 52200 702901596 54 458687 61997562 17/12/2015 9.06 20/11/2002 2000 702901597 54 458297 6196517 17/12/2015 9.04 19/11/2002 3070 702901601 54 460561 6199680 17/12/2015 9.14 19/11/2002 42070 702901601 54 460561 6199680 17/12/2015 13.46 17/11/2002 22070 702901601 54 478509 6213104 <td< td=""><td>702901541</td><td>54</td><td>484847</td><td>6210593</td><td>21/12/2015</td><td>20.56</td><td></td><td></td></td<>	702901541	54	484847	6210593	21/12/2015	20.56		
702901580 54 457900 6202964 17/12/2015 19/11/2002 5860 702901581 54 461500 6202890 23/12/2015 11.56 19/11/2002 293500 702901588 54 460279 6202944 23/12/2015 1.53 19/11/2002 66700 702901589 54 460279 6202940 21/12/2015 1.23 17/11/2002 28200 702901597 54 458687 6199273 17/12/2015 1.0.68 21/11/2002 2670 702901597 54 458687 6199273 17/12/2015 1.0.08 21/11/2002 2670 702901600 54 460074 6200674 17/12/2015 1.0.08 21/11/2002 2670 702901601 54 459222 6199600 27/12/2015 1.4.04 19/11/2002 46000 702901601 54 45059 621304 21/12/2015 1.3.79 17/11/2002 46000 702901610 54 478509 621304	702901569	54	458393	6187736	23/12/2015	15.04	13/12/2001	17060
702201581 54 461500 6202890 23/12/2015 18/11/2002 25300 702901582 54 461278 6202057 23/12/2015 11.56 19/11/2002 66700 702901589 54 460279 6202084 23/12/2015 11.95 18/11/2002 66700 702901592 54 473083 6199723 17/12/2015 10.08 21/11/2002 2230 702901596 54 458297 6196517 17/12/2015 10.08 21/11/2002 2670 702901600 54 456074 6200674 17/12/2015 9.14 19/11/2002 3070 702901601 54 459922 6199600 29/10/2014 13.69 20/11/2002 720 702901605 54 460561 6199680 17/12/2015 14.74 19/11/2002 60600 702901605 54 478509 621104 21/12/2015 14.75 17/11/2002 2070 702901605 54 481049 6211663 21/12	702901580	54	457900	6202964	17/12/2015		19/11/2002	5860
702901582 54 461278 6202057 23/12/2015 11.56 19/11/2002 39500 702901588 54 457076 6201179 17/12/2015 6.88 19/11/2002 66700 702901599 54 440279 6202948 23/12/2015 12.93 17/11/2002 58200 702901597 54 457841 619752 17/12/2015 9.65 20/11/2002 2200 702901597 54 458687 6199521 17/12/2015 9.14 19/11/2002 2670 702901600 54 460074 620674 17/12/2015 9.14 19/11/2002 2670 702901602 54 469561 6199680 17/12/2015 14.04 19/11/2002 4970 702901605 54 4757983 619782 17/12/2015 13.69 17/11/2002 2700 702901601 54 481167 6210453 9/12/2015 13.79 17/11/2002 48600 702901611 54 481167 6210453 <td>702901581</td> <td>54</td> <td>461500</td> <td>6202890</td> <td>23/12/2015</td> <td></td> <td>18/11/2002</td> <td>25300</td>	702901581	54	461500	6202890	23/12/2015		18/11/2002	25300
702901588 54 457076 6201179 17/12/2015 6.88 19/11/2002 66700 702901599 54 460279 6202984 23/12/2015 11.95 11/11/2002 54200 702901597 54 457641 6199273 17/12/2015 9.65 20/11/2002 2233 702901597 54 457541 6199571 17/12/2015 9.14 19/11/2002 2670 702901600 54 460074 6206674 17/12/2015 9.14 19/11/2002 3070 702901601 54 459222 6199660 29/10/2014 13.69 20/11/2002 2670 702901606 54 457983 6199782 17/12/2015 13.61 17/11/2002 2000 702901610 54 481167 6210433 9/12/2015 13.79 17/11/2002 2000 702901612 54 481649 621623 21/12/2015 14.64 17/11/2002 59300 702901612 54 481649 6216273 <td>702901582</td> <td>54</td> <td>461278</td> <td>6202057</td> <td>23/12/2015</td> <td>11.56</td> <td>19/11/2002</td> <td>39500</td>	702901582	54	461278	6202057	23/12/2015	11.56	19/11/2002	39500
