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Affidavit of Jordin Alexander Barclay

WAD 37 of 2022

Federal Court of Australia

District Registry: Western Australia

Division: General

YINDJIBARNDI NGURRA ABORIGINAL CORPORATION RNTBC

Applicant

STATE OF WESTERN AUSTRALIA & ORS

Respondents

Affidavit of: **Jordin Alexander Barclay**

Address: c/ Fortescue Metals Group, Level 2, 87 Adelaide Terrace, East Perth WA
6004

Occupation: Hydrogeologist

Date: 22 February 2024

Filed on behalf of (name & role of party)	FMG Pilbara Pty Ltd, Pilbara Energy (Generation) Pty Ltd, Pilbara Energy Company Pty Ltd, Pilbara Gas Pipeline Pty Ltd and The Pilbara Infrastructure Pty Ltd		
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I, Jordin Alexander Barclay, c/- Fortescue Metals Group, Level 2, 87 Adelaide Terrace, East Perth WA 6004, hydrogeologist, make oath and say as follows:

1. I am currently employed by FMG Personnel Services Pty Ltd, a subsidiary of Fortescue Metals Group Ltd (FMGL), as Senior Manager – Water Planning. I have been in this role since January 2023. Prior to being employed in this role, I have been employed by FMG Personnel Services Pty Ltd in various roles since December 2011.



2. I am authorised to make this affidavit on behalf of the 2nd to 6th respondents (**FMG Respondents**). In this statement, I refer to FMGL, the FMG Respondents, and other entities related to them collectively as “**FMG**”.
3. Unless otherwise stated, the facts contained in this affidavit are within my own knowledge and are true.

BACKGROUND

My Qualifications and role within FMG

4. I have the following qualifications:
 - (a) a Bachelor of Science (major in Geology/Earth Science) awarded by the University of Victoria; and
 - (b) a Master of Science (majoring in Hydrogeology) awarded by the University of British Columbia.
5. Between December 2011 and April 2013, I was employed by FMG as a Hydrogeology Superintendent. In April 2013, I was promoted to the role of Specialist Hydrogeologist at FMG. In August 2017, I was promoted to the role of Principal Hydrogeologist at FMG. In these roles, I worked for FMG in relation to both the Solomon Hub Mine and other mines operated by FMG. In relation to the Solomon mine, my duties involved supervision of a team of hydrogeologists and engineers with the primary function of providing water planning support for the Solomon operations. I have acted in that role for Solomon and other FMG mining operations since April 2018. My role has been Perth based, however, I have made several trips to Solomon for the purpose of stakeholder interactions.
6. In July 2019, I was promoted to the role of Manager – Water Planning at FMG. In January 2023, I was promoted to my current role as Senior Manager – Water Planning. My current role involves managing a team of hydrogeologists, water engineers and hydrologists to provide water planning support for FMG’s metals portfolio.



Purpose of this statement

7. I have been provided with, and have read, the Applicant's Expert Hydrologist's Report dated 19 December 2023 and prepared by Dr Huade Guan (the **Guan Report**). I have been informed, and believe, that FMG has engaged an expert hydrogeologist to write a responsive report to the Guan Report.
8. To assist FMG's expert hydrogeologist in the preparation of his responsive report, I caused documents to be prepared which compiled data that (1) FMG had already collected during its mining operations for various purposes, including complying with its reporting obligations, or (2) was available from publicly-available sources, as outlined below.
9. In this statement, where I state that I caused a document to be prepared (or similar), I provided instructions to a member of my team who then prepared the document, and I then reviewed that document before it was finalised.

PREPARATION OF HYDROGEOLOGICAL DATA

Rainfall Monitoring Data

10. On 15 January 2024, I caused to be prepared a spreadsheet entitled "*Rainfall Data and Analysis_VI*" (the **Rainfall Spreadsheet**). A copy of the Rainfall Spreadsheet is attached and marked "**JAB-1**".
11. The Rainfall Spreadsheet has compiled data available to FMG from internal and public sources which record rainfall levels within and surrounding the area of the Solomon Hub Mine, and from further afield in the Pilbara Region. The Rainfall Spreadsheet is broken up into several worksheets, which I further explain below. Specifically:
 - (a) The worksheet titled "Raw Data_Flat" records the data available to FMG from 11 rainfall gauges located within and in the vicinity of the Solomon Hub Mine (together, the **Solomon Area Stations**). 10 of the Solomon Area Stations are operated by FMG, whereas one (Solomon Airport AWS) is an automated weather station which delivers data to the Bureau of Meteorology ("**BOM**") and that data is publicly available from the BOM website. The data from the FMG-owned rainfall gauges is recorded on at least a daily frequency. Some of the



instruments transmit data via telemetry on at least a daily basis whilst other are manually downloaded on an ad-hoc basis. Once collected or transmitted, data is stored on FMG's systems.

- (b) The worksheets titled "Yalleen", "Mt Newman Aero", "Hamersley", "Mt Florance", "Wittenoom" and "Coolawanya" each record publicly available data accessible at the BOM website. Each worksheet records the data available from the station identified in the worksheet title. The Hamersley, Mt Florance, Wittenoom and Coolawanyah stations were chosen because they are the closest stations to the Solomon Hub area, whilst the Yalleen and Mt Newman Aero stations were included because they are relied upon in the Guan Report.
 - (c) The worksheet titled "CDFM Analysis_Solomon Area" contains a Cumulative Deviation from Mean ("CDFM") table and graph prepared by FMG, which compares the year-by-year data from the Solomon Area Stations against the mean rainfall recorded at each of the BOM automated stations identified in the other worksheets.
 - (d) The worksheet titled "CDFM Analysis_Regional Comparison" contains a CDFM table and graph comparing the annual rainfall from each of the BOM weather stations, and a compiled Solomon Area rainfall dataset (as explained below at paragraph 12(a) against the long-term and short term (i.e. between 2011-2023) mean recorded at the relevant station. In some cases, available data did not extend to 2023.
12. To prepare the worksheet titled "Raw Data_Flat", I caused a member of my team to adopt the following process:
- (a) First, the team member downloaded monthly aggregated (total monthly rainfall in mm) data from each of the Solomon Area Stations identified in the spreadsheet from FMG's systems and extracted that data into the spreadsheet in columns A – C. The data from each rainfall gauge for each month was transposed, via pivot table, into columns I to S of the worksheet. Where a rainfall gauge was not online for a month (and so no data was available for that month), the cell in the worksheet for the relevant month was deliberately left as blank (as



