

LOCATION MAP



AUTHOR: BK
DRAWN: BK
DATE: 2/10/19

REPORT NO: 007
REVISION: A
JOB NO: 136D

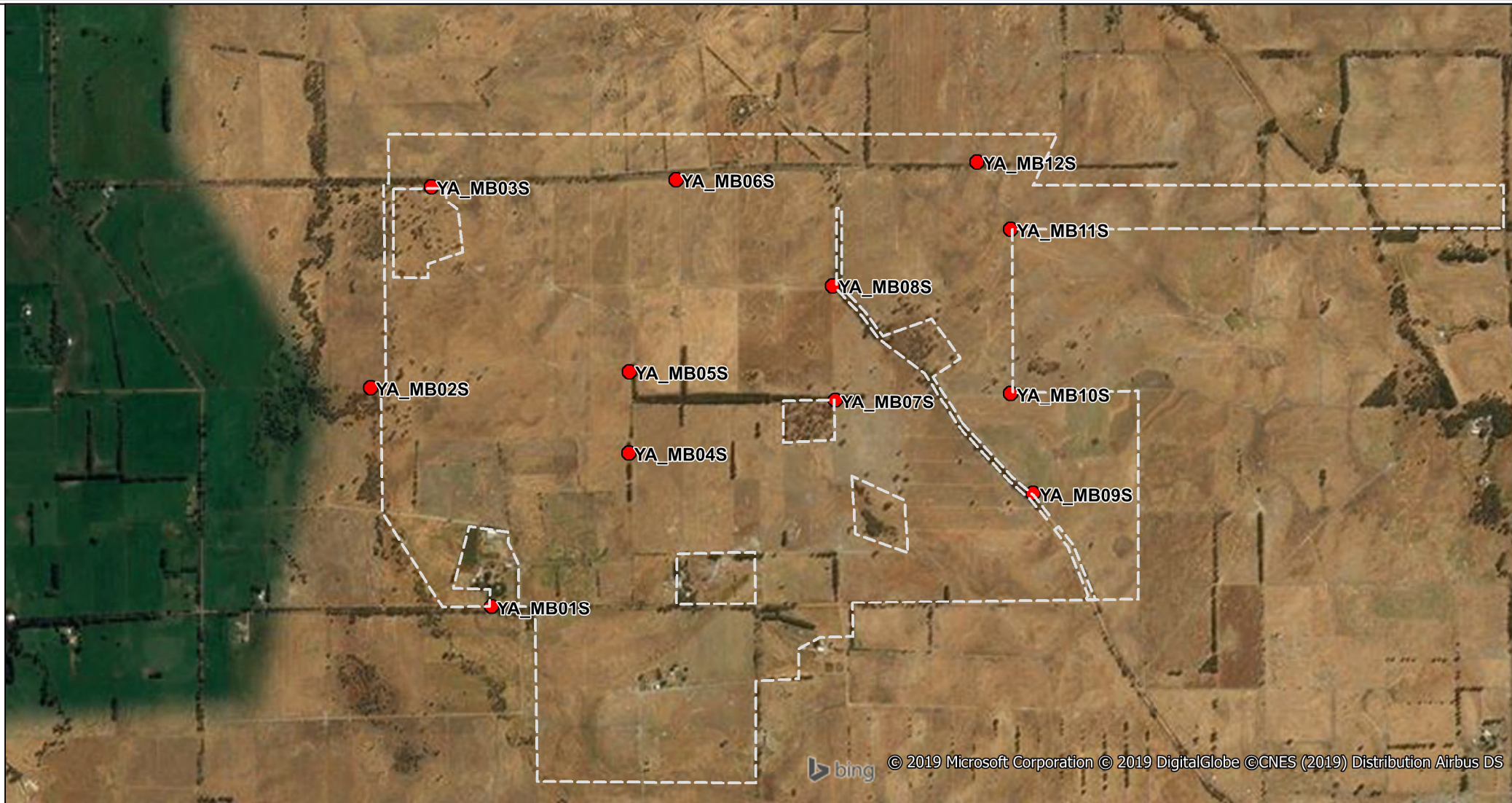
NOTES & DATA SOURCES:
Figure taken from Figure 3-9
CSIRO, 2009, Groundwater Yields in
South-West Western Australia



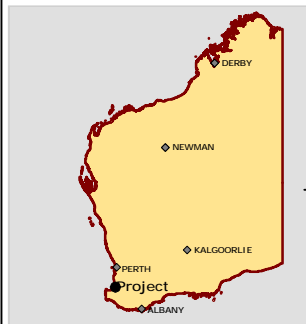
FIGURE 8

YALYALUP MINERAL SAND PROJECT

REGIONAL HYDROGEOLOGICAL CROSS SECTION OF SOUTHERN PERTH BASIN



LOCATION MAP



Location: XXXX

LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Doral Monitoring Bores

AUTHOR: BDK
 DRAWN: BDK
 DATE: 20/10/19

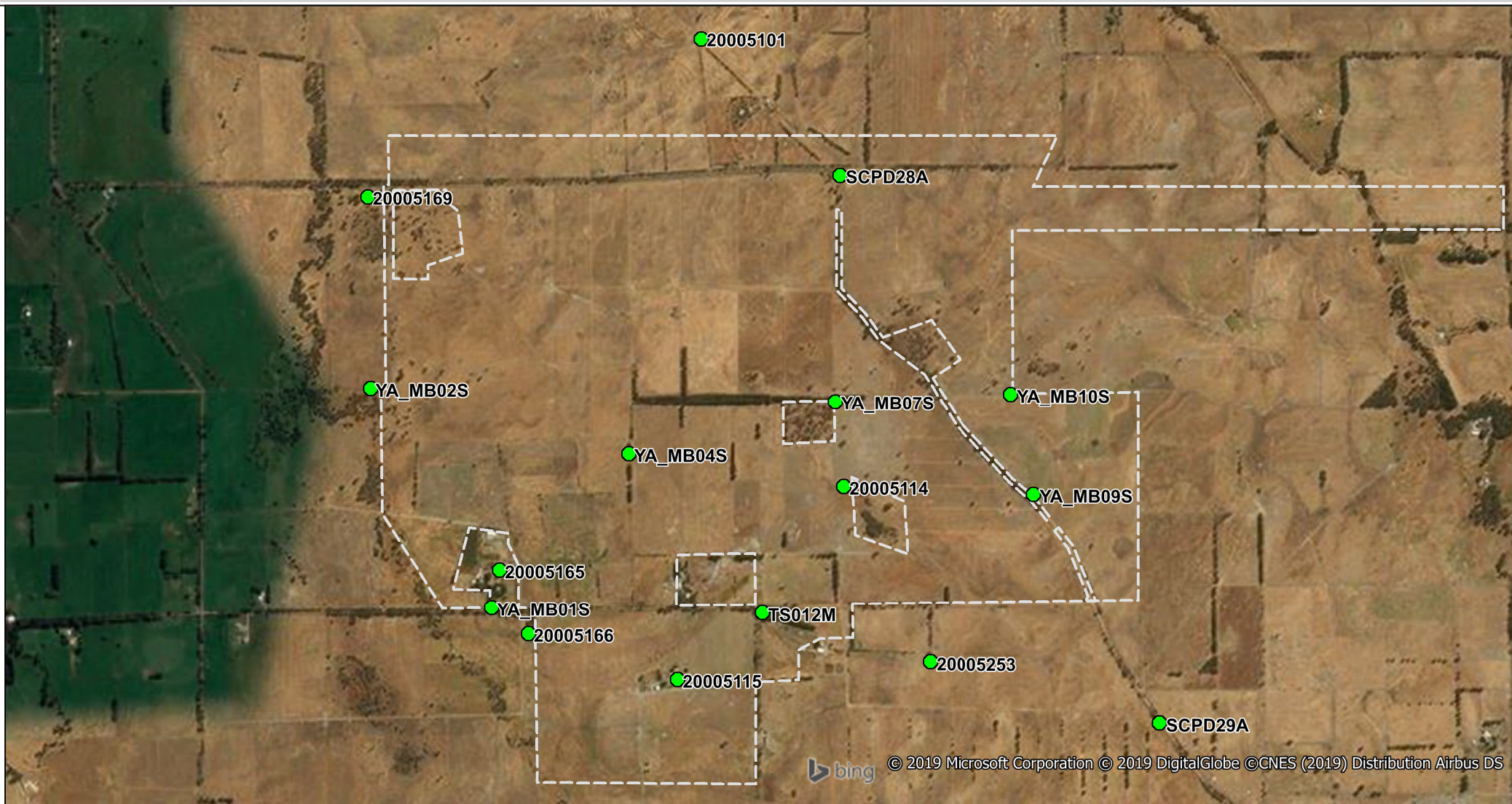
REPORT NO: 007
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NOTES & DATA SOURCES:

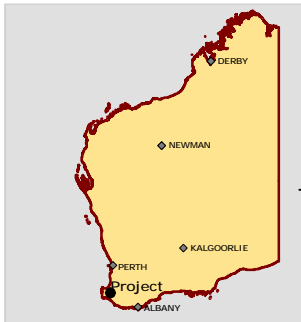


FIGURE 9

**LOCATION OF DORAL
 SUPERFICIAL AQUIFER
 MONITORING BORES
 YA_MB01-YA_MB12**



LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Superficial Monitoring Bores

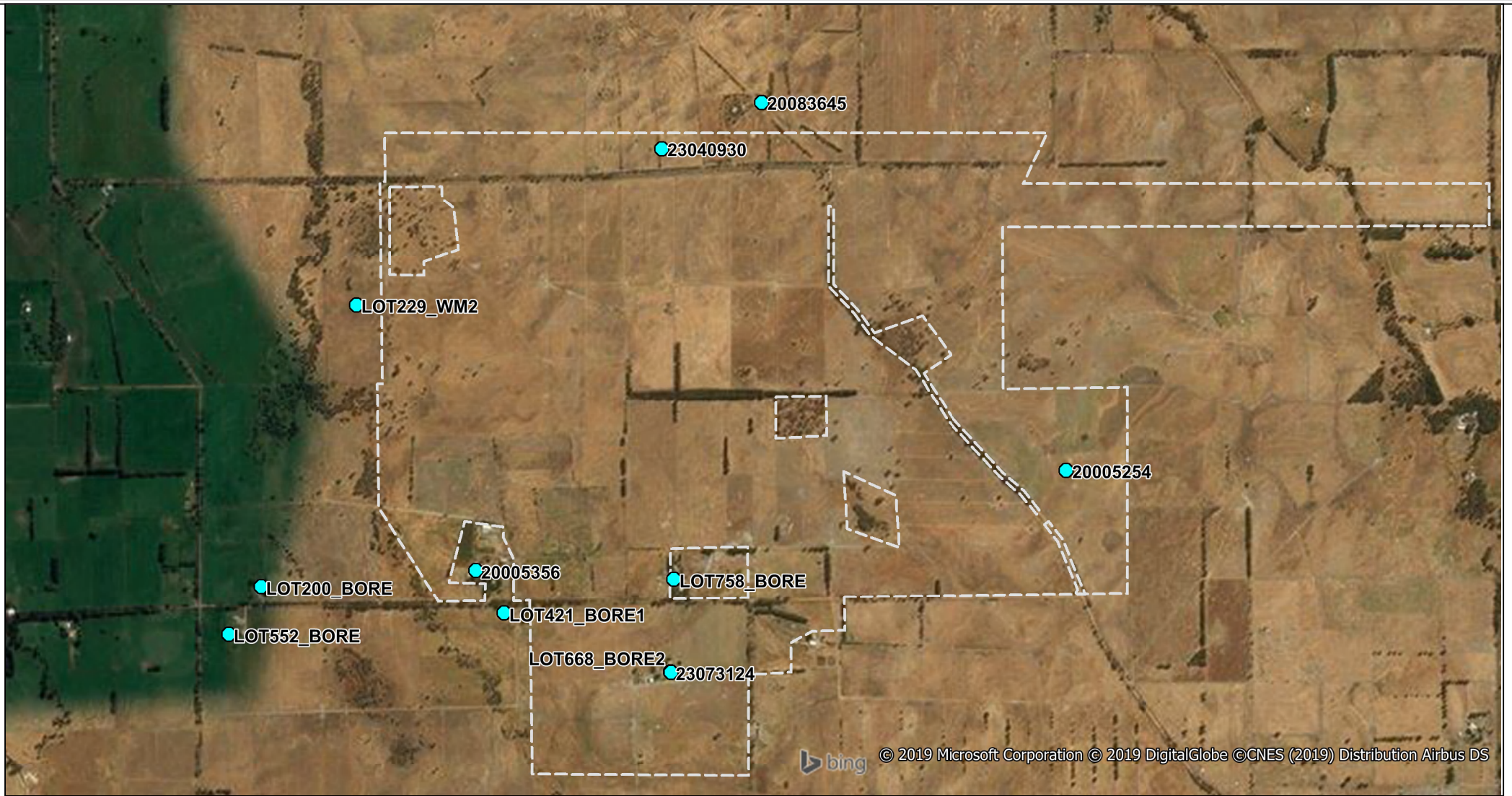
AUTHOR: BDK
 DRAWN: BDK
 DATE: 20/10/19

REPORT NO: 007
 REVISION: a
 JOB NO: 136D

NOTES & DATA SOURCES:



FIGURE 10
 LOCATION OF
 SUPERFICIAL AQUIFER
 BASELINE GROUNDWATER
 MONITORING BORES



LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Leederville Baseline Monitoring Bores

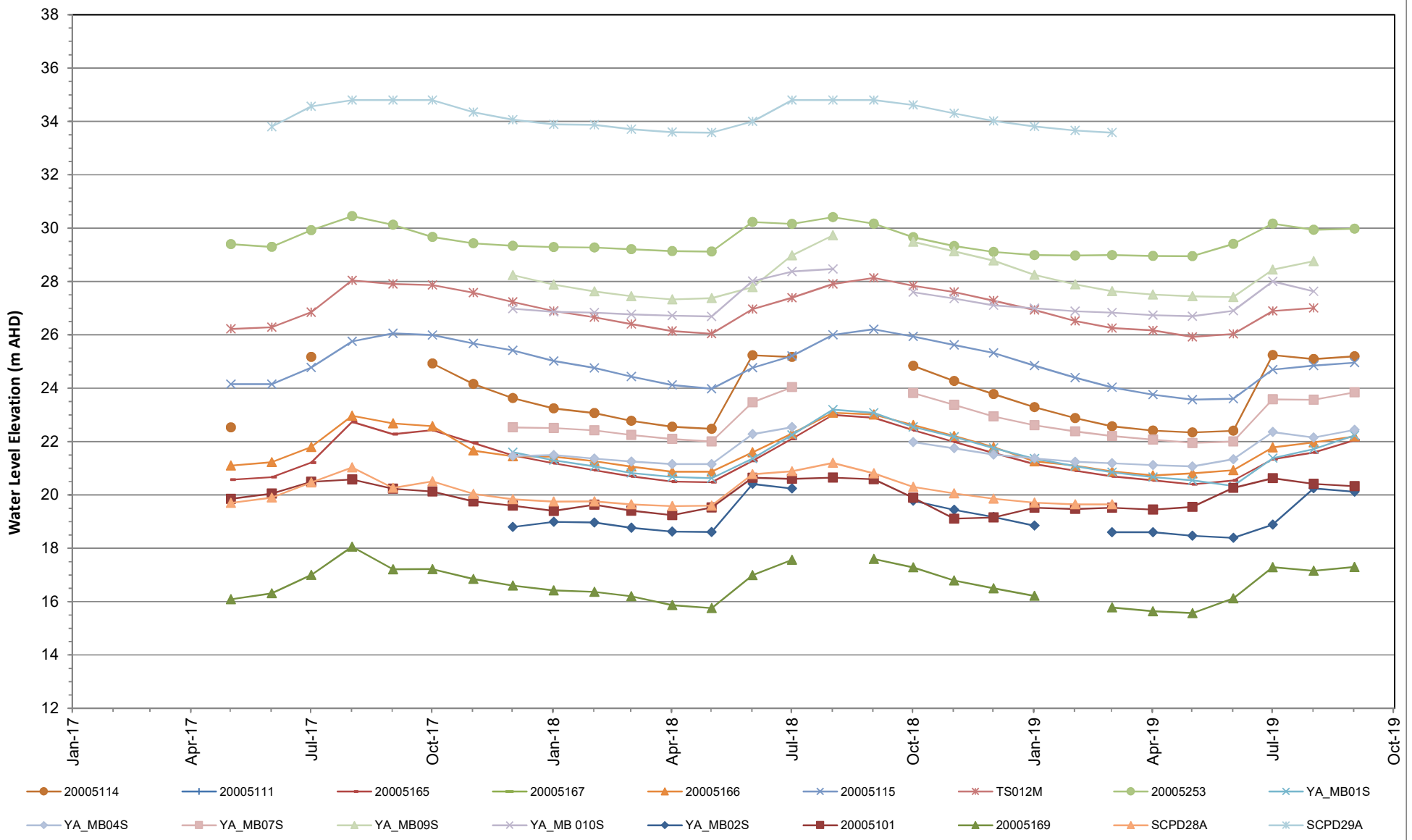
AUTHOR: BDK
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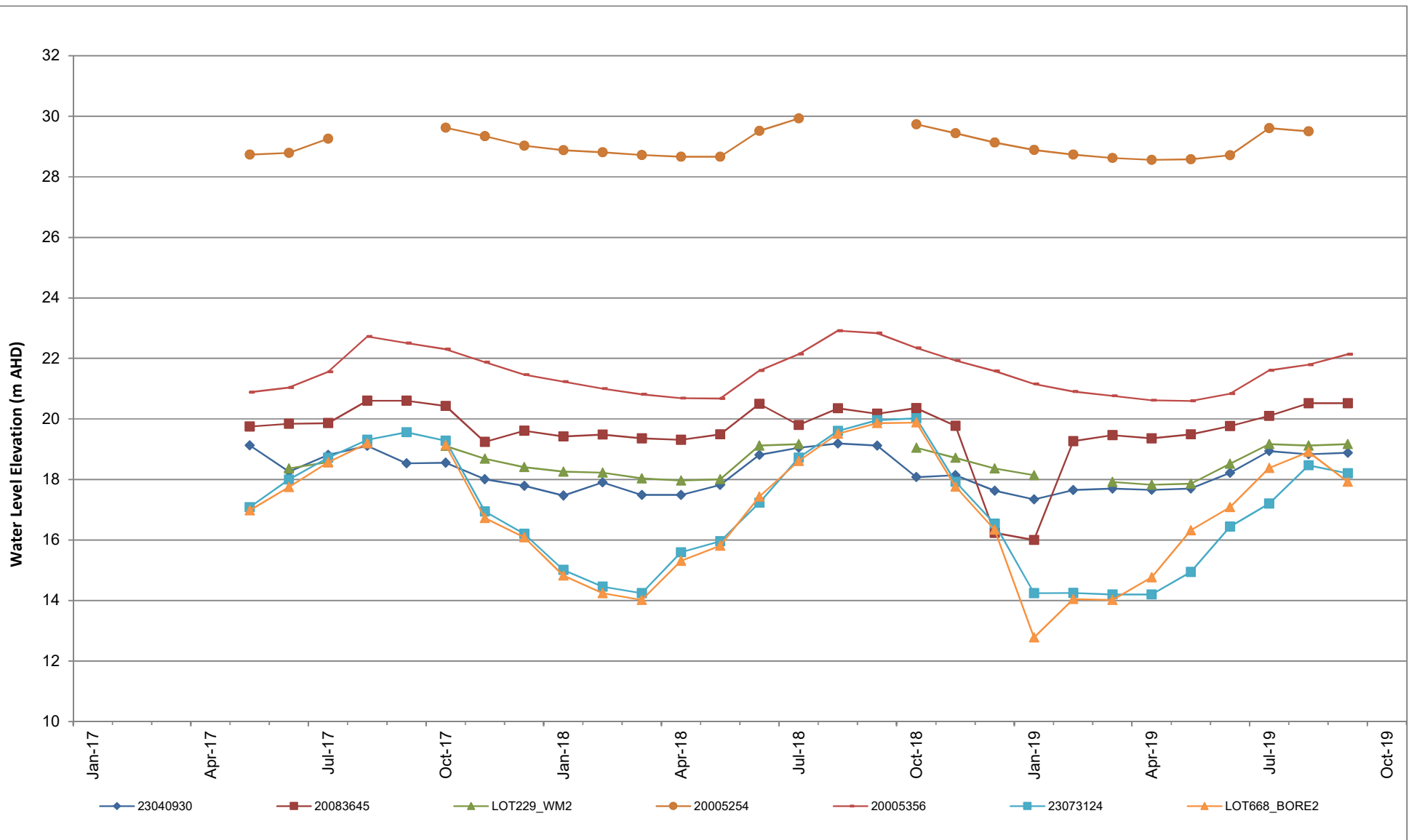
NOTES & DATA SOURCES:



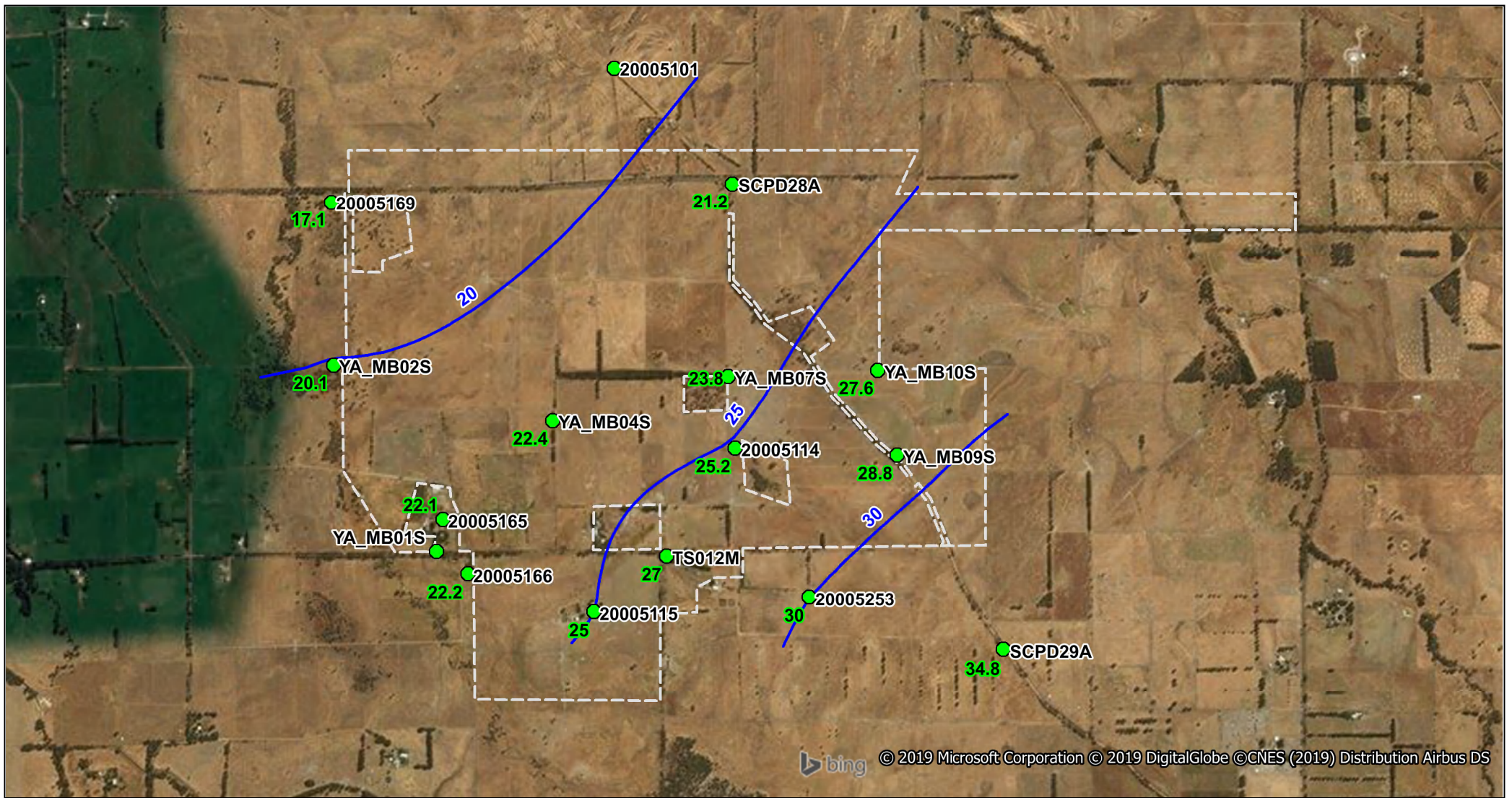
FIGURE 11
 LOCATION OF
 LEEDERVILLE AQUIFER
 BASELINE GROUNDWATER
 MONITORING BORES