702901589 54 460279 6202984 23/12/2015 11.95 18/11/2002 64200 702901592 54 473083 6209105 21/12/2015 12.93 17/11/2002 58200 702901596 54 458297 6195517 17/12/2015 10.08 21/11/2002 51000 702901509 54 458297 6196517 17/12/2015 10.08 21/11/2002 3670 702901600 54 460561 6199680 17/12/2015 14.04 19/11/2002 4970 702901600 54 460561 6199680 17/12/2015 13.69 19/11/2002 60600 702901600 54 478509 6213104 21/12/2015 13.79 17/11/2002 84600 702901610 54 481167 6210433 9/12/2015 13.66 17/11/2002 59300 702901612 54 481649 6216263 21/12/2015 14.64 17/11/2002 59300 702901612 54 481649 62	702901588	54	457076	6201179	17/12/2015	6.88	19/11/2002	66700
702901592 54 473083 6209105 21/12/2015 12.93 17/11/2002 58200 702901596 54 458687 6199273 17/12/2015 9.65 2011/2002 2230 702901597 54 458297 6196517 17/12/2015 10.08 21/11/2002 2670 702901600 54 460074 6206674 17/12/2015 9.14 19/11/2002 3070 702901601 54 460561 6199680 17/12/2015 14.04 19/11/2002 4970 702901605 54 475983 6199782 17/12/2015 14.76 17/11/2002 84600 702901610 54 481167 6210453 9/12/2015 13.86 17/11/2002 84600 702901611 54 481167 6210453 9/12/2015 13.86 17/11/2002 84600 702901612 54 481649 6210453 9/12/2015 14.82 4/02/2004 43050 702901612 54 479926 6214990 <td>702901589</td> <td>54</td> <td>460279</td> <td>6202984</td> <td>23/12/2015</td> <td>11.95</td> <td>18/11/2002</td> <td>64200</td>	702901589	54	460279	6202984	23/12/2015	11.95	18/11/2002	64200
702901596 54 458687 6199273 17/12/2015 9.65 20/11/2002 2230 702901597 54 457541 6197562 17/12/2015 10.08 21/11/2002 2670 702901600 54 460074 620674 17/12/2015 9.14 19/11/2002 3070 702901601 54 460074 620674 17/12/2015 14.04 19/11/2002 4970 702901602 54 460561 6199782 17/12/2015 14.04 19/11/2002 4970 702901605 54 478509 6213104 21/12/2015 13.79 17/11/2002 86000 702901610 54 481167 6216263 21/12/2015 13.86 17/11/2002 86000 702901612 54 481649 6216263 21/12/2015 14.64 17/11/2002 59300 702901810 54 479926 621490 21/12/2015 14.23 4/02/2004 43050 70290180 54 479926 6214920 <td>702901592</td> <td>54</td> <td>473083</td> <td>6209105</td> <td>21/12/2015</td> <td>12.93</td> <td>17/11/2002</td> <td>58200</td>	702901592	54	473083	6209105	21/12/2015	12.93	17/11/2002	58200
702901597 54 457541 6197562 17/12/2015 10.08 21/11/2002 51000 702901598 54 458297 6196517 17/12/2015 1 19/11/2002 3070 702901600 54 460561 6199600 29/10/2014 13.69 20/11/2002 470 702901601 54 460561 6199680 17/12/2015 14.04 19/11/2002 470 702901605 54 457983 6199782 17/12/2015 1.3.76 17/11/2002 22070 702901609 54 481167 6210433 9/12/2015 13.79 17/11/2002 59300 702901611 54 481193 6211150 9/12/2015 14.64 17/11/2002 59300 702901612 54 477682 6212722 21/12/2015 14.64 17/11/2002 59300 702901809 54 479926 6213857 21/12/2015 14.64 17/11/2002 59300 702901809 54 479926 6214990 </td <td>702901596</td> <td>54</td> <td>458687</td> <td>6199273</td> <td>17/12/2015</td> <td>9.65</td> <td>20/11/2002</td> <td>2230</td>	702901596	54	458687	6199273	17/12/2015	9.65	20/11/2002	2230
702901598 54 458297 6196517 17/12/2015 21/11/2002 2670 702901600 54 460074 6200674 17/12/2015 9.14 19/11/2002 3070 702901601 54 460561 6199680 29/10/2014 13.69 20/11/2002 4970 702901602 54 457983 6199782 17/12/2015 7.35 19/11/2002 66600 702901605 54 457983 6199782 17/12/2015 13.76 17/11/2002 22070 702901611 54 481167 621150 9/12/2015 13.86 17/11/2002 68000 702901612 54 481649 6216263 21/12/2015 14.64 17/11/2002 59300 702901612 54 479926 6214990 21/12/2015 14.01 22/01/2004 43050 702901810 54 479926 6215126 21/12/2015 14.01 22/01/2004 49813 702901811 54 480740 6215157 21/1	702901597	54	457541	6197562	17/12/2015	10.08	21/11/2002	51000