- distinct from a “0” entry, which means that there was no rainfall during that month).
- (b) Next, that team member calculated the average rainfall for each month, determined by the results drawn from those gauges that were online during the relevant month, and inserted that data into column T of the worksheet.
 - (c) Next, that team member calculated the average annual rainfall as the product of the average monthly rainfall for all available months in column T and the 12 months of the year. This value was entered into cell T164.
 - (d) Next, that team member summated, using a pivot table, the monthly data into annual totals, displayed the table in the columns X – Y of this worksheet. The numbers for the years 2010 and 2024 are much lower than the other averages because data is only available for a portion of each of those years. The years 2010 and 2024 were therefore omitted from further analysis.
 - (e) Next, that team member cross-checked the average rainfall for each month against the data recorded by the Mt Florance BOM automated station for the relevant month. The result of that cross-checking is set out in column V of the worksheet. The Mt Florance station was chosen because it is relatively close to the Solomon Hub Mine geographically, and has been consistently active during the period 2011 to 2023 (as compared to, for example, the Hamersley station, which is closer but was only active until 2015). The total deviation between monthly average rainfall recorded at the Solomon Area Stations and at the Mt Florance station during the period was recorded at cell V165.
13. To prepare the worksheets titled “Yalleen”, “Mt Newman Aero”, “Hamersley”, “Mt Florance”, “Wittenoom” and “Coolawanya”, I caused a member of my team to take the following steps. On 15 January 2024 the team member accessed and downloaded a full set of data (as daily rainfall totals in mm) recorded by BOM in relation to the relevant station from the website identified in cell A1 of each worksheet. The total rainfall recorded between 2011 and 2023 (or, where the data was limited during that period, all years within that period for which data was available) was summated, using a pivot table, and inserted into the table inset in each spreadsheet. The mean annual rainfall



statistic for all years of available data for each station was also extracted from the same BOM website referenced in cell A1 of each worksheet and entered above the table.

14. To prepare the worksheet titled CDFM Analysis_Solomon Area, I caused a member of my team to conduct the following process.
 - (a) First, the team member adopted a figure as the long term mean for each of the BOM automated stations, based on cell L4 in each of the other worksheets in paragraph 13. A mean for Solomon Area Stations was adopted from cell T164 of the Raw Data_Flat worksheet. The annual mean figures are outlined at cells B2 to B8 of the worksheet.
 - (b) Second, the annual rainfall data for the Solomon Area Stations, as calculated in the table referred to at paragraph 12(d) above, was reproduced at cells C12 to C26 of the worksheet.
 - (c) Third, the team member compared that annual rainfall data against the annual mean for each of the BOM automated stations and from the Solomon Area Stations, in order to perform a CDFM analysis against each of the annual mean figures. The team member then used Excel's chart function to prepare a CDFM graph showing that analysis.

15. To prepare the worksheet titled CDFM Analysis_Regional Comparis, a similar process was adopted. Specifically:
 - (a) First, the team member adopted the same figure as identified at paragraph 14(a) as the long-term annual mean for each of the BOM stations and the compiled Solomon Area data, which is expressed in Row 1 of the spreadsheet.
 - (b) Second, the team member calculated a short-term annual mean for each of the BOM stations by calculating the mean rainfall data between 2011 and 2023, which is expressed in Row 2 of the spreadsheet. For the compiled Solomon Area data, allowance was made to investigate CDFM compared to shorter term means from the data. As submitted, the shorter term mean was for annual total rainfall between 2018 and 2023 (inclusive).



- (c) Third, the team member reproduced the annual rainfall data for each of the BOM stations and the compiled Solomon Area data between 2011 and 2023, as set out in the tables referred to at paragraph 12 and 13 above, in the table in that worksheet.
 - (d) Fourth, the team member compared the annual rainfall data for each BOM station and the compiled Solomon Area data against the short-term (i.e. since 2011) and long-term annual mean for that station, in order to perform a CDFM analysis against that station's short-term and long-term annual mean figures. The team member then used Excel's chart function to prepare a single CDFM graph showing that analysis, with options to dynamically change which station(s) are presented at any time.
16. The chart which is located in that workbook can be manually adjusted using Excel's chart filter function, in order to display (for example) the results from selected stations only, or to display short-term or long-term data only.
17. To accompany the Rainfall Spreadsheet, on 15 January 2024 I caused to be prepared a PDF document titled "*Rainfall Map_VI*" (the **Rainfall Map**). A copy of the Rainfall Map is attached and marked "**JAB-2**". That document identifies:
- (a) with blue dots, the stations with data published to the BOM website referred to in the Rainfall Spreadsheet;
 - (b) with purple dots, automated stations with data published to the BOM website and also ingested into FMG's systems, located in the Pilbara region. Of these, the Solomon Airport AWS is referenced in the compiled Solomon Area data;
 - (c) with green dots, other rainfall monitoring stations maintained by FMG or third parties; and
 - (d) within the black box labelled "Solomon Area", the area in the vicinity of the Solomon Hub Mine from which the rainfall gauges identified in the Rainfall Spreadsheet, worksheet Raw Data_Flat, were drawn.