Monitoring Bore Water Level Elevations m AHD (Superficial Aquifer) FIGURE 12



Monitoring Bore Water Level Elevations m AHD (Leederville Aquifer) FIGURE 13



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LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Superficial Water Levels (mRL) 5m intervals
- Superficial Monitoring Bores
- Measured Water Level (mRL)

AUTHOR: BDK
 DRAWN: BDK
 DATE: 20/10/19

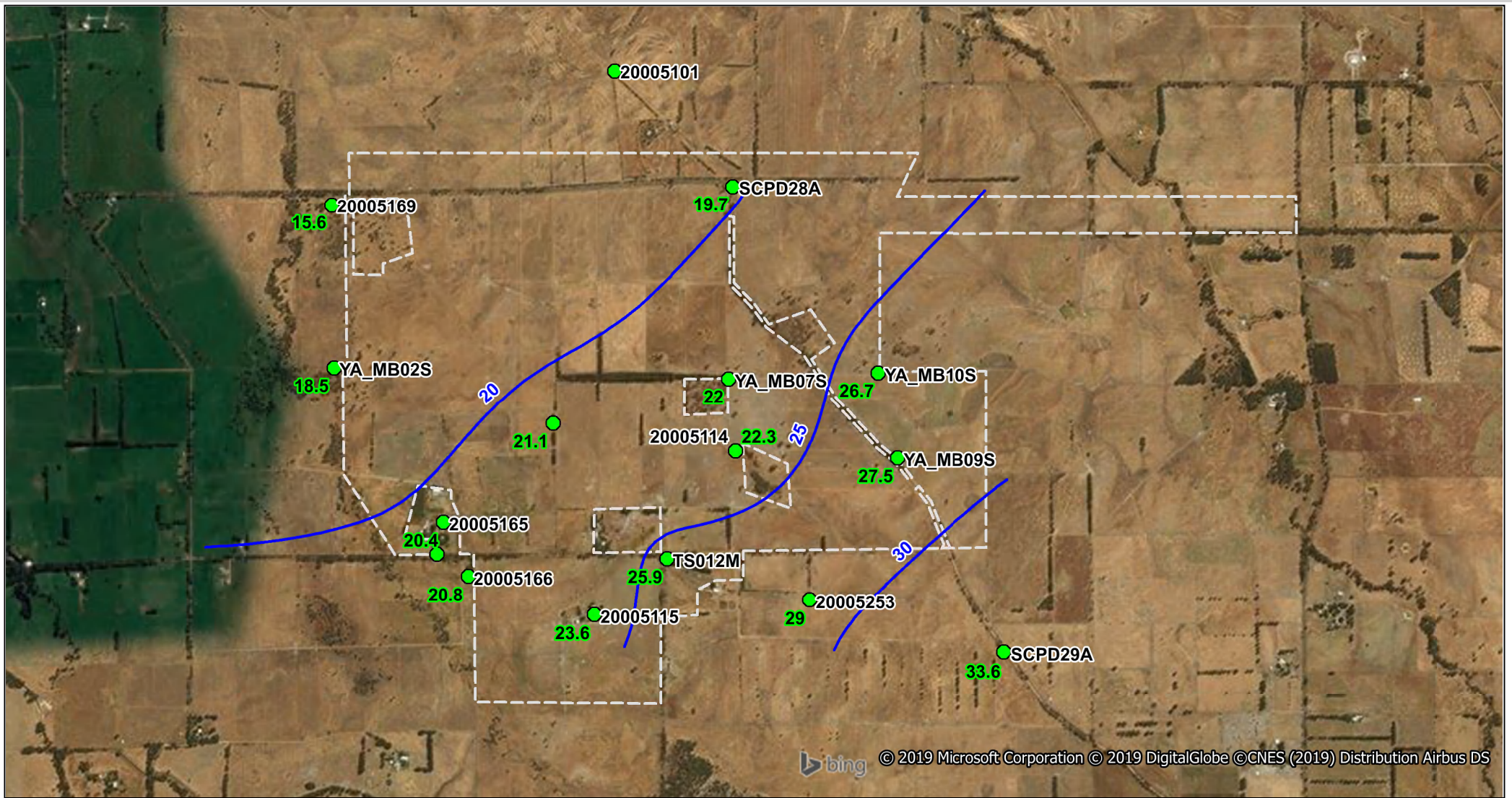
REPORT NO: 007
 REVISION: a
 JOB NO: 136D

NOTES & DATA SOURCES:



FIGURE 14

SITE MEASURED GROUNDWATER LEVEL CONTOURS IN THE SUPERFICIAL AQUIFER FOR THE WINTER PERIOD



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LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Superficial Water Levels (mRL) 5m intervals
- Superficial Monitoring Bores
- Measured Water Level (mRL)

AUTHOR: BDK
 DRAWN: BDK
 DATE: 20/10/19

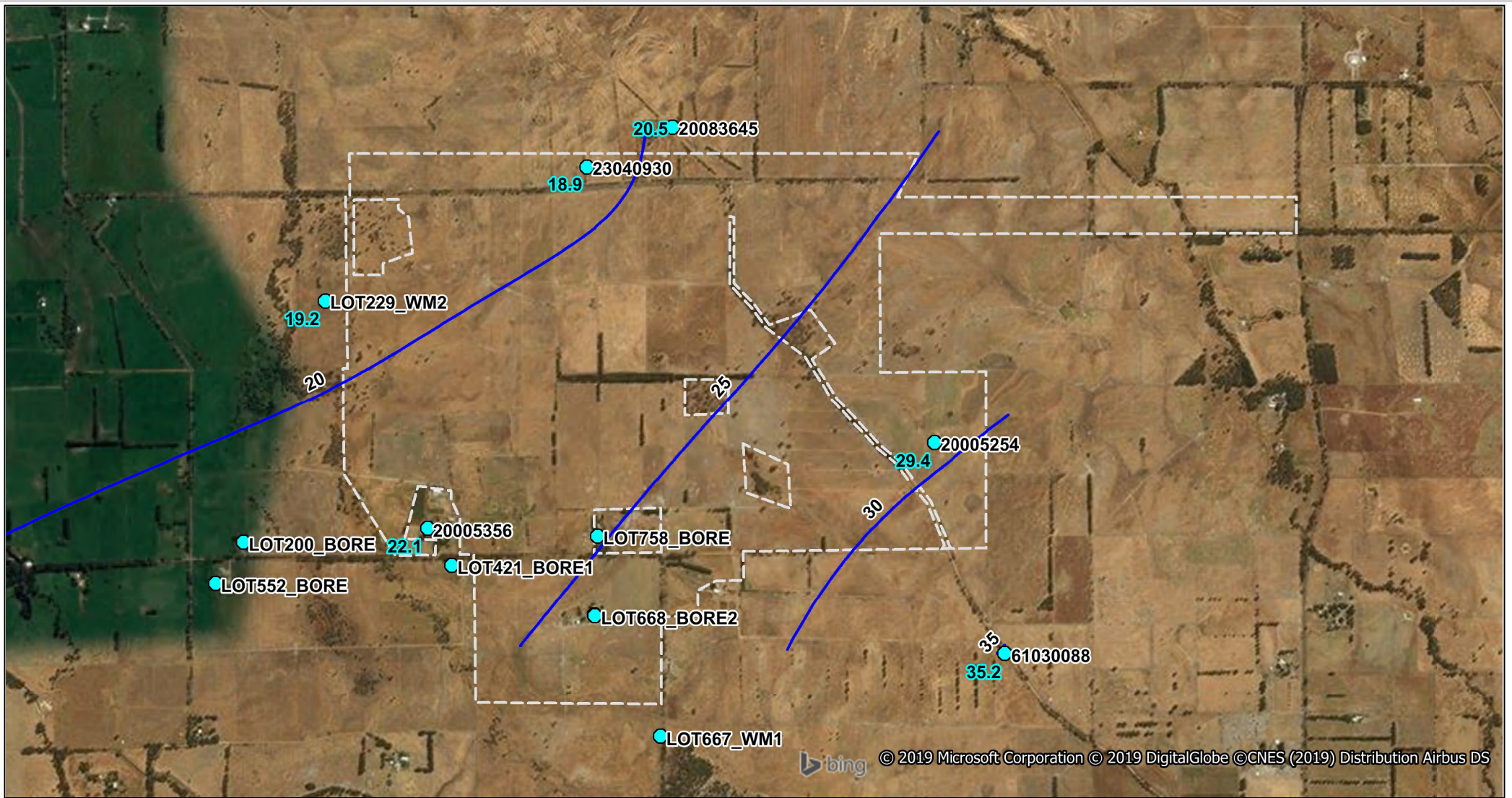
REPORT NO: 007
 REVISION: a
 JOB NO: 136D

NOTES & DATA SOURCES:



FIGURE 15

SITE MEASURED GROUNDWATER LEVEL CONTOURS IN THE SUPERFICIAL AQUIFER FOR THE SUMMER PERIOD



LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Leederville Water Levels (mRL)
5m intervals
- Leederville Monitoring Bores
- 22.2 Measured Water Level (mRL)

AUTHOR: BDK
 DRAWN: BDK
 DATE: 20/10/19

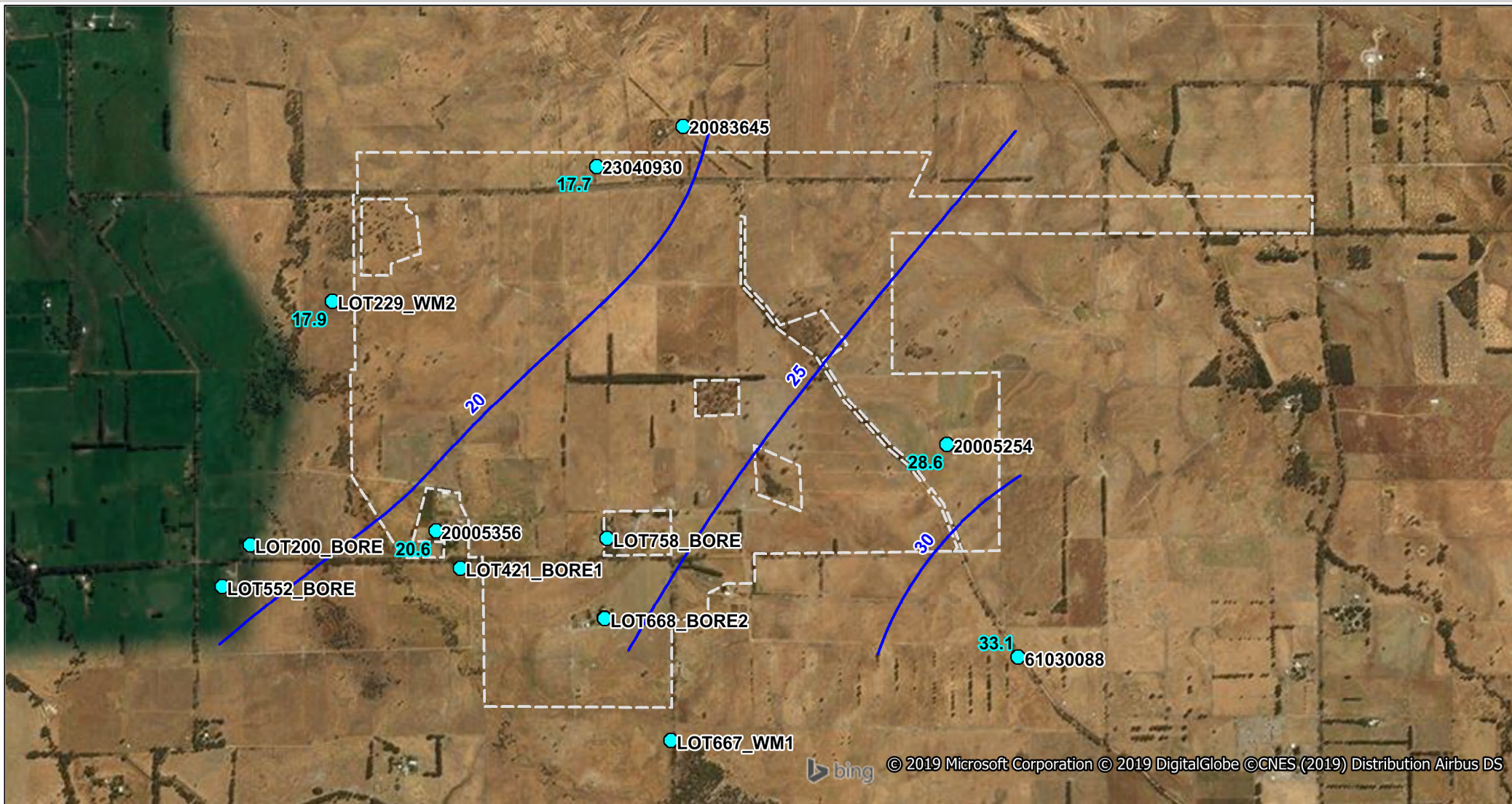
REPORT NO: 007
 REVISION: a
 JOB NO: 136D