702901600 54 460074 6200674 17/12/2015 9.14 19/11/2002 702 702901601 54 459222 6199600 29/10/2014 13.69 20/11/2002 720 702901602 54 460561 6199680 17/12/2015 14.04 19/11/2002 4970 702901605 54 4787983 6199782 17/12/2015 13.79 17/11/2002 22700 702901610 54 481167 6210453 9/12/2015 13.86 17/11/2002 84600 702901612 54 481649 6212633 21/12/2015 14.64 17/11/2002 59300 702901612 54 481649 6212633 21/12/2015 14.04 22/01/2004 43050 702901810 54 479985 6215126 21/12/2015 14.19 22/01/2004 49473 702901811 54 480740 6215874 21/12/2015 15.86 3/09/2004 49473 702901812 54 480740 621587	702901598	54	458297	6196517	17/12/2015		21/11/2002	2670
702901601 54 459222 6199600 29/10/2014 13.69 20/11/2002 720 702901602 54 460561 6199680 17/12/2015 14.04 19/11/2002 4970 702901609 54 4778509 6213104 21/12/2015 13.75 19/11/2002 28600 702901610 54 481167 6210453 9/12/2015 13.86 17/11/2002 84600 702901612 54 481167 6210453 9/12/2015 13.86 17/11/2002 89300 702901612 54 481167 6216263 21/12/2015 14.23 4/02/2004 43050 70290179 54 477682 6215126 21/12/2015 14.19 22/01/2004 57572 702901810 54 480740 6215857 21/12/2015 16.89 22/01/2004 49473 702901812 54 481157 6216573 21/02/014 14.77 22/01/2004 49563 70290184 54 482744 6216569	702901600	54	460074	6200674	17/12/2015	9.14	19/11/2002	3070
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	702901601	54	459222	6199600	29/10/2014	13.69	20/11/2002	720
702901606 54 457983 6199782 17/12/2015 7.35 19/11/2002 60600 702901609 54 478509 6213104 21/12/2015 14.76 17/11/2002 22700 702901610 54 481167 6210453 9/12/2015 13.86 17/11/2002 84600 702901611 54 481193 6211150 14.64 17/11/2002 59300 702901612 54 481649 6216263 21/12/2015 14.23 4/02/2004 43050 702901809 54 4779826 6217272 21/12/2015 14.01 22/01/2004 57572 702901810 54 479085 6215126 21/12/2015 14.01 22/01/2004 49473 702901811 54 480740 6215857 21/12/2015 14.01 22/01/2004 45663 702901980 54 481157 6216573 27/08/2004 14.170 25/06/2004 41100 702901980 54 482744 6214569 4/1	702901602	54	460561	6199680	17/12/2015	14.04	19/11/2002	4970
702901609 54 478509 6213104 21/12/2015 14.76 17/11/2002 22700 702901610 54 481167 6210453 9/12/2015 13.79 17/11/2002 84600 702901611 54 481169 62116263 21/12/2015 13.86 17/11/2002 59300 702901612 54 481649 6212623 21/12/2015 14.64 17/11/2002 59300 702901799 54 477682 6217272 21/12/2015 14.19 22/01/2004 57572 702901810 54 479085 6215126 21/12/2015 14.01 22/01/2004 76914 702901812 54 481157 6216573 21/12/2015 16.89 25/06/2004 13120 702901812 54 48274 6216573 4/11/2015 15.46 26/06/2004 41100 702901980 54 48274 6216573 4/11/2015 15.66 3/09/2004 9000 702901980 54 48274 620984	702901606	54	457983	6199782	17/12/2015	7.35	19/11/2002	60600
702901610 54 481167 6210453 9/12/2015 13.79 17/1/2002 84600 702901611 54 481193 6211150 9/12/2015 13.86 17/11/2002 68000 702901612 54 481649 6216263 21/12/2015 14.64 17/11/2002 59300 702901809 54 477682 6217272 21/12/2015 14.19 22/01/2004 45050 702901810 54 479926 621590 21/12/2015 14.01 22/01/2004 76914 702901811 54 480740 6215857 21/12/2015 12/01/2004 46663 702901812 54 48157 6216573 27/08/2004 14.77 22/01/2004 45663 702901980 54 482744 6215854 5/11/2015 15.46 26/06/2004 41100 702901980 54 482744 6205864 4/11/2015 15.7 16/10/2015 55700 702901980 54 480190 6205828 10/07	702901609	54	478509	6213104	21/12/2015	14.76	17/11/2002	22700