Groundwater Level Data

18. On 9 February 2024, I prepared a spreadsheet entitled “*Regional Groundwater Levels_rev1*” (the **Groundwater Spreadsheet**). A copy of the Groundwater Spreadsheet is attached and marked “**JAB-3**”. The Groundwater Spreadsheet was a corrected version of a previous document, prepared on 12 January 2024, which contained minor errors (in that it omitted the results from one groundwater bore, and contained errors in some of the document headings).
19. The Groundwater Spreadsheet records data available to FMG in relation to groundwater levels within and surrounding the area of the Solomon Hub Mine. That data is obtained by FMG from groundwater monitoring bores in the area surrounding the Solomon Hub Mine. Some of the bores are owned and operated by FMG, whilst others are owned by third parties. As I explain below, the Groundwater Spreadsheet was accompanied by a map showing the locations of these bores.
20. FMG obtains data from these bores by a combination of manual inspection (using commercially available water level meters) or automated data collection (using commercially available pressure transducers), with data submitted to FMG’s systems. The frequency of data collection varies from hours (for automated pressure transducers) to months or more for manual inspection.
21. As with the Rainfall Spreadsheet, the Groundwater Spreadsheet is split into worksheets. I explain the process by which the team member prepared each of the worksheets below.
22. In the worksheet titled “*Averaged Water Levels_mbrp*” in the Groundwater Spreadsheet:
 - (a) Column A records the name of the relevant groundwater monitoring bore, whereas Columns B and C record the geographic location of that bore.
 - (b) Column D records the average water level at the relevant bore, based on the mean of all daily water level readings (both manual and automated) from that bore. The measurements are recorded in metres below reference point (**mBRP**), with the “reference point” being an arbitrary point on the bore at surface, commonly the top of the bore casing.



- (c) Columns E and G record the first date on which a water level reading was taken from the relevant bore (as shown by the available data), and the daily average result of all readings on that day, measured in mbRP. Similarly, Columns F and H record the final date on which a water level reading was taken from that bore, and the daily average result of all the readings on that day.
 - (d) In column I, the average daily rate of change for each bore was determined by calculating the difference between the first water level reading (Column G) and the final water level reading (Column H), and then dividing the difference between the number of days between those readings (determined by reference to Columns E and F).
23. The worksheet "*Regional GWL Hydrograph*" contains a pivot table which is designed to display groundwater levels recorded at each of the groundwater monitoring bores. The pivot table can be manually adjusted to show the data from any of the bores by selecting the relevant bore from the table overlaid onto columns L through Q.
24. I caused a member of my team to create the pivot table through the following process.
- (a) First, the team member extracted the daily average water levels recorded at groundwater monitoring bores from FMG's records. As above, the data was recorded as daily average water levels mbRP, and is recorded in column G of the spreadsheet.
 - (b) Then, that same team member calculated the difference between each daily average water level and the initial water level reading and the overall average for the bore. The results of these calculations are in columns H and I respectively.
 - (c) Then, I conducted a CDFM analysis and displayed it in column J of the spreadsheet.
 - (d) Then, I used the Excel Graph function to create a graph to display that information. The graph enables an analyst to select one bore at a time and display one of columns G – J.



25. To accompany the Groundwater Spreadsheet, on 1 February 2024 I caused to be prepared a map titled "*Regional Groundwater Level Monitoring*" (**Groundwater Map**). A copy of the Groundwater Map is attached and marked "JAB-4".
26. I have confirmed with Mr Sean Costello, an employee of FMG, that he prepared the Groundwater Map based on instructions from a member of my team (which I had given to that team member). The instructions which I gave to that team member were to have a map prepared that identified the information I explain at paragraph 27 below, based on information derived from FMG's systems.
27. The Groundwater Map identifies:
- (a) in circles, the locations of groundwater monitoring bores identified in the Groundwater Spreadsheet. The circles are colour-coded based on the average rate of groundwater decline at the relevant bore, measured in metres per year. The average rate of decline was calculated by multiplying the average daily rate of change referred to at paragraph 22(d) above by 365.
 - (b) in triangles, the locations of flora sampling species referred to in the Guan Report as being either groundwater dependent or of potential groundwater dependence. The triangles are colour-coded to reflect the particular species identified.
 - (c) in background colours, the geological context surrounding the Solomon Hub. I am aware from my employment at FMG that the data underlying this geological context is publicly available from the Geological Survey of Western Australia, and that FMG uploads this data into its internal systems. The colours show the topmost geological unit at the relevant location. Based on my experience as a hydrogeologist and my work at FMG, I understand that the geological units are most commonly layered on top of each other, so that (for example) the paleochannels underlying the Solomon Hub Mine (coloured beige) sit on top of Brockman Iron Formation (coloured blue), which in turn may sit on top of other geological formations.



Groundwater Abstraction Data

28. On 15 January 2024, I caused to be prepared a spreadsheet entitled “*Abstraction Volume Check*” (the **Abstraction Spreadsheet**). A copy of the Abstraction Spreadsheet is attached and marked “**JAB-5**”.
29. The purpose of the Abstraction Spreadsheet was to check the statement at paragraph [11] of the Guan Report that “it is estimated that about 160 GL groundwater has been extracted from 2011 to 2022, based on the data provided in FMG’s triennial review reports”.
30. The Abstraction Spreadsheet was prepared by reviewing the data contained in FMG’s Solomon Triennial Aquifer Reviews for the years 2014-2017 and 2017-2019, and FMG’s Solomon Triennial Groundwater Monitoring Review for the years 2020-2022, and identifying the volumes of water reported to be extracted pursuant to FMG’s groundwater licences during that period. The volumes of water are recorded, in kilolitres, at column D of the spreadsheet.
31. Based on the data outlined in the Abstraction Spreadsheet, FMG reported in the triennial reports that it abstracted 148.9 GL of groundwater across all of its Solomon groundwater licences between August 2011 and December 2022 inclusive. Of this amount, 28.9 GL of groundwater was abstracted from the Stockyard Supply, Southern Fortescue Supply, and Airstrip Supply, each of which is located entirely outside the areas of Solomon that are or will be dewatered and mined.
32. The Abstraction Spreadsheet does not document the amount of groundwater that FMG has reinjected into Kangeenarina Creek, Weelumurra Creek, or elsewhere pursuant to its supplementation programmes. I have not been requested to address that issue.



Sworn by Jordin Alexander Barclay
At East Perth
in the State of Western Australia
on 22 February 2024

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Signature of deponent

Before me:



Signature of witness

KARL WELKER

a legal practitioner who has held
a practice certificate for at least
2 years and who holds a current
practice certificate.