NOTES & DATA SOURCES:



FIGURE 16

**SITE MEASURED
 GROUNDWATER LEVEL
 CONTOURS IN THE
 LEEDERVILLE AQUIFER FOR
 THE WINTER PERIOD**



LOCATION MAP



LEGEND

- Yalyalup Site Disturbance Envelop Boundary
- Leederville Water Levels (mRL)
5m intervals
- Leederville Monitoring Bores
- 22.2 Measured Water Level (mRL)

AUTHOR: BDK
 DRAWN: BDK
 DATE: 20/10/19

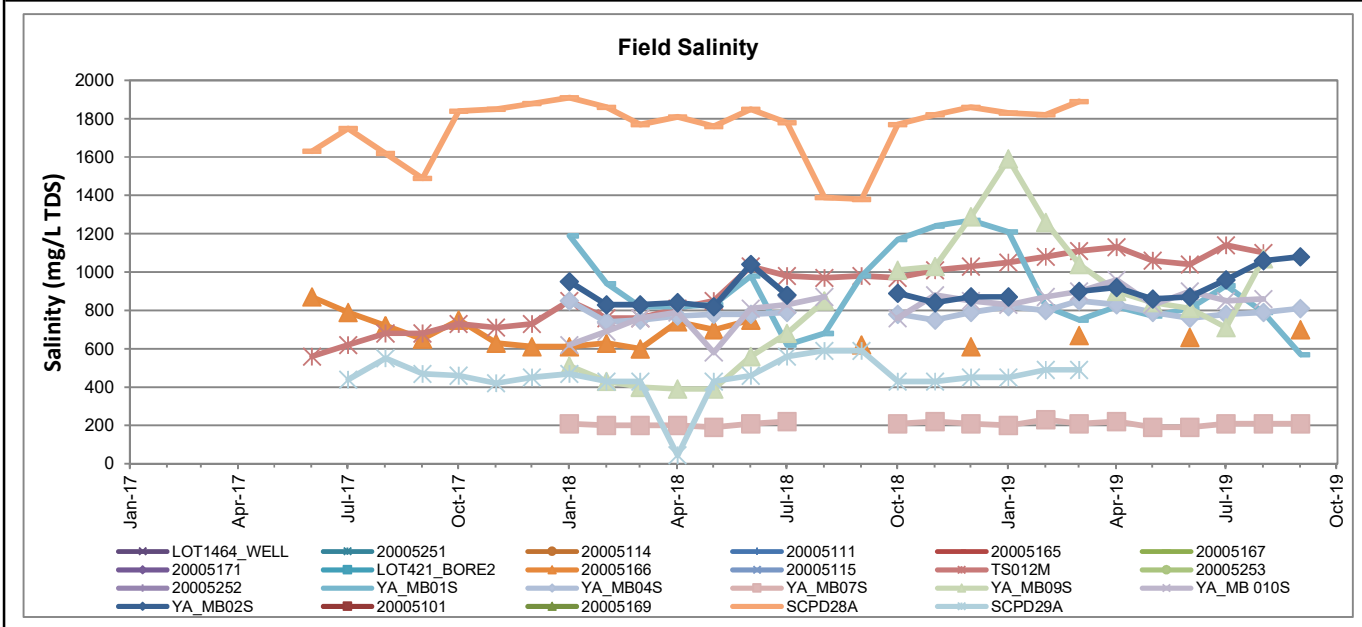
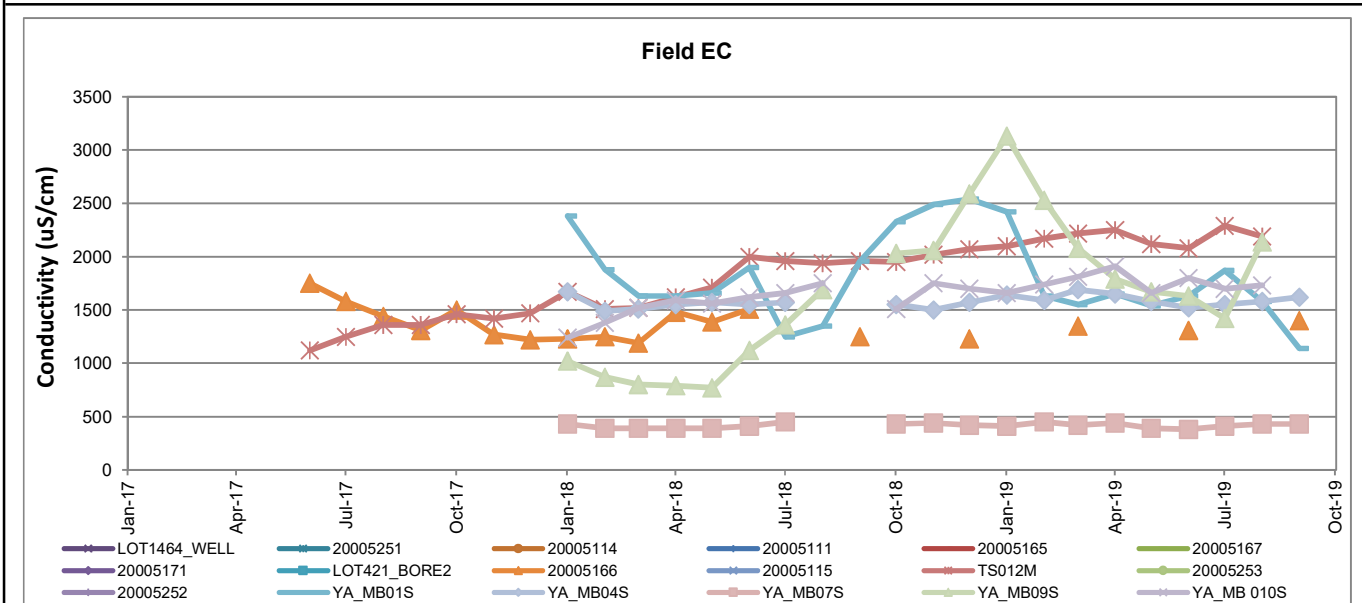
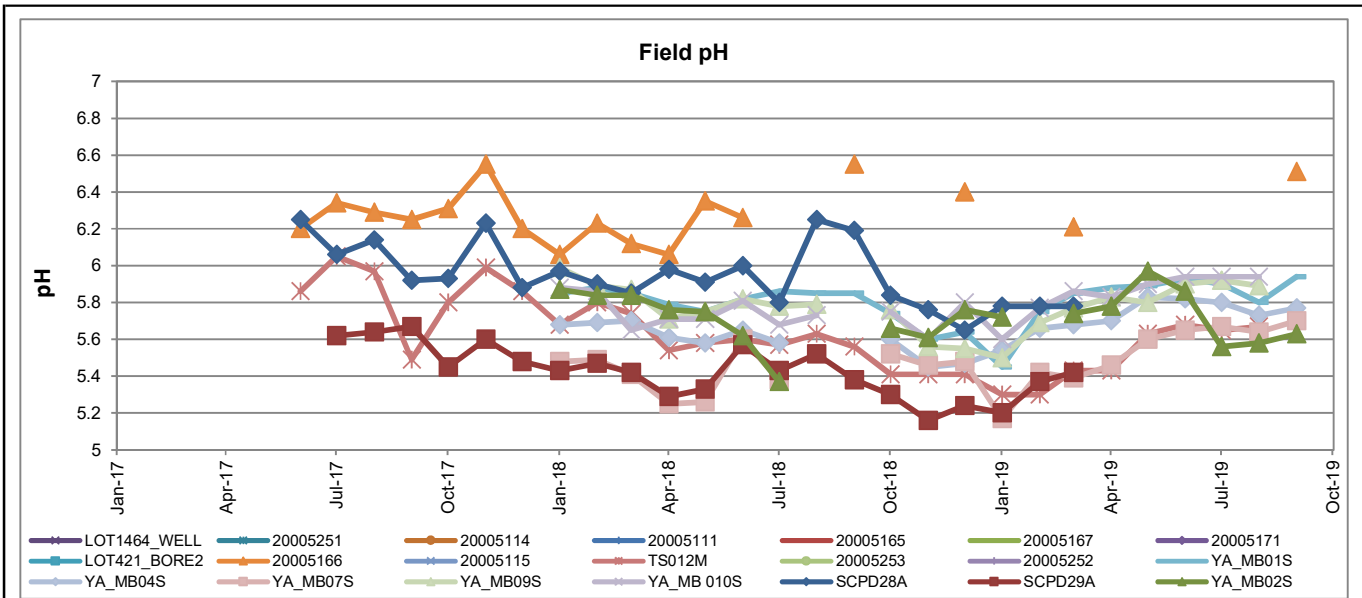
REPORT NO: 007
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 JOB NO: 136D

NOTES & DATA SOURCES:

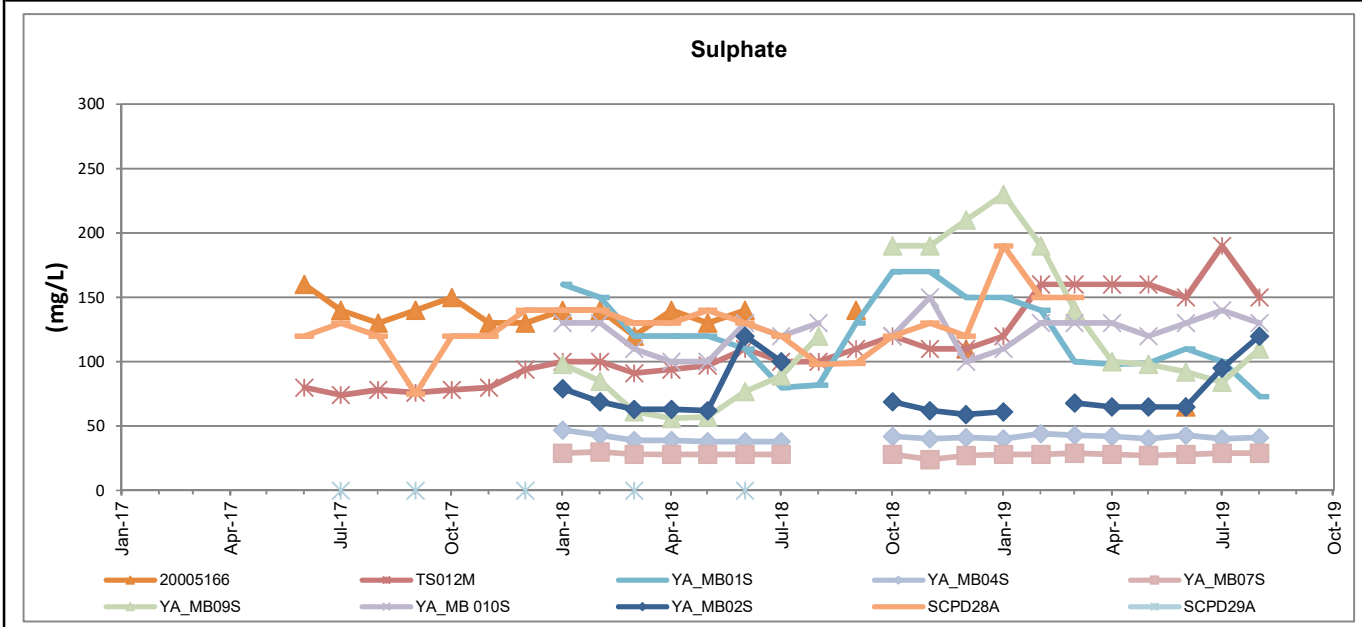
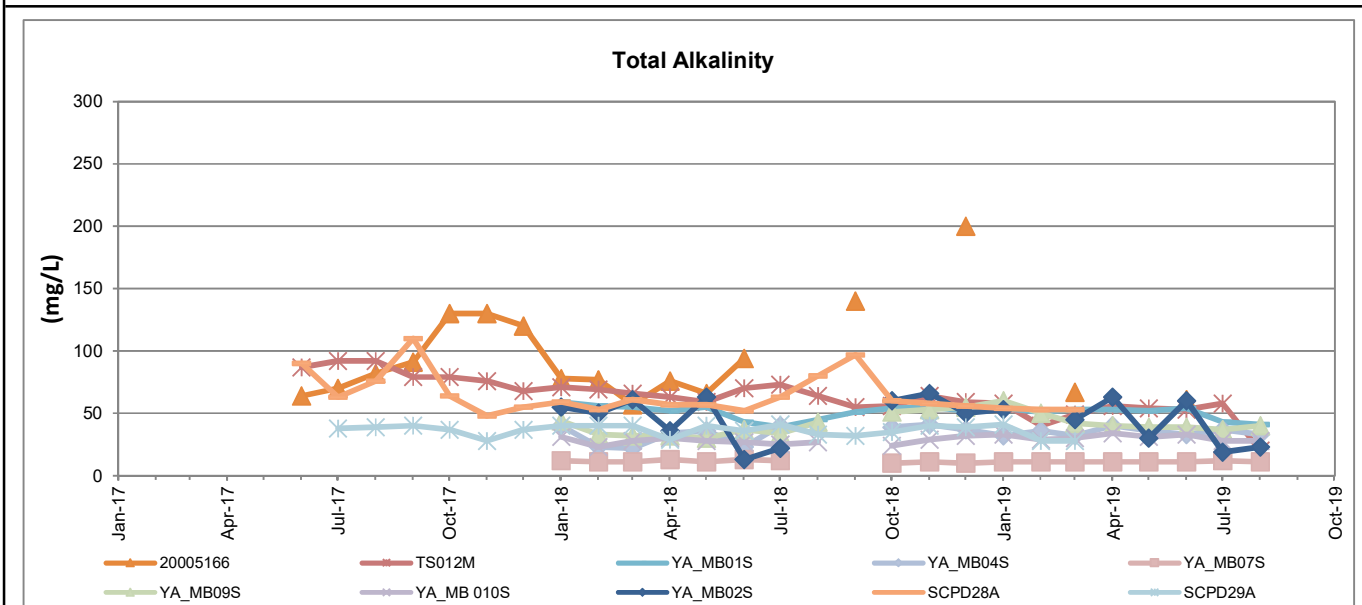
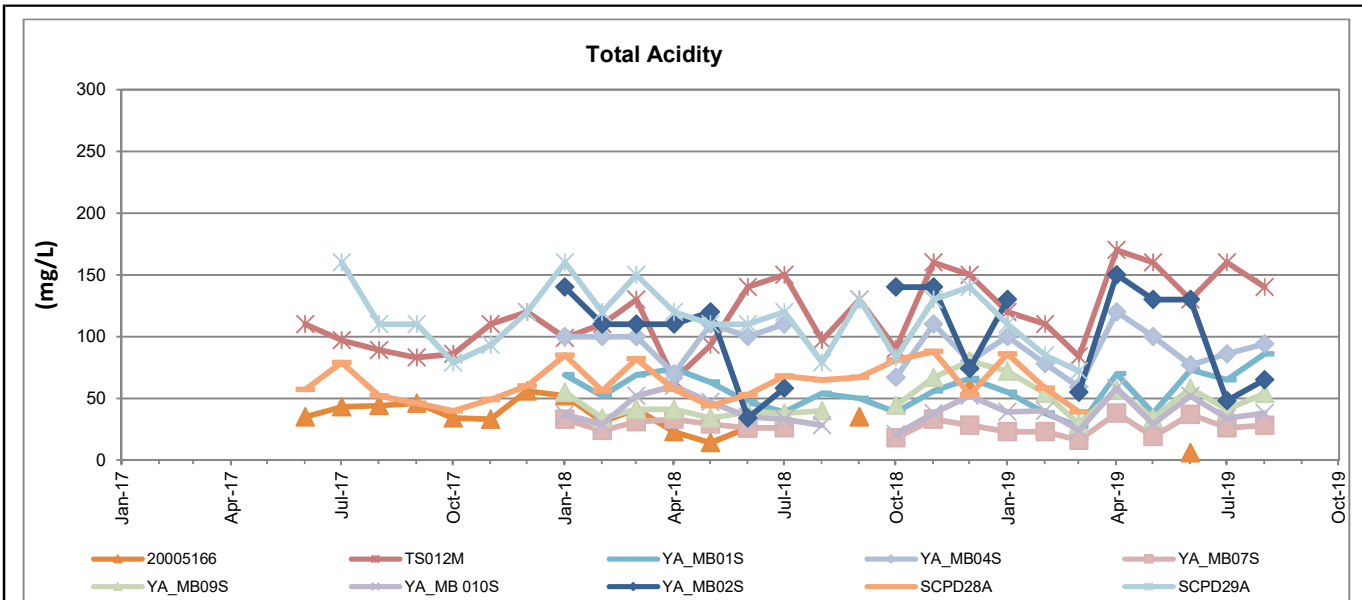


FIGURE 17

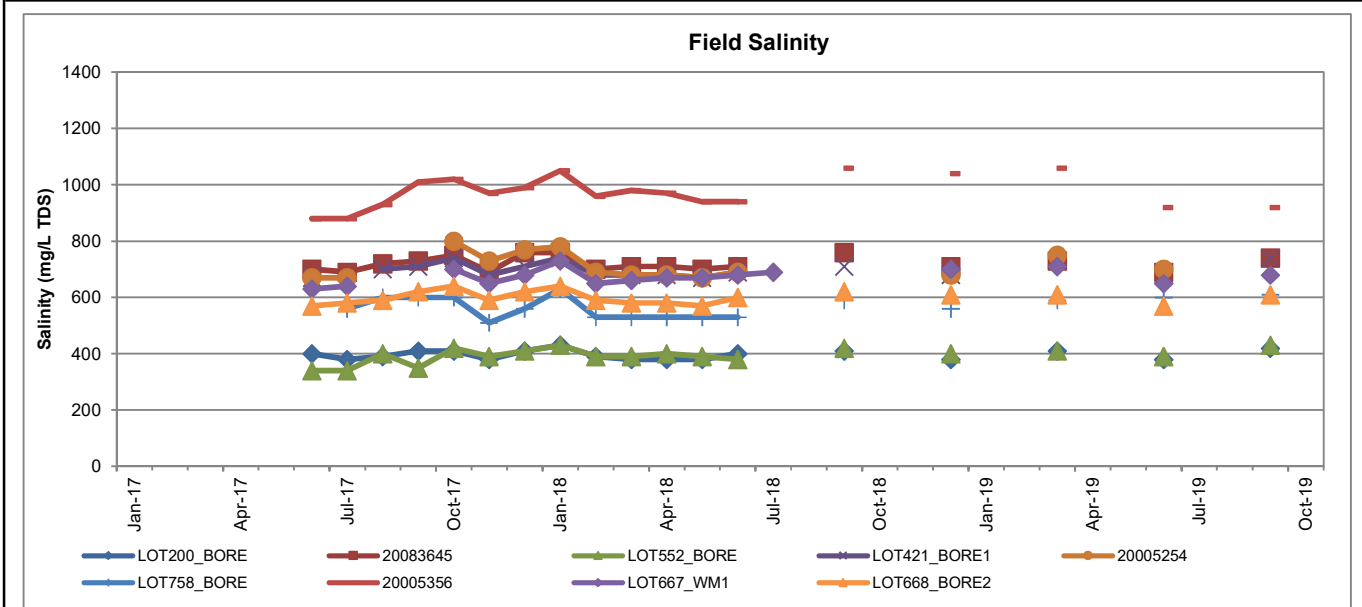
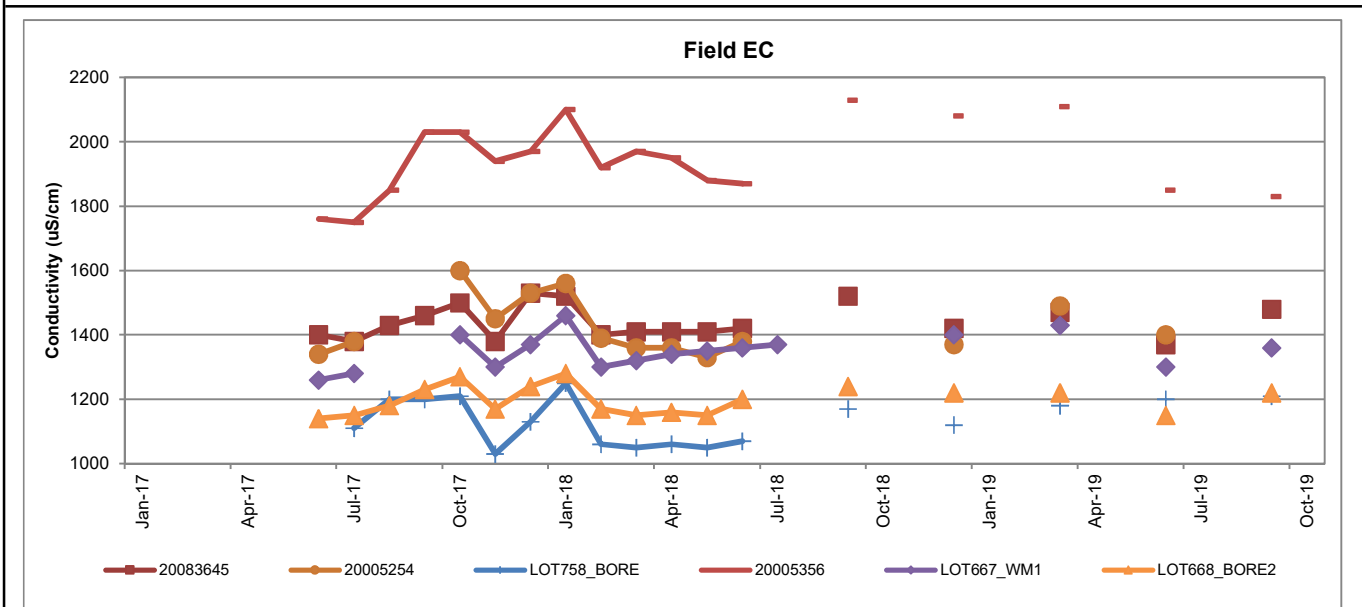
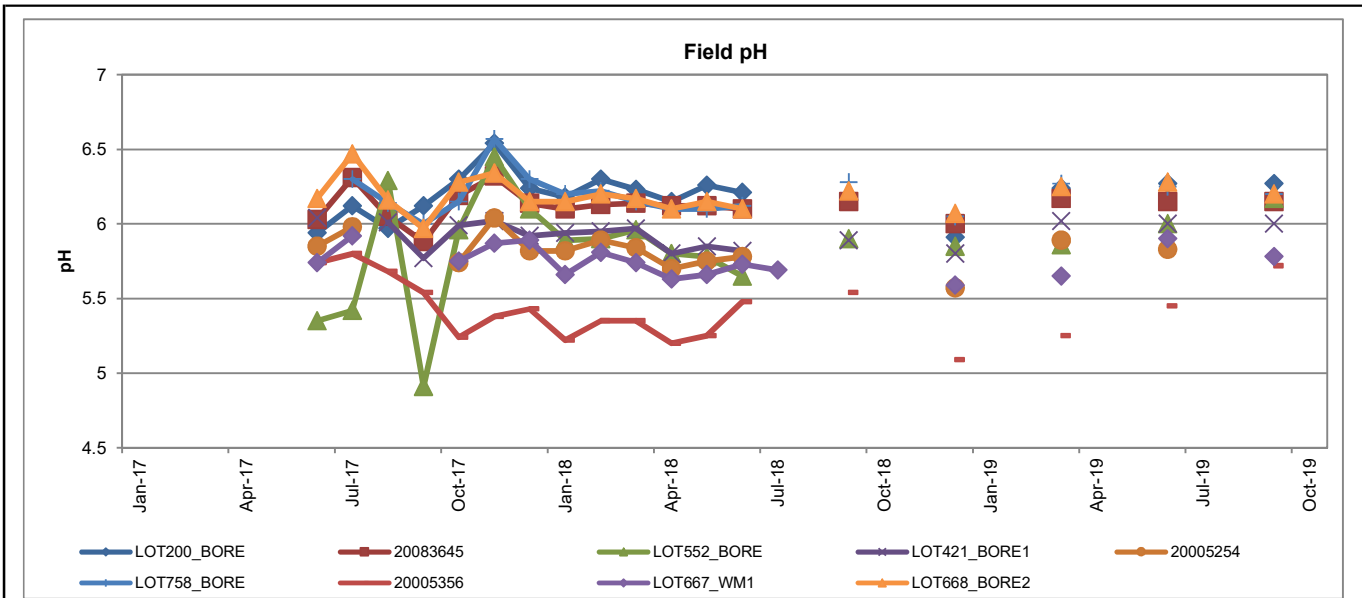
**SITE MEASURED
 GROUNDWATER LEVEL
 CONTOURS IN THE
 LEEDERVILLE AQUIFER FOR
 THE SUMMER PERIOD**