702901611 54 481193 6211150 9/12/2015 13.86 17/1/2002 68000 702901612 54 481649 6216263 21/12/2015 14.64 17/11/2002 59300 702901799 54 477682 6217272 21/12/2015 14.23 4/02/2004 43050 702901809 54 479926 6214990 21/12/2015 14.01 22/01/2004 76914 702901811 54 480740 6215857 21/12/2015 22/01/2004 49473 702901812 54 48157 6216573 27/08/2004 14.77 22/01/2004 45663 702901980 54 482744 6216573 27/08/2004 14.77 22/01/2004 4100 702901980 54 482744 6219523 4/11/2015 15.66 3/09/2004 90000 702901984 54 484788 6210523 4/11/2015 15.7 16/10/2015 55700 702901984 54 480180 6207866 10/07/	702901610	54	481167	6210453	9/12/2015	13.79	17/11/2002	84600
702901612 54 481649 6216263 21/12/2015 14.64 17/12/202 59300 702901799 54 477682 6217272 21/12/2015 14.23 4/02/2004 43050 702901809 54 479926 6214990 21/12/2015 14.19 22/01/2004 57572 702901810 54 479926 6214990 21/12/2015 14.01 22/01/2004 49473 702901811 54 480740 6215857 21/12/2015 22/01/2004 49473 702901812 54 481551 6218573 27/08/2004 14.77 22/01/2004 49473 702901980 54 482744 6214569 4/11/2015 15.66 3/09/2004 90000 702901980 54 484237 620845 4/11/2015 15.76 16/0/2015 55700 702901983 54 480118 6207860 6/11/2015 14.92 31/08/2004 67700 702901993 54 460927 6199850 23/12	702901611	54	481193	6211150	9/12/2015	13.86	17/11/2002	68000
702901799 54 477682 6217272 21/12/2015 14.23 4/02/2004 43050 702901809 54 479926 6214990 21/12/2015 14.19 22/01/2004 57572 702901810 54 479985 6215126 21/12/2015 14.01 22/01/2004 76914 702901812 54 481740 6215857 21/12/2015 22/01/2004 49473 702901912 54 481551 6216573 27/08/2004 14.77 22/01/2004 45663 702901980 54 482744 6214569 4/11/2015 15.46 26/06/2004 13120 702901980 54 48274 6209845 4/11/2015 15.66 3/09/2004 90000 702901983 54 480118 6207860 6/11/2015 14.74 8/09/2004 91400 702901993 54 460927 6199850 23/12/2015 19/05/2005 34600 702902107 54 4609670 17/12/2015 10.54	702901612	54	481649	6216263	21/12/2015	14.64	17/11/2002	59300
702901809 54 479926 6214990 21/12/2015 14.19 22/01/2004 57572 702901810 54 479085 6215126 21/12/2015 14.01 22/01/2004 76914 702901811 54 480740 6215857 21/12/2015 22/01/2004 49473 702901812 54 481051 6216573 27/08/2004 14.77 22/01/2004 45663 702901979 54 485051 6218584 5/11/2015 15.66 26/06/2004 1100 702901980 54 482744 6214569 4/11/2015 15.66 3/09/2004 90000 702901984 54 48478 6210523 4/11/2015 15.76 16/10/2015 55700 702901989 54 480118 6207860 6/11/2015 14.74 8/09/2004 91400 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460923 619850 23/12/	702901799	54	477682	6217272	21/12/2015	14.23	4/02/2004	43050
702901810 54 479085 6215126 21/12/2015 14.01 22/01/2004 76914 702901811 54 480740 6215857 21/12/2015 22/01/2004 49473 702901812 54 481157 6216573 27/08/2004 14.77 22/01/2004 45663 702901979 54 485051 6218584 5/11/2015 16.89 25/06/2004 13120 702901980 54 482744 6214569 4/11/2015 15.46 26/06/2004 41100 702901984 54 484237 6209845 4/11/2015 15.7 16/10/2015 55700 702901993 54 48109 6207860 6/11/2015 14.74 8/09/2004 91400 702901993 54 481090 6207860 6/11/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 10.54 19/05/2005 31000 702902108 54 460923 6198213 26/09	702901809	54	479926	6214990	21/12/2015	14.19	22/01/2004	57572