“JAB-1”

WAD 37 of 2022

Federal Court of Australia

District Registry: Western Australia

Division: General

YINDJIBARNDI NGURRA ABORIGINAL CORPORATION RNTBC

Applicant

STATE OF WESTERN AUSTRALIA & ORS

Respondents

This is the annexure marked **JAB-1** referred to in the affidavit of Jordin Alexander Barclay sworn on 22 February 2024.



Signature of witness

KARL WELNER

a legal practitioner who has held a practice certificate for at least 2 years and who holds a current practice certificate.



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IDCJAC000: 005029	1930	3	22			22/01/1930
IDCJAC000: 005029	1930	3	23			23/01/1930
IDCJAC000: 005029	1930	3	24			24/01/1930
IDCJAC000: 005029	1930	3	25			25/01/1930
IDCJAC000: 005029	1930	3	26			26/01/1930
IDCJAC000: 005029	1930	3	27			27/01/1930
IDCJAC000: 005029	1930	3	28			28/01/1930
IDCJAC000: 005029	1930	3	29			29/01/1930
IDCJAC000: 005029	1930	3	30			30/01/1930
IDCJAC000: 005029	1930	3	31			31/01/1930
IDCJAC000: 005029	1930	4	1			1/01/1930
IDCJAC000: 005029	1930	4	2			2/01/1930
IDCJAC000: 005029	1930	4	3			3/01/1930
IDCJAC000: 005029	1930	4	4			4/01/1930
IDCJAC000: 005029	1930	4	5			5/01/1930
IDCJAC000: 005029	1930	4	6			6/01/1930
IDCJAC000: 005029	1930	4	7			7/01/1930
IDCJAC000: 005029	1930	4	8			8/01/1930

ObsCode=139&p_display_type=dataFile&p_startYear=&p_c=&p_stn_num=005029

BOM Statistics

Mean (all years)

372.8 mm

Row Labels	Sum of Rainfall amount (millimetres)
2011	506.9
2012	387.2
2013	421.5
2014	253.2
2015	378.5
2016	476.6
2017	524.4
2018	301.6
2019	243.9
2020	291.1
2021	484.7
2022	479.5
2023	383.5
Grand Total	5132.6

IDCJAC0001_007176_Data (accessed from http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_ncc)

Product code	Bureau of Meteorology	Year	Month	Day	Rainfall amount	Period	Quality	Date
IDCJAC000:007176		1971	1	1	1			1/01/1971
IDCJAC000:007176		1971	1	1	2			2/01/1971
IDCJAC000:007176		1971	1	1	3			3/01/1971
IDCJAC000:007176		1971	1	1	4			4/01/1971
IDCJAC000:007176		1971	1	1	5			5/01/1971
IDCJAC000:007176		1971	1	1	6			6/01/1971
IDCJAC000:007176		1971	1	1	7			7/01/1971
IDCJAC000:007176		1971	1	1	8			8/01/1971
IDCJAC000:007176		1971	1	1	9			9/01/1971
IDCJAC000:007176		1971	1	1	10			10/01/1971
IDCJAC000:007176		1971	1	1	11			11/01/1971
IDCJAC000:007176		1971	1	1	12			12/01/1971
IDCJAC000:007176		1971	1	1	13			13/01/1971
IDCJAC000:007176		1971	1	1	14			14/01/1971
IDCJAC000:007176		1971	1	1	15			15/01/1971
IDCJAC000:007176		1971	1	1	16			16/01/1971
IDCJAC000:007176		1971	1	1	17			17/01/1971
IDCJAC000:007176		1971	1	1	18			18/01/1971
IDCJAC000:007176		1971	1	1	19			19/01/1971
IDCJAC000:007176		1971	1	1	20			20/01/1971
IDCJAC000:007176		1971	1	1	21			21/01/1971
IDCJAC000:007176		1971	1	1	22			22/01/1971
IDCJAC000:007176		1971	1	1	23			23/01/1971
IDCJAC000:007176		1971	1	1	24			24/01/1971
IDCJAC000:007176		1971	1	1	25			25/01/1971
IDCJAC000:007176		1971	1	1	26			26/01/1971
IDCJAC000:007176		1971	1	1	27			27/01/1971
IDCJAC000:007176		1971	1	1	28			28/01/1971
IDCJAC000:007176		1971	1	1	29			29/01/1971
IDCJAC000:007176		1971	1	1	30			30/01/1971
IDCJAC000:007176		1971	1	1	31			31/01/1971
IDCJAC000:007176		1971	2	1	1			1/01/1971
IDCJAC000:007176		1971	2	1	2			2/01/1971
IDCJAC000:007176		1971	2	1	3			3/01/1971
IDCJAC000:007176		1971	2	1	4			4/01/1971
IDCJAC000:007176		1971	2	1	5			5/01/1971
IDCJAC000:007176		1971	2	1	6			6/01/1971
IDCJAC000:007176		1971	2	1	7			7/01/1971
IDCJAC000:007176		1971	2	1	8			8/01/1971
IDCJAC000:007176		1971	2	1	9			9/01/1971
IDCJAC000:007176		1971	2	1	10			10/01/1971
IDCJAC000:007176		1971	2	1	11			11/01/1971
IDCJAC000:007176		1971	2	1	12			12/01/1971
IDCJAC000:007176		1971	2	1	13			13/01/1971
IDCJAC000:007176		1971	2	1	14			14/01/1971
IDCJAC000:007176		1971	2	1	15			15/01/1971
IDCJAC000:007176		1971	2	1	16			16/01/1971
IDCJAC000:007176		1971	2	1	17			17/01/1971