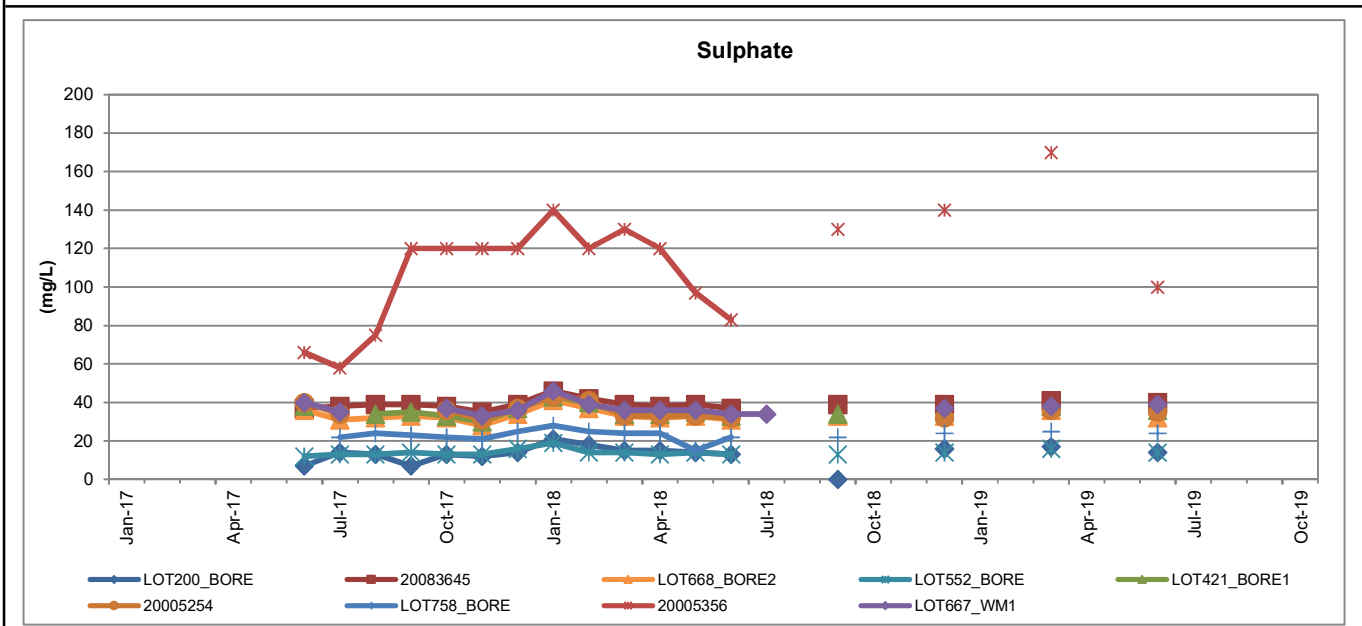
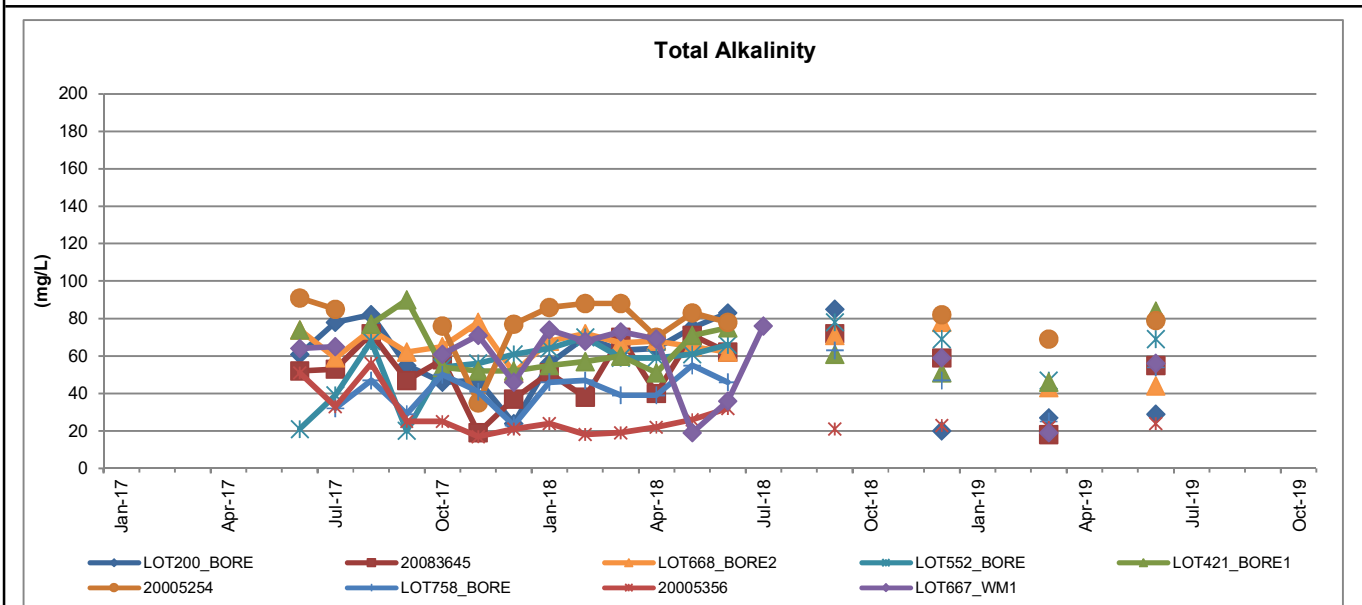
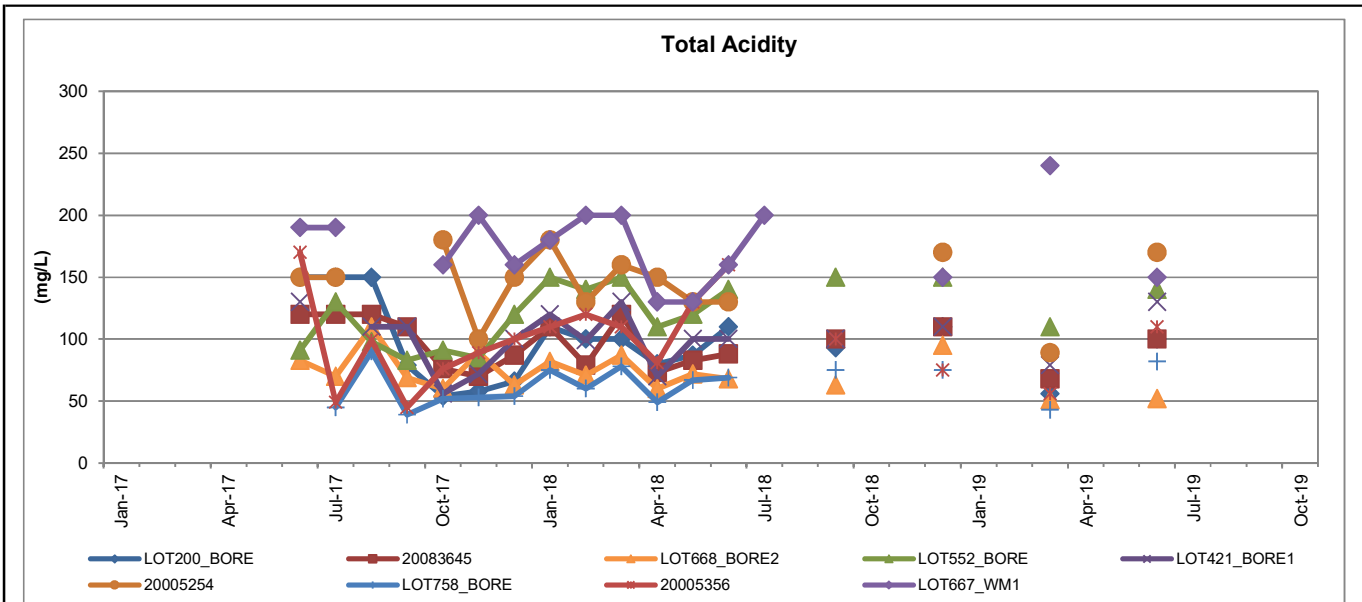
Superficial Aquifer Monitoring Bore Field Chemistry (pH, EC, TDS) Figure 18



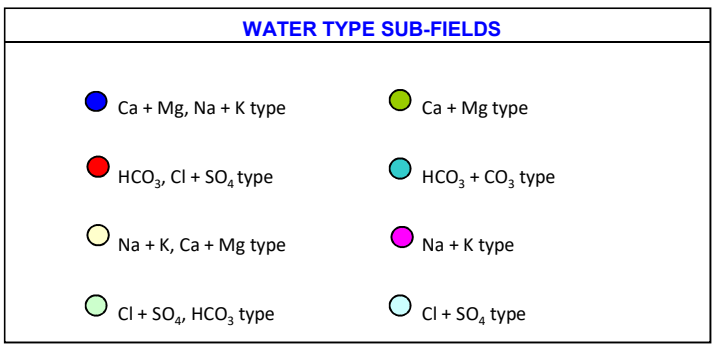
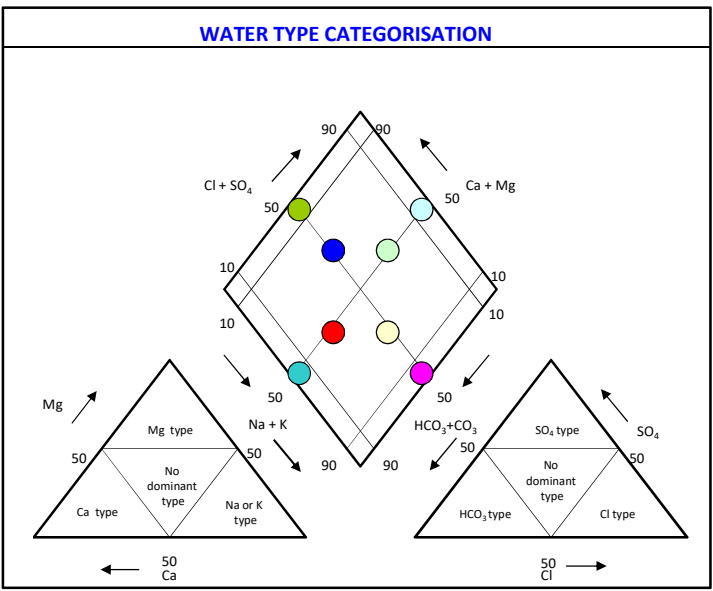
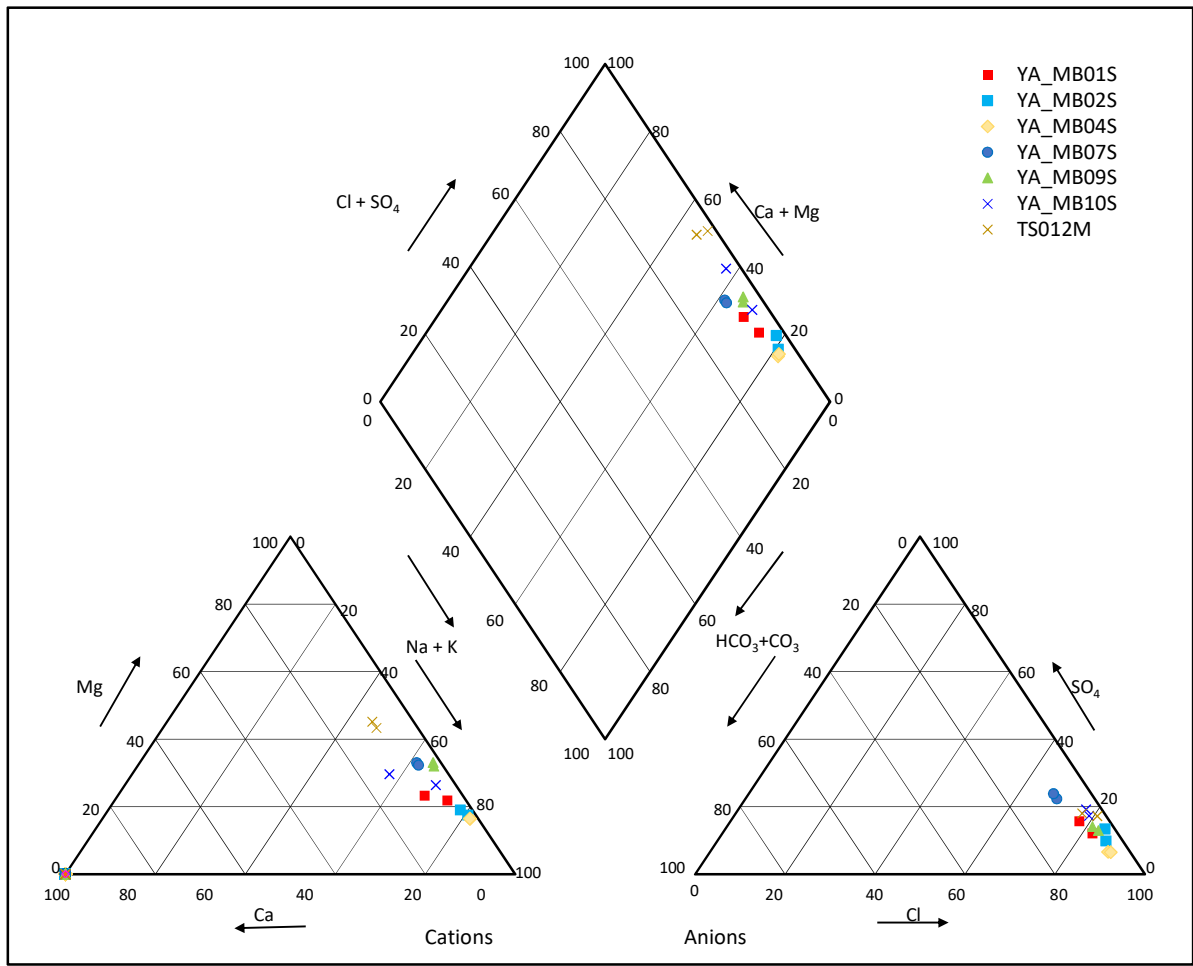
Superficial Aquifer Monitoring Bore Laboratory Chemistry (Total Acidity, Total Alkalinity, Sulphate)
Figure 19