702901811 54 480740 6215857 21/12/2015 22/01/2004 49473 702901812 54 481157 6216573 27/08/2004 14.77 22/01/2004 45663 702901979 54 485051 6218584 5/11/2015 16.89 25/06/2004 13120 702901980 54 482744 6214569 4/11/2015 15.46 26/06/2004 41100 702901984 54 484788 6210523 4/11/2015 15.66 3/09/2004 90000 702901993 54 484137 6209845 4/11/2015 15.7 16/10/2015 55700 702901993 54 48109 6207866 10/07/2015 14.92 31/08/2004 97000 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 10.54 19/05/2005 31000 702902108 54 460923 6198213 26/0	702901810	54	479085	6215126	21/12/2015	14.01	22/01/2004	76914
702901812 54 481157 6216573 27/08/2004 14.77 22/01/2004 45663 702901979 54 485051 6218584 5/11/2015 16.89 25/06/2004 13120 702901980 54 482744 6214569 4/11/2015 15.46 26/06/2004 41100 702901984 54 484788 6210523 4/11/2015 15.66 3/09/2004 90000 702901989 54 484237 6209845 4/11/2015 15.7 16/10/2015 55700 702901993 54 480118 6207866 10/07/2015 14.92 31/08/2004 67700 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 15.31 28/06/2004 55500 702902108 54 460969 6199670 17/12/2015 10.54 19/05/2005 32600 702902109 54 460931 6198213 26/09/2014 10.26 19/05/2005 28200 702902216 </td <td>702901811</td> <td>54</td> <td>480740</td> <td>6215857</td> <td>21/12/2015</td> <td></td> <td>22/01/2004</td> <td>49473</td>	702901811	54	480740	6215857	21/12/2015		22/01/2004	49473
702901979 54 485051 6218584 5/11/2015 16.89 25/06/2004 13120 702901980 54 482744 6214569 4/11/2015 15.46 26/06/2004 41100 702901984 54 484788 6210523 4/11/2015 15.66 3/09/2004 90000 702901989 54 484237 6209845 4/11/2015 15.7 16/10/2015 55700 702901993 54 480118 6207866 10/07/2015 14.92 31/08/2004 67700 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 19/05/2005 31000 702902108 54 460923 6198214 26/09/2014 10.99 19/05/2005 28200 702902100 54 460923 6198213 26/09/2014 10.26 19/05/2005 28200 702902110 54 459768 6201317 17/	702901812	54	481157	6216573	27/08/2004	14.77	22/01/2004	45663
702901980 54 482744 6214569 4/11/2015 15.46 26/06/2004 41100 702901984 54 484788 6210523 4/11/2015 15.66 3/09/2004 90000 702901989 54 484237 6209845 4/11/2015 15.7 16/10/2015 55700 702901993 54 480118 6207860 6/11/2015 14.92 31/08/2004 67700 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 19/05/2005 31000 702902108 54 460969 6199670 17/12/2015 10.54 19/05/2005 32600 702902109 54 460923 6198213 26/09/2014 10.26 19/05/2005 28200 702902180 54 459768 6201317 17/12/2015 7.99 - - 702902276 54 477607 6215497 21/12/2015	702901979	54	485051	6218584	5/11/2015	16.89	25/06/2004	13120
702901984 54 484788 6210523 4/11/2015 15.66 3/09/2004 90000 702901989 54 484237 6209845 4/11/2015 15.7 16/10/2015 55700 702901993 54 480118 6207866 10/07/2015 14.92 31/08/2004 67700 702901999 54 481090 6207860 6/11/2015 14.74 8/09/2004 91400 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 19/05/2005 31000 702902108 54 460969 6199670 17/12/2015 10.54 19/05/2005 28200 702902109 54 460923 6198213 26/09/2014 10.99 19/05/2005 28200 702902276 54 477607 6215497 21/12/2015 13.5 6/06/2006 9650 702902277 54 475347 6213162 21/12/	702901980	54	482744	6214569	4/11/2015	15.46	26/06/2004	41100
702901989 54 484237 6209845 4/11/2015 15.7 16/10/2015 55700 702901993 54 480118 6207866 10/07/2015 14.92 31/08/2004 67700 702901999 54 481090 6207860 6/11/2015 14.74 8/09/2004 91400 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 19/05/2005 34600 702902108 54 460923 6198213 26/09/2014 10.99 19/05/2005 28200 702902100 54 460923 6198213 26/09/2014 10.26 19/05/2005 28200 702902276 54 477607 6215497 21/12/2015 7.99 702902277 54 477537 6213162 21/12/2015 13.35 6/06/2006 28100 702902278 54 47452 6212296 21/12/2015 13.35 <td>702901984</td> <td>54</td> <td>484788</td> <td>6210523</td> <td>4/11/2015</td> <td>15.66</td> <td>3/09/2004</td> <td>90000</td>	702901984	54	484788	6210523	4/11/2015	15.66	3/09/2004	90000