IDCJAC000: 007176	1971	2	18	18/01/1971
IDCJAC000: 007176	1971	2	19	19/01/1971
IDCJAC000: 007176	1971	2	20	20/01/1971
IDCJAC000: 007176	1971	2	21	21/01/1971
IDCJAC000: 007176	1971	2	22	22/01/1971
IDCJAC000: 007176	1971	2	23	23/01/1971
IDCJAC000: 007176	1971	2	24	24/01/1971
IDCJAC000: 007176	1971	2	25	25/01/1971
IDCJAC000: 007176	1971	2	26	26/01/1971
IDCJAC000: 007176	1971	2	27	27/01/1971
IDCJAC000: 007176	1971	2	28	28/01/1971
IDCJAC000: 007176	1971	3	1	1/01/1971
IDCJAC000: 007176	1971	3	2	2/01/1971
IDCJAC000: 007176	1971	3	3	3/01/1971
IDCJAC000: 007176	1971	3	4	4/01/1971
IDCJAC000: 007176	1971	3	5	5/01/1971
IDCJAC000: 007176	1971	3	6	6/01/1971
IDCJAC000: 007176	1971	3	7	7/01/1971
IDCJAC000: 007176	1971	3	8	8/01/1971
IDCJAC000: 007176	1971	3	9	9/01/1971
IDCJAC000: 007176	1971	3	10	10/01/1971
IDCJAC000: 007176	1971	3	11	11/01/1971
IDCJAC000: 007176	1971	3	12	12/01/1971
IDCJAC000: 007176	1971	3	13	13/01/1971
IDCJAC000: 007176	1971	3	14	14/01/1971
IDCJAC000: 007176	1971	3	15	15/01/1971
IDCJAC000: 007176	1971	3	16	16/01/1971
IDCJAC000: 007176	1971	3	17	17/01/1971
IDCJAC000: 007176	1971	3	18	18/01/1971
IDCJAC000: 007176	1971	3	19	19/01/1971
IDCJAC000: 007176	1971	3	20	20/01/1971
IDCJAC000: 007176	1971	3	21	21/01/1971
IDCJAC000: 007176	1971	3	22	22/01/1971
IDCJAC000: 007176	1971	3	23	23/01/1971
IDCJAC000: 007176	1971	3	24	24/01/1971
IDCJAC000: 007176	1971	3	25	25/01/1971
IDCJAC000: 007176	1971	3	26	26/01/1971
IDCJAC000: 007176	1971	3	27	27/01/1971
IDCJAC000: 007176	1971	3	28	28/01/1971
IDCJAC000: 007176	1971	3	29	29/01/1971
IDCJAC000: 007176	1971	3	30	30/01/1971
IDCJAC000: 007176	1971	3	31	31/01/1971
IDCJAC000: 007176	1971	4	1	1/01/1971
IDCJAC000: 007176	1971	4	2	2/01/1971
IDCJAC000: 007176	1971	4	3	3/01/1971
IDCJAC000: 007176	1971	4	4	4/01/1971
IDCJAC000: 007176	1971	4	5	5/01/1971
IDCJAC000: 007176	1971	4	6	6/01/1971
IDCJAC000: 007176	1971	4	7	7/01/1971
IDCJAC000: 007176	1971	4	8	8/01/1971

ObsCode=136&p_display_type=dailyDataFile&p_startYear=&p_c=&p_stn_num=00

BOM Statistics
Mean (all years) 321.8 mm

Row Labels	Sum of Rainfall amount (millimetres)
2011	416.8
2012	453.2
2013	322.8
2014	363
2015	448.8
2016	238.8
2017	519
2018	206.4
2019	115.8
2020	359.2
2021	297
2022	296.4
2023	232.4
Grand Total	4269.6

IDCJAC0001_005005_Data (accessed from http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_ncc)

Product co	Bureau of	Year	Month	Day	Rainfall am	Period over	Quality	Date
IDCJAC000:005005		1912	1	1	1	0	Y	1/01/1912
IDCJAC000:005005		1912	1	2	2	0	Y	2/01/1912
IDCJAC000:005005		1912	1	3	3	0	Y	3/01/1912
IDCJAC000:005005		1912	1	4	4	0	Y	4/01/1912
IDCJAC000:005005		1912	1	5	5	0	Y	5/01/1912
IDCJAC000:005005		1912	1	6	6	0	Y	6/01/1912
IDCJAC000:005005		1912	1	7	7	0	Y	7/01/1912
IDCJAC000:005005		1912	1	8	8	0	Y	8/01/1912
IDCJAC000:005005		1912	1	9	9	0	Y	9/01/1912
IDCJAC000:005005		1912	1	10	10	0	Y	10/01/1912
IDCJAC000:005005		1912	1	11	11	0	Y	11/01/1912
IDCJAC000:005005		1912	1	12	12	0	Y	12/01/1912
IDCJAC000:005005		1912	1	13	13	0	Y	13/01/1912
IDCJAC000:005005		1912	1	14	14	0	Y	14/01/1912
IDCJAC000:005005		1912	1	15	15	0	Y	15/01/1912
IDCJAC000:005005		1912	1	16	16	4.1	1 Y	16/01/1912
IDCJAC000:005005		1912	1	17	17	0	Y	17/01/1912
IDCJAC000:005005		1912	1	18	18	0	Y	18/01/1912
IDCJAC000:005005		1912	1	19	19	0	Y	19/01/1912
IDCJAC000:005005		1912	1	20	20	0	Y	20/01/1912
IDCJAC000:005005		1912	1	21	21	0	Y	21/01/1912
IDCJAC000:005005		1912	1	22	22	0	Y	22/01/1912
IDCJAC000:005005		1912	1	23	23	0	Y	23/01/1912
IDCJAC000:005005		1912	1	24	24	0	Y	24/01/1912
IDCJAC000:005005		1912	1	25	25	0	Y	25/01/1912
IDCJAC000:005005		1912	1	26	26	23.1	1 Y	26/01/1912
IDCJAC000:005005		1912	1	27	27	0	Y	27/01/1912
IDCJAC000:005005		1912	1	28	28	0	Y	28/01/1912
IDCJAC000:005005		1912	1	29	29	0	Y	29/01/1912
IDCJAC000:005005		1912	1	30	30	0	Y	30/01/1912
IDCJAC000:005005		1912	1	31	31	0	Y	31/01/1912
IDCJAC000:005005		1912	2	1	1	0	Y	1/01/1912
IDCJAC000:005005		1912	2	2	2	0	Y	2/01/1912
IDCJAC000:005005		1912	2	3	3	0	Y	3/01/1912
IDCJAC000:005005		1912	2	4	4	0	Y	4/01/1912
IDCJAC000:005005		1912	2	5	5	0	Y	5/01/1912
IDCJAC000:005005		1912	2	6	6	0	Y	6/01/1912
IDCJAC000:005005		1912	2	7	7	11.4	1 Y	7/01/1912
IDCJAC000:005005		1912	2	8	8	0	Y	8/01/1912
IDCJAC000:005005		1912	2	9	9	1.3	1 Y	9/01/1912
IDCJAC000:005005		1912	2	10	10	0	Y	10/01/1912
IDCJAC000:005005		1912	2	11	11	0	Y	11/01/1912
IDCJAC000:005005		1912	2	12	12	28.4	1 Y	12/01/1912
IDCJAC000:005005		1912	2	13	13	0	Y	13/01/1912
IDCJAC000:005005		1912	2	14	14	0	Y	14/01/1912
IDCJAC000:005005		1912	2	15	15	0	Y	15/01/1912
IDCJAC000:005005		1912	2	16	16	0	Y	16/01/1912
IDCJAC000:005005		1912	2	17	17	0	Y	17/01/1912