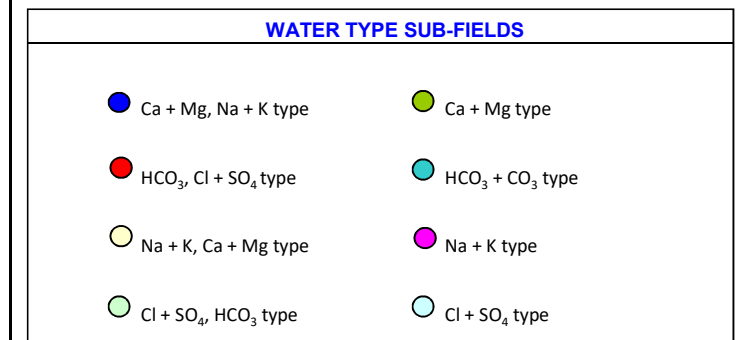
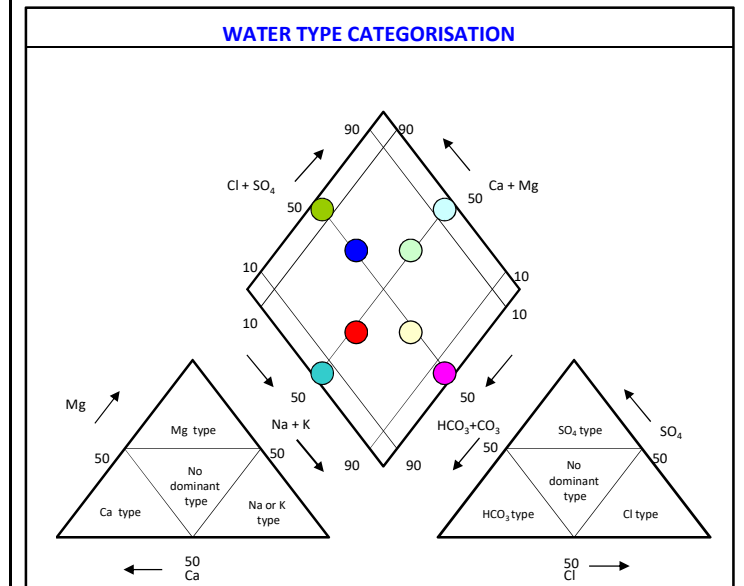
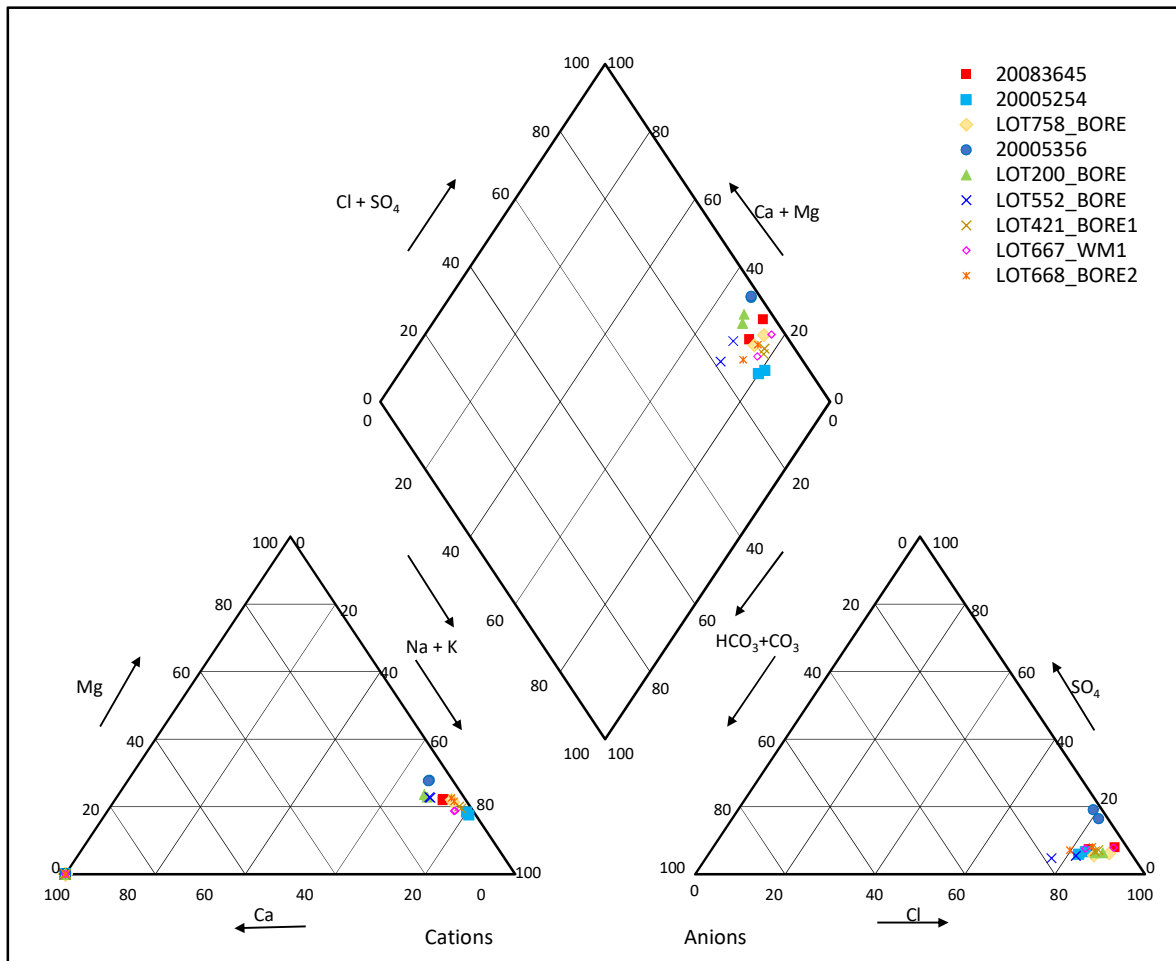


Leederville Aquifer Monitoring Bore Field Chemistry (pH, EC, TDS) Figure 20



Leederville Aquifer Monitoring Bore Laboratory Chemistry (Total Acidity, Total Alkalinity, Sulphate)
Figure 21





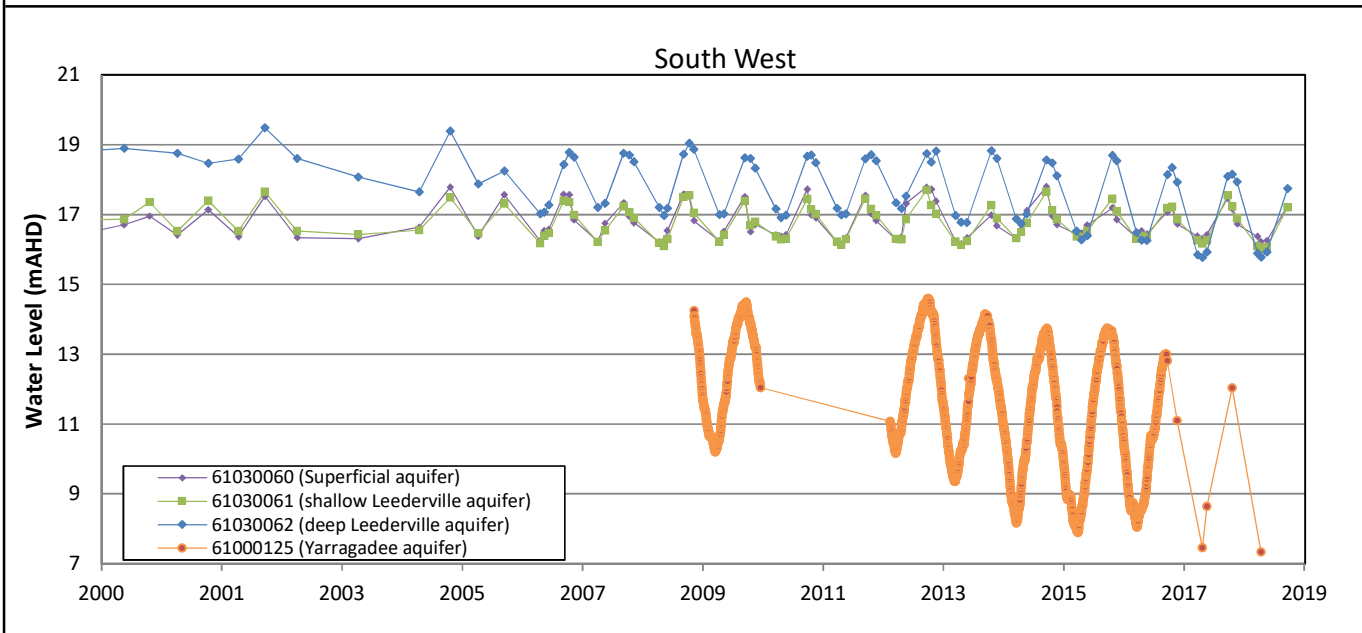
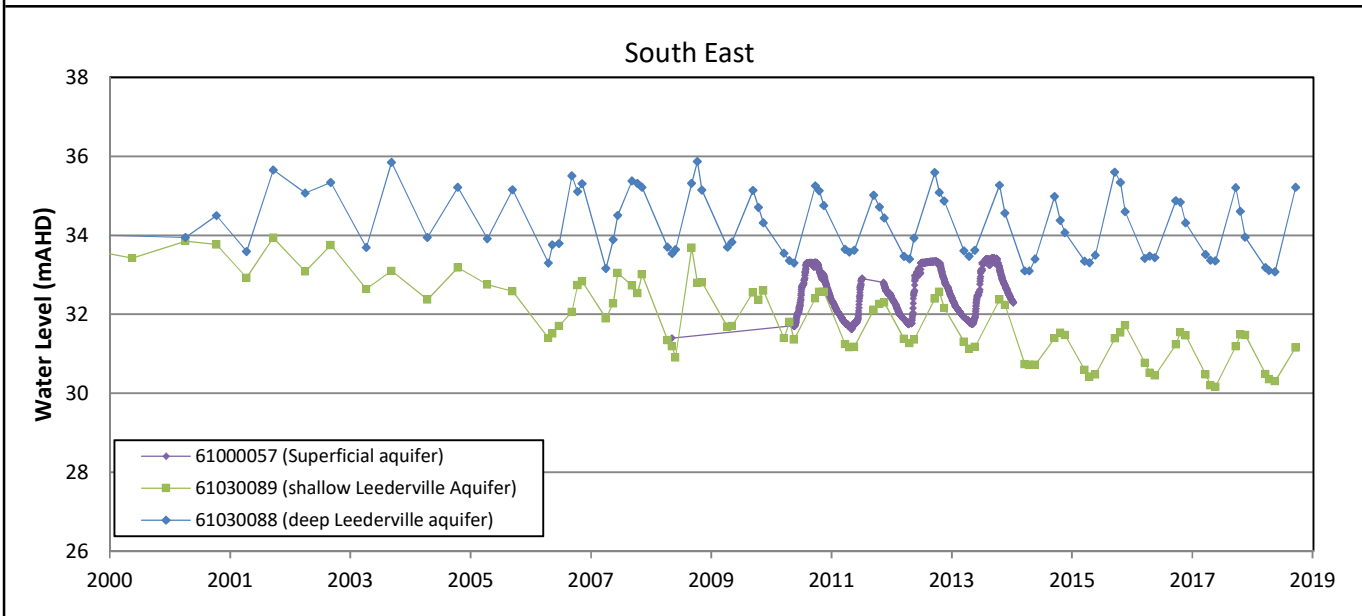
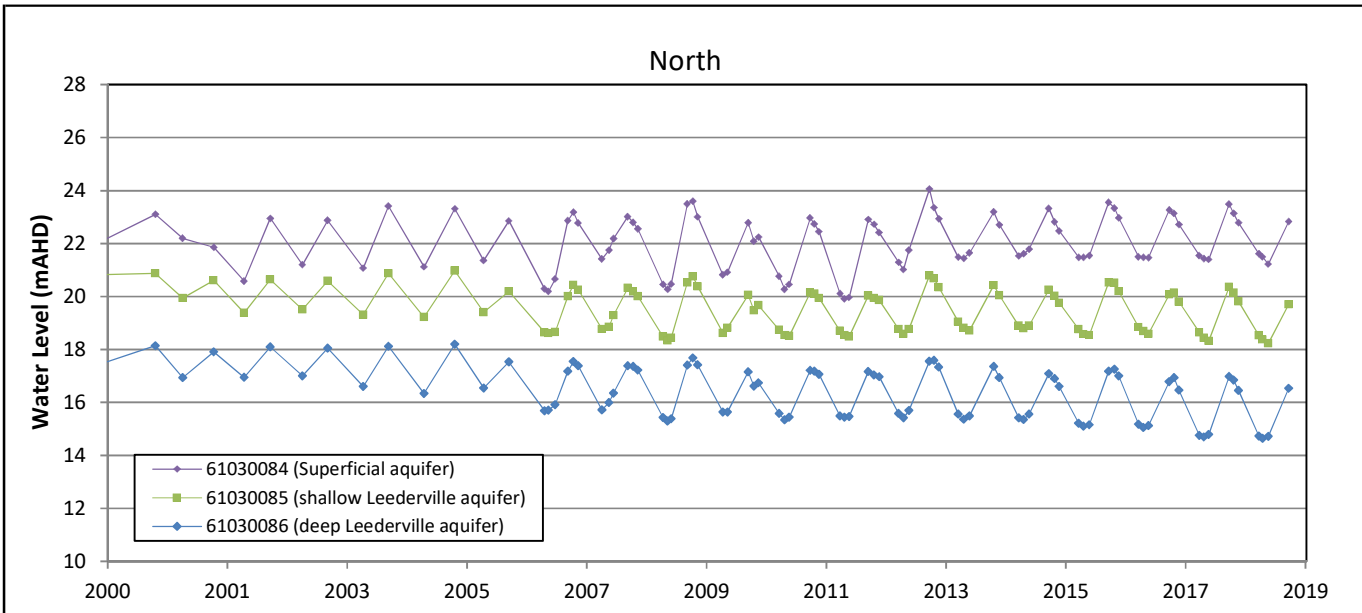
Piper Diagram - Leederville Aquifer Water Quality Data for December 2018 and March 2019