702901993 54 480118 6207866 10/07/2015 14.92 31/08/2004 67700 702901999 54 481090 6207860 6/11/2015 14.74 8/09/2004 91400 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 19/05/2005 34600 702902108 54 460969 6199670 17/12/2015 10.54 19/05/2005 32600 702902109 54 460931 6198213 26/09/2014 10.26 19/05/2005 28200 702902100 54 460923 6198214 26/09/2014 10.26 19/05/2005 28200 702902276 54 477607 6215497 21/12/2015 13.5 6/06/2006 28100 702902277 54 475347 6213162 21/12/2015 13.35 6/06/2006 68100 702902330 54 477452 6212420 21	702901989	54	484237	6209845	4/11/2015	15.7	16/10/2015	55700
702901999 54 481090 6207860 6/11/2015 14.74 8/09/2004 91400 702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 19/05/2005 34600 702902108 54 460927 6199870 17/12/2015 10.54 19/05/2005 31000 702902109 54 460923 6198213 26/09/2014 10.99 19/05/2005 28200 702902180 54 459768 6201317 17/12/2015 7.99 - - 702902276 54 477607 6215497 21/12/2015 13.5 6/06/2006 28100 702902277 54 475347 6213162 21/12/2015 13.35 6/06/2006 28100 702902278 54 477452 6212296 21/12/2015 13.28 4/09/2007 20550 702902330 54 477375 621403 21/12/2015	702901993	54	480118	6207866	10/07/2015	14.92	31/08/2004	67700
702902001 54 476409 6205828 10/07/2015 15.31 28/06/2004 55500 702902107 54 460927 6199850 23/12/2015 19/05/2005 34600 702902108 54 460969 6199670 17/12/2015 10.54 19/05/2005 31000 702902109 54 460923 6198213 26/09/2014 10.99 19/05/2005 52600 702902100 54 460923 6198213 26/09/2014 10.26 19/05/2005 28200 702902100 54 459768 6201317 17/12/2015 7.99	702901999	54	481090	6207860	6/11/2015	14.74	8/09/2004	91400
702902107 54 460927 6199850 23/12/2015 19/05/2005 34600 702902108 54 460969 6199670 17/12/2015 10.54 19/05/2005 31000 702902109 54 460931 6198213 26/09/2014 10.99 19/05/2005 52600 702902100 54 460923 6198214 26/09/2014 10.26 19/05/2005 28200 702902180 54 459768 6201317 17/12/2015 7.99	702902001	54	476409	6205828	10/07/2015	15.31	28/06/2004	55500
702902108 54 460969 6199670 17/12/2015 10.54 19/05/2005 31000 702902109 54 460931 6198213 26/09/2014 10.99 19/05/2005 52600 702902110 54 460923 6198214 26/09/2014 10.26 19/05/2005 28200 702902180 54 459768 6201317 17/12/2015 7.99	702902107	54	460927	6199850	23/12/2015		19/05/2005	34600
702902109 54 460931 6198213 26/09/2014 10.99 19/05/2005 52600 702902110 54 460923 6198214 26/09/2014 10.26 19/05/2005 28200 702902180 54 459768 6201317 17/12/2015 7.99	702902108	54	460969	6199670	17/12/2015	10.54	19/05/2005	31000
702902110 54 460923 6198214 26/09/2014 10.26 19/05/2005 28200 702902180 54 459768 6201317 17/12/2015 7.99	702902109	54	460931	6198213	26/09/2014	10.99	19/05/2005	52600
702902180 54 459768 6201317 17/12/2015 7.99 702902276 54 477607 6215497 21/12/2015 13.5 6/06/2006 9650 702902277 54 475347 6213162 21/12/2015 14.29 6/06/2006 28100 702902278 54 474452 6212296 21/12/2015 13.35 6/06/2006 68100 702902330 54 477121 6214230 21/12/2015 13.28 4/09/2007 20550 702902332 54 477532 6214017 21/12/2015 13.63 4/09/2007 1660 702902333 54 477375 6214003 21/12/2015 13.63 4/09/2007 40900 702902412 54 483029 6215821 15/10/2015 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902110	54	460923	6198214	26/09/2014	10.26	19/05/2005	28200