IDCJAC000: 005005	1912	2	18	0	Y	18/01/1912
IDCJAC000: 005005	1912	2	19	0	Y	19/01/1912
IDCJAC000: 005005	1912	2	20	0	Y	20/01/1912
IDCJAC000: 005005	1912	2	21	0	Y	21/01/1912
IDCJAC000: 005005	1912	2	22	0	Y	22/01/1912
IDCJAC000: 005005	1912	2	23	0	Y	23/01/1912
IDCJAC000: 005005	1912	2	24	0	Y	24/01/1912
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IDCJAC000: 005005	1912	3	3	0	Y	3/01/1912
IDCJAC000: 005005	1912	3	4	0	Y	4/01/1912
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IDCJAC000: 005005	1912	3	6	0	Y	6/01/1912
IDCJAC000: 005005	1912	3	7	0	Y	7/01/1912
IDCJAC000: 005005	1912	3	8	0	Y	8/01/1912
IDCJAC000: 005005	1912	3	9	0	Y	9/01/1912
IDCJAC000: 005005	1912	3	10	0	Y	10/01/1912
IDCJAC000: 005005	1912	3	11	0	Y	11/01/1912
IDCJAC000: 005005	1912	3	12	0	Y	12/01/1912
IDCJAC000: 005005	1912	3	13	0	Y	13/01/1912
IDCJAC000: 005005	1912	3	14	0	Y	14/01/1912
IDCJAC000: 005005	1912	3	15	0	Y	15/01/1912
IDCJAC000: 005005	1912	3	16	0	Y	16/01/1912
IDCJAC000: 005005	1912	3	17	0	Y	17/01/1912
IDCJAC000: 005005	1912	3	18	0	Y	18/01/1912
IDCJAC000: 005005	1912	3	19	0	Y	19/01/1912
IDCJAC000: 005005	1912	3	20	0	Y	20/01/1912
IDCJAC000: 005005	1912	3	21	0	Y	21/01/1912
IDCJAC000: 005005	1912	3	22	73.7	1 Y	22/01/1912
IDCJAC000: 005005	1912	3	23	33	1 Y	23/01/1912
IDCJAC000: 005005	1912	3	24	0	Y	24/01/1912
IDCJAC000: 005005	1912	3	25	0	Y	25/01/1912
IDCJAC000: 005005	1912	3	26	0	Y	26/01/1912
IDCJAC000: 005005	1912	3	27	0	Y	27/01/1912
IDCJAC000: 005005	1912	3	28	0	Y	28/01/1912
IDCJAC000: 005005	1912	3	29	0	Y	29/01/1912
IDCJAC000: 005005	1912	3	30	0	Y	30/01/1912
IDCJAC000: 005005	1912	3	31	9.1	1 Y	31/01/1912
IDCJAC000: 005005	1912	4	1	0	Y	1/01/1912
IDCJAC000: 005005	1912	4	2	0	Y	2/01/1912
IDCJAC000: 005005	1912	4	3	0	Y	3/01/1912
IDCJAC000: 005005	1912	4	4	0	Y	4/01/1912
IDCJAC000: 005005	1912	4	5	0	Y	5/01/1912
IDCJAC000: 005005	1912	4	6	0	Y	6/01/1912
IDCJAC000: 005005	1912	4	7	0	Y	7/01/1912

ObsCode=139&p_display_type=dataFile&p_startYear=&p_c=&p_stn_nu

BOM Statistics
Mean (all years) 384.5

Row Labels	Sum of Rainfall amount (millimetres)
2011	450.6
2012	425.5
2013	491
2014	323
2015	323.5
Grand Total	2013.6