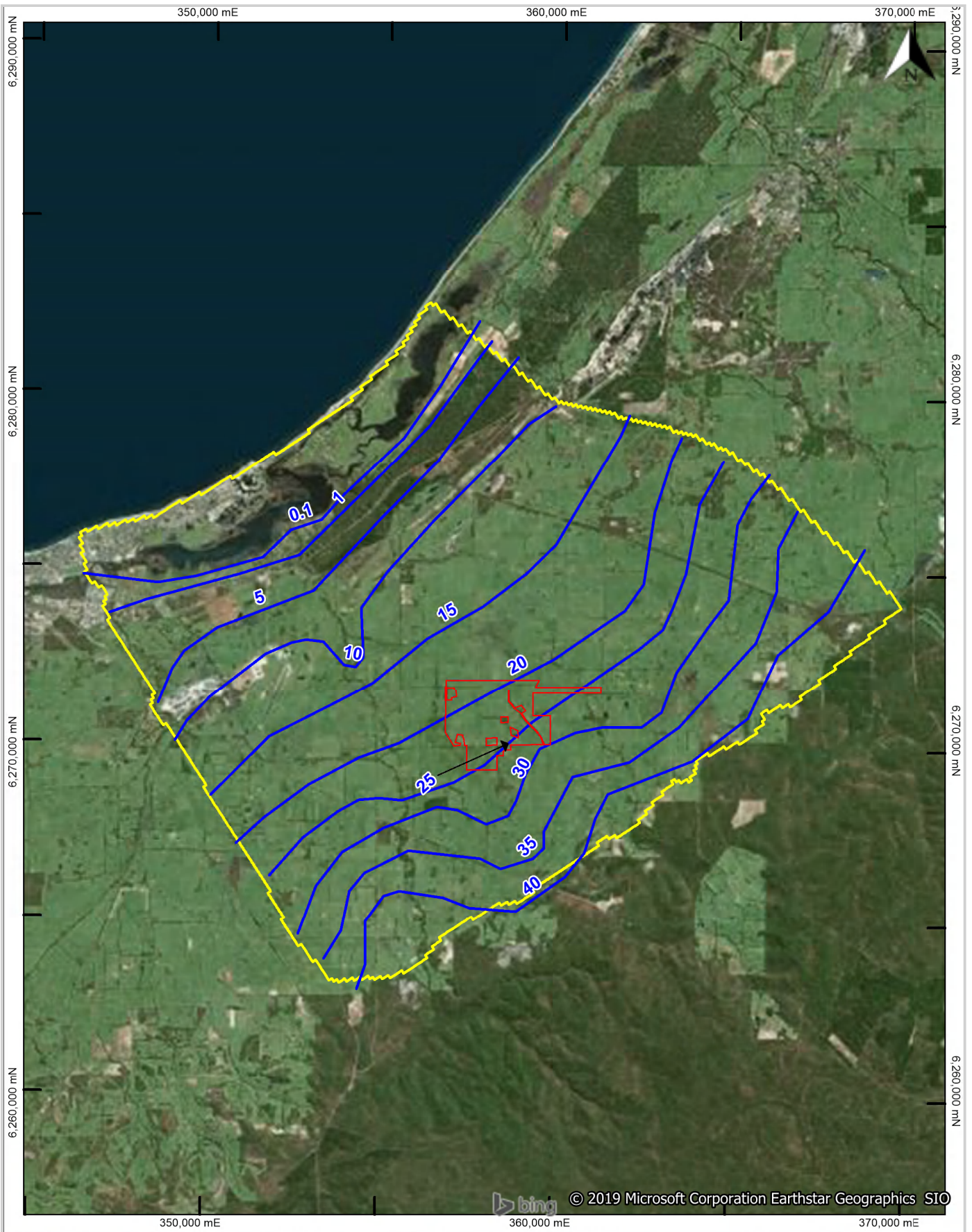
Figure 23

Date: 15/10/19

Project: Yalyalup Project
Project No: 136

Description: Hydrogeological Assessment
Client: Doral

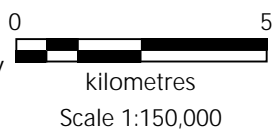




Legend

- Groundwater Model Boundary
- Yalyalup Site Disturbance Boundary
- Average Measured Superficial Aquifer Water Level (mRL)

Scale



AUTHOR: BK
 DRAWN: BK
 DATE: 23/10/2019

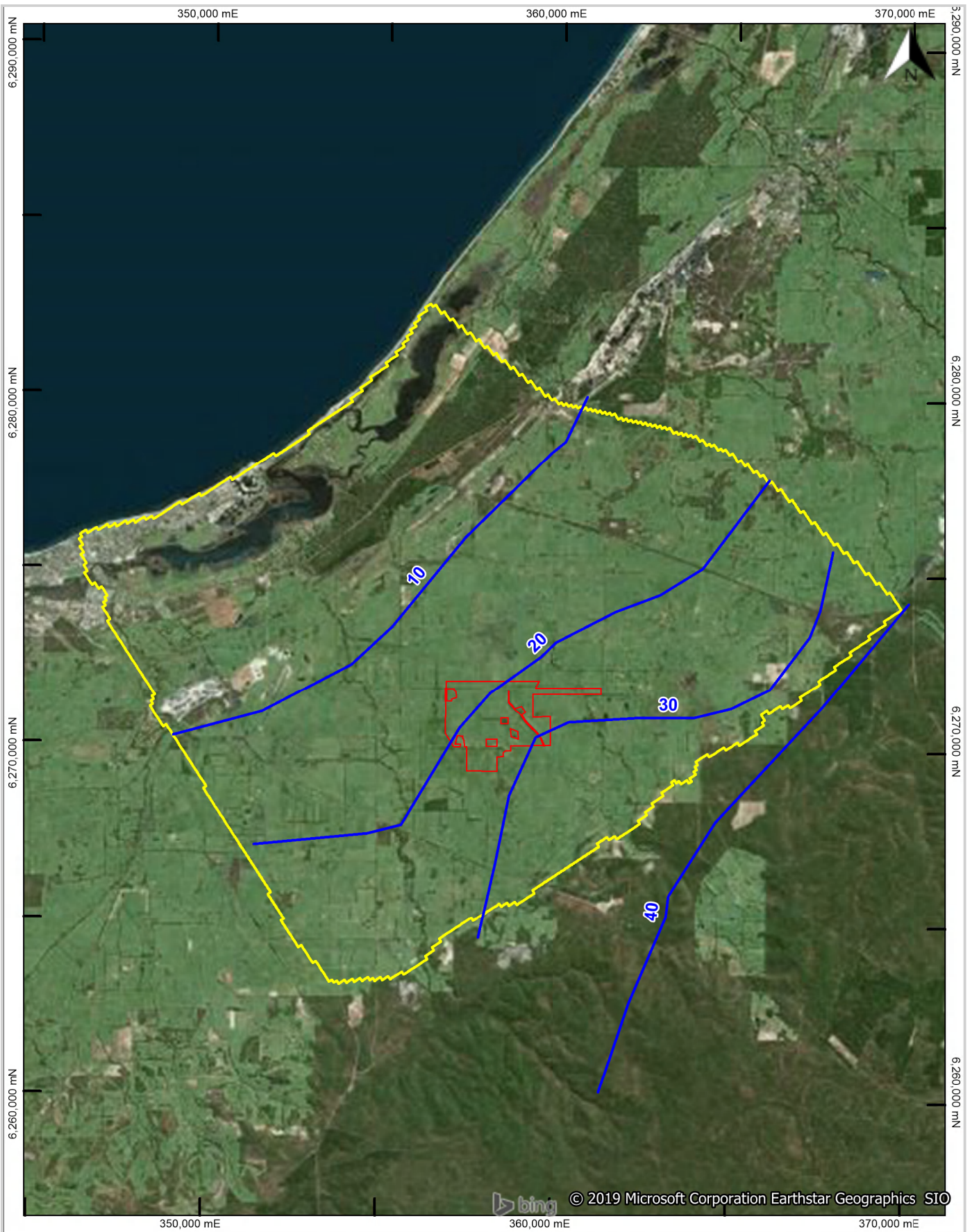
REPORT NO: 007
 REVISION: A
 JOB NO: 136

NOTES & DATA SOURCES:
 Mine outline provided by Doral
 Water Level Elevation Contours
 were taken from Baddock 2005!



FIGURE 25

AVERAGE MEASURED WATER TABLE ELEVATION CONTOURS IN THE SUPERFICIAL AQUIFER ACROSS THE MODELLED AREA



Legend

- Groundwater Model Boundary
- Yalyalup Site Disturbance Boundary
- Average Measured Leederville Aquifer Water Level (mRL)

Scale

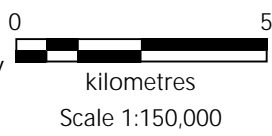


FIGURE 26

AVERAGE MEASURED WATER TABLE ELEVATION CONTOURS IN THE LEEDERVILLE AQUIFER ACROSS THE MODELLED AREA

AUTHOR: BK
 DRAWN: BK
 DATE: 23/10/2019

REPORT NO: 007
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