702902276 54 477607 6215497 21/12/2015 13.5 6/06/2006 9650 702902277 54 475347 6213162 21/12/2015 14.29 6/06/2006 28100 702902278 54 474452 6212296 21/12/2015 13.35 6/06/2006 68100 702902330 54 477121 6214230 21/12/2015 13.28 4/09/2007 20550 702902332 54 477532 6214017 21/12/2015 13.63 4/09/2007 1660 702902333 54 477375 6214003 21/12/2015 13.63 4/09/2007 40900 702902412 54 483029 6215821 15/10/2015 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902180	54	459768	6201317	17/12/2015	7.99	,,	
702902277 54 475347 6213162 21/12/2015 14.29 6/06/2006 28100 702902278 54 474452 6212296 21/12/2015 13.35 6/06/2006 68100 702902330 54 477121 6214230 21/12/2015 13.28 4/09/2007 20550 702902332 54 477532 6214017 21/12/2015 13.63 4/09/2007 1660 702902333 54 477375 6214003 21/12/2015 13.63 4/09/2007 40900 702902412 54 483029 6215821 15/10/2015 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902276	54	477607	6215497	21/12/2015	13 5	6/06/2006	9650
702902278 54 474452 6212296 21/12/2015 13.35 6/06/2006 68100 702902330 54 477121 6214230 21/12/2015 13.28 4/09/2007 20550 702902332 54 477532 6214017 21/12/2015 13.63 4/09/2007 1660 702902333 54 477375 6214003 21/12/2015 13.63 4/09/2007 40900 702902412 54 483029 6215821 15/10/2015 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902277	54	475347	6213162	21/12/2015	14 29	6/06/2006	28100
702902330 54 477121 6214230 21/12/2015 13.28 4/09/2007 20550 702902332 54 477532 6214017 21/12/2015 13.63 4/09/2007 1660 702902333 54 477375 6214003 21/12/2015 13.63 4/09/2007 40900 702902412 54 483029 6215821 15/10/2015 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902278	54	474452	6212296	21/12/2015	13 35	6/06/2006	68100
702902332 54 477532 6214017 21/12/2015 4/09/2007 1660 702902333 54 477375 6214003 21/12/2015 13.63 4/09/2007 40900 702902412 54 483029 6215821 15/10/2015 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902330	54	477121	6214230	21/12/2015	13.28	4/09/2007	20550
702902333 54 477375 6214003 21/12/2015 13.63 4/09/2007 40900 702902412 54 483029 6215821 15/10/2015 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902332	54	477532	6214017	21/12/2015	13.20	4/09/2007	1660
702902412 54 483029 6217187 29/08/2014 15.73 15/10/2015 44300 702902413 54 481467 6217187 29/08/2014 15.83 15/10/2015 43200 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902332	54	477375	6214003	21/12/2015	13 63	4/09/2007	40900
702902413 54 481467 6217187 29/08/2014 15.83 702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902412	54	483029	6215821	15/10/2015	15 73	15/10/2015	44300
702902416 54 482821 6213171 15/10/2015 15.03 15/10/2015 43200	702902413	54	481467	6217187	29/08/2014	15.83	10, 10, 2013	11500
	702902416	54	482821	6213171	15/10/2015	15.03	15/10/2015	43200

Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (µS/cm)
702902420	54	478746	6217420	21/12/2015	14.89		
702902614	54	475906	6206919	10/07/2015	13.81		
702902615	54	475856	6206917	22/12/2015	18.6	13/05/2010	75900
702902672	54	460826	6206615				
702902707	54	473516	6210225		13.06		
702902709	54	473535	6211208		12.94		
702902733	54	475334	6207131			5/02/2012	87200
702902735	54	476284	6207838				
702902736	54	474906	6207316			3/02/2012	73300