Product co-Station number	Year	Month	Monthly Precipitation Total (millimetres)
IDCJAC000:005014	1886	7	8.1
IDCJAC000:005014	1886	8	2
IDCJAC000:005014	1886	9	0
IDCJAC000:005014	1886	10	0
IDCJAC000:005014	1886	11	1.8
IDCJAC000:005014	1886	12	23.9
IDCJAC000:005014	1887	1	147.1
IDCJAC000:005014	1887	2	60.7
IDCJAC000:005014	1887	3	37.6
IDCJAC000:005014	1887	4	68.6
IDCJAC000:005014	1887	5	28.2
IDCJAC000:005014	1887	6	53.3
IDCJAC000:005014	1887	7	7.1
IDCJAC000:005014	1887	8	0.5
IDCJAC000:005014	1887	9	0
IDCJAC000:005014	1887	10	0
IDCJAC000:005014	1887	11	0
IDCJAC000:005014	1887	12	13.7
IDCJAC000:005014	1888	1	133.9
IDCJAC000:005014	1888	2	50.5
IDCJAC000:005014	1888	3	4.1
IDCJAC000:005014	1888	4	35.6
IDCJAC000:005014	1888	5	16.5
IDCJAC000:005014	1888	6	27.7
IDCJAC000:005014	1888	7	18.5
IDCJAC000:005014	1888	8	14.2
IDCJAC000:005014	1888	9	0.3
IDCJAC000:005014	1888	10	0.3
IDCJAC000:005014	1888	11	0
IDCJAC000:005014	1888	12	22.4
IDCJAC000:005014	1889	1	109.2
IDCJAC000:005014	1889	2	73.2
IDCJAC000:005014	1889	3	40.4
IDCJAC000:005014	1889	4	0
IDCJAC000:005014	1889	5	27.9
IDCJAC000:005014	1889	6	35.6
IDCJAC000:005014	1889	7	3
IDCJAC000:005014	1889	8	14
IDCJAC000:005014	1889	9	0
IDCJAC000:005014	1889	10	0
IDCJAC000:005014	1889	11	3
IDCJAC000:005014	1889	12	49.3
IDCJAC000:005014	1890	1	35.1
IDCJAC000:005014	1890	2	80.5
IDCJAC000:005014	1890	3	58.2
IDCJAC000:005014	1890	4	39.4
IDCJAC000:005014	1890	5	20.6
IDCJAC000:005014	1890	6	7.1
IDCJAC000:005014	1890	7	0

IDCJAC000: 005014	1890	8	0
IDCJAC000: 005014	1890	9	0
IDCJAC000: 005014	1890	10	0
IDCJAC000: 005014	1890	11	80.5
IDCJAC000: 005014	1890	12	0
IDCJAC000: 005014	1891	1	52.3
IDCJAC000: 005014	1891	2	19.3
IDCJAC000: 005014	1891	3	0
IDCJAC000: 005014	1891	4	0
IDCJAC000: 005014	1891	5	0
IDCJAC000: 005014	1891	6	11.4
IDCJAC000: 005014	1891	7	0
IDCJAC000: 005014	1891	8	0
IDCJAC000: 005014	1891	9	0
IDCJAC000: 005014	1891	10	0
IDCJAC000: 005014	1891	11	21.6
IDCJAC000: 005014	1891	12	35.3
IDCJAC000: 005014	1892	1	32
IDCJAC000: 005014	1892	2	16.3
IDCJAC000: 005014	1892	3	58.7
IDCJAC000: 005014	1892	4	0
IDCJAC000: 005014	1892	5	2.5
IDCJAC000: 005014	1892	6	0
IDCJAC000: 005014	1892	7	37.3
IDCJAC000: 005014	1892	8	0.8
IDCJAC000: 005014	1892	9	0
IDCJAC000: 005014	1892	10	0
IDCJAC000: 005014	1892	11	0
IDCJAC000: 005014	1892	12	14.2
IDCJAC000: 005014	1893	1	261.6
IDCJAC000: 005014	1893	2	102.6
IDCJAC000: 005014	1893	3	9.1
IDCJAC000: 005014	1893	4	53.3
IDCJAC000: 005014	1893	5	0
IDCJAC000: 005014	1893	6	78.5
IDCJAC000: 005014	1893	7	33
IDCJAC000: 005014	1893	8	0
IDCJAC000: 005014	1893	9	0
IDCJAC000: 005014	1893	10	0
IDCJAC000: 005014	1893	11	0
IDCJAC000: 005014	1893	12	24.1
IDCJAC000: 005014	1894	1	666.5
IDCJAC000: 005014	1894	2	38.1
IDCJAC000: 005014	1894	3	50.3
IDCJAC000: 005014	1894	4	0
IDCJAC000: 005014	1894	5	0
IDCJAC000: 005014	1894	6	0.5
IDCJAC000: 005014	1894	7	5.3
IDCJAC000: 005014	1894	8	0

Quality	Date
Y	1/7/1886
Y	1/8/1886
Y	1/9/1886
Y	1/10/1886
Y	1/11/1886
Y	1/12/1886
Y	1/1/1887
Y	1/2/1887
Y	1/3/1887
Y	1/4/1887
Y	1/5/1887
Y	1/6/1887
Y	1/7/1887
Y	1/8/1887
Y	1/9/1887
Y	1/10/1887
Y	1/11/1887
Y	1/12/1887
Y	1/1/1888
Y	1/2/1888
Y	1/3/1888
Y	1/4/1888
Y	1/5/1888
Y	1/6/1888
Y	1/7/1888
Y	1/8/1888
Y	1/9/1888
Y	1/10/1888
Y	1/11/1888
Y	1/12/1888
Y	1/1/1889
Y	1/2/1889
Y	1/3/1889
Y	1/4/1889
Y	1/5/1889
Y	1/6/1889
Y	1/7/1889
Y	1/8/1889
Y	1/9/1889
Y	1/10/1889
Y	1/11/1889
Y	1/12/1889
Y	1/1/1890
Y	1/2/1890
Y	1/3/1890
Y	1/4/1890
Y	1/5/1890
Y	1/6/1890
Y	1/7/1890

BOM Statistics
Mean (all years)

377

Row Labels	Sum of Monthly Precipitation Total (millimetres)
2011	449
2012	333
2013	664.7
2014	456.3
2015	594.8
2016	362.2
2017	352.6
2018	266.4
2019	189.6
2020	483.2
2021	523.3
2022	474.7
2023	237
Grand Total	5386.8

Y	1/8/1890
Y	1/9/1890
Y	1/10/1890
Y	1/11/1890
Y	1/12/1890
Y	1/1/1891
Y	1/2/1891
Y	1/3/1891
Y	1/4/1891
Y	1/5/1891
Y	1/6/1891
Y	1/7/1891
Y	1/8/1891
Y	1/9/1891
Y	1/10/1891
Y	1/11/1891
Y	1/12/1891
Y	1/1/1892
Y	1/2/1892
Y	1/3/1892
Y	1/4/1892
Y	1/5/1892
Y	1/6/1892
Y	1/7/1892
Y	1/8/1892
Y	1/9/1892
Y	1/10/1892
Y	1/11/1892
Y	1/12/1892
Y	1/1/1893
Y	1/2/1893
Y	1/3/1893
Y	1/4/1893
Y	1/5/1893
Y	1/6/1893
Y	1/7/1893
Y	1/8/1893
Y	1/9/1893
Y	1/10/1893
Y	1/11/1893
Y	1/12/1893
Y	1/1/1894
Y	1/2/1894
Y	1/3/1894
Y	1/4/1894
Y	1/5/1894
Y	1/6/1894
Y	1/7/1894
Y	1/8/1894