702902794	54	460616	6202391			-, - , -	
702902795	54	457929	6201189				
702902807	54	459563	6202111				
702902808	54	457443	6196927				
702902809	54	457874	6202635				
702902803	54	458527	6199779		-3 72		
702902819	54	481594	6213861		14 34		
702902820	54	481558	6213805		15.12		
702902820	54	481511	6213712		14.48		
702902821	54	479273	6214390		15 73		
702902822	54	479344	6214465		13.75		
702902823	54	479344	6214405				
702902824	54	479402	6212245		12.02		
702902025	54	479450	6212400		15.92		
702902020	54	400000	6213499		14.22		
702902827	54	480716	6213758		14.22		
702902828	54	480729	6213609		14.22		
702902829	54	4/918/	6209896		14.23		
702902830	54	482077	6209313		14.44		
702902831	54	457132	6199955				
702902832	54	450805	6198375		10.00		
702902833	54	458303	6195831		10.99	12/10/2015	44000
702902836	54	459231	6200090		10.43	12/10/2015	44000
/0290283/	54	458301	6195810		9.87	12/10/2015	38400
702902838	54	458303	6195815		9.77	12/10/2015	51200
702902839	54	457132	6199953		10.16	12/10/2015	12400
/02902840	54	456868	6198383		9.91	12/10/2015	4/200
702902841	54	477560	6213027		13.13	15/10/2015	45400
/02902842	54	477960	6212646		13.17	15/10/2015	48800
702902843	54	479178	6209897		13.92	14/10/2015	38000
702902844	54	479178	6209897		13.43	15/10/2015	71000
702902845	54	479524	6212633		13.49	24/09/2015	61600
702902846	54	481511	6213717		14.43	13/10/2015	35700
702902847	54	481509	6213719		14.42	13/10/2015	48900
702902848	54	481559	6213808		14.43	13/10/2015	41200
702902849	54	481557	6213806		14.39	13/10/2015	52800
702902850	54	481594	6213863		14.48	13/10/2015	31300
702902851	54	481591	6213864		14.36	13/10/2015	75200
702902852	54	479344	6214469		14.11	13/10/2015	52700
702902853	54	479403	6214489		14.12	13/10/2015	55400
702902854	54	479271	6214386		14.13	13/10/2015	48200
702902855	54	480717	6213756		14.25	13/10/2015	47800
702902856	54	480732	6213613		14.14	13/10/2015	48100
702902857	54	480730	6213611		14.15	13/10/2015	54000
702902858	54	480684	6213495		14.12	13/10/2015	54600
702902859	54	480685	6213491		14.12	13/10/2015	56900

Unit No	Zone	Easting	Northing	Latest RSWL Date	RSWL (mAHD)	Lastest EC Date	EC (μS/cm)
702902864	54	482070	6207859		14.87	29/10/2015	82400
702902865	54	478601	6212443		13.29	1/11/2015	65600
702902866	54	480351	6211076		13.72	2/11/2015	67500
702902867	54	478502	6212309		13.31	2/11/2015	61800
702902868	54	482223	6210258		13.99	1/11/2015	80600
702902869	54	482283	6208602		13.92	1/11/2015	89900
702902870	54	483799	6211995		14.78	1/11/2015	48500
702902871	54	480589	6209262		13.69	31/10/2015	78000
702902872	54	478504	6213122		13.41	2/11/2015	59200
702902873	54	477581	6210939		13.05	31/10/2015	81600
702902874	54	478853	6214213		13.89	2/11/2015	33000
702902875	54	482162	6208200		13.57	29/10/2015	82900
702902876	54	477914	6213982		13.11	2/11/2015	51400
702902877	54	483300	6210016		14.22	2/11/2015	92500
702902878	54	478969	6211833		13.33	30/10/2015	67600
702902879	54	477670	6208823		13.44	30/10/2015	86500
702902880	54	482124	6207848		14.91	29/10/2015	76300

9 Appendix C: Instructions on how to access the state groundwater database: WaterConnect

- URL: www.waterconnect.sa.gov.au
- From "Data Systems" select "Groundwater Data"
- Click "Groundwater Data" link



Search by Unit Number, Obswell network, Permit Number, Hundred & Parcel, Property, Coordinates, NRM Region, Prescribed Area or use the interactive map.