IDCJAC0009_005026_1800_Data (accessed from <http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?>

Product cor Bureau of M Year	Month	Day	Rainfall am Period over Quality	Date
IDCJAC000 005026	1950 01	01		1/01/1950
IDCJAC000 005026	1950 01	02		2/01/1950
IDCJAC000 005026	1950 01	03		3/01/1950
IDCJAC000 005026	1950 01	04		4/01/1950
IDCJAC000 005026	1950 01	05		5/01/1950
IDCJAC000 005026	1950 01	06		6/01/1950
IDCJAC000 005026	1950 01	07		7/01/1950
IDCJAC000 005026	1950 01	08		8/01/1950
IDCJAC000 005026	1950 01	09		9/01/1950
IDCJAC000 005026	1950 01		10	10/01/1950
IDCJAC000 005026	1950 01		11	11/01/1950
IDCJAC000 005026	1950 01		12	12/01/1950
IDCJAC000 005026	1950 01		13	13/01/1950
IDCJAC000 005026	1950 01		14	14/01/1950
IDCJAC000 005026	1950 01		15	15/01/1950
IDCJAC000 005026	1950 01		16	16/01/1950
IDCJAC000 005026	1950 01		17	17/01/1950
IDCJAC000 005026	1950 01		18	18/01/1950
IDCJAC000 005026	1950 01		19	19/01/1950
IDCJAC000 005026	1950 01		20	20/01/1950
IDCJAC000 005026	1950 01		21	21/01/1950
IDCJAC000 005026	1950 01		22	22/01/1950
IDCJAC000 005026	1950 01		23	23/01/1950
IDCJAC000 005026	1950 01		24	24/01/1950
IDCJAC000 005026	1950 01		25	25/01/1950
IDCJAC000 005026	1950 01		26	26/01/1950
IDCJAC000 005026	1950 01		27	27/01/1950
IDCJAC000 005026	1950 01		28	28/01/1950
IDCJAC000 005026	1950 01		29	29/01/1950
IDCJAC000 005026	1950 01		30	30/01/1950
IDCJAC000 005026	1950 01		31	31/01/1950
IDCJAC000 005026	1950 02	01		1/01/1950
IDCJAC000 005026	1950 02	02		2/01/1950
IDCJAC000 005026	1950 02	03		3/01/1950
IDCJAC000 005026	1950 02	04		4/01/1950
IDCJAC000 005026	1950 02	05		5/01/1950
IDCJAC000 005026	1950 02	06		6/01/1950
IDCJAC000 005026	1950 02	07		7/01/1950
IDCJAC000 005026	1950 02	08		8/01/1950
IDCJAC000 005026	1950 02	09		9/01/1950
IDCJAC000 005026	1950 02		10	10/01/1950
IDCJAC000 005026	1950 02		11	11/01/1950
IDCJAC000 005026	1950 02		12	12/01/1950
IDCJAC000 005026	1950 02		13	13/01/1950
IDCJAC000 005026	1950 02		14	14/01/1950
IDCJAC000 005026	1950 02		15	15/01/1950
IDCJAC000 005026	1950 02		16	16/01/1950
IDCJAC000 005026	1950 02		17	17/01/1950

IDCJAC000 005026	1950 02	18	18/01/1950
IDCJAC000 005026	1950 02	19	19/01/1950
IDCJAC000 005026	1950 02	20	20/01/1950
IDCJAC000 005026	1950 02	21	21/01/1950
IDCJAC000 005026	1950 02	22	22/01/1950
IDCJAC000 005026	1950 02	23	23/01/1950
IDCJAC000 005026	1950 02	24	24/01/1950
IDCJAC000 005026	1950 02	25	25/01/1950
IDCJAC000 005026	1950 02	26	26/01/1950
IDCJAC000 005026	1950 02	27	27/01/1950
IDCJAC000 005026	1950 02	28	28/01/1950
IDCJAC000 005026	1950 03	01	1/01/1950
IDCJAC000 005026	1950 03	02	2/01/1950
IDCJAC000 005026	1950 03	03	3/01/1950
IDCJAC000 005026	1950 03	04	4/01/1950
IDCJAC000 005026	1950 03	05	5/01/1950
IDCJAC000 005026	1950 03	06	6/01/1950
IDCJAC000 005026	1950 03	07	7/01/1950
IDCJAC000 005026	1950 03	08	8/01/1950
IDCJAC000 005026	1950 03	09	9/01/1950
IDCJAC000 005026	1950 03	10	10/01/1950
IDCJAC000 005026	1950 03	11	11/01/1950
IDCJAC000 005026	1950 03	12	12/01/1950
IDCJAC000 005026	1950 03	13	13/01/1950
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IDCJAC000 005026	1950 03	15	15/01/1950
IDCJAC000 005026	1950 03	16	16/01/1950
IDCJAC000 005026	1950 03	17	17/01/1950
IDCJAC000 005026	1950 03	18	18/01/1950
IDCJAC000 005026	1950 03	19	19/01/1950
IDCJAC000 005026	1950 03	20	20/01/1950
IDCJAC000 005026	1950 03	21	21/01/1950
IDCJAC000 005026	1950 03	22	22/01/1950
IDCJAC000 005026	1950 03	23	23/01/1950
IDCJAC000 005026	1950 03	24	24/01/1950
IDCJAC000 005026	1950 03	25	25/01/1950
IDCJAC000 005026	1950 03	26	26/01/1950
IDCJAC000 005026	1950 03	27	27/01/1950
IDCJAC000 005026	1950 03	28	28/01/1950
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IDCJAC000 005026	1950 03	30	30/01/1950
IDCJAC000 005026	1950 03	31	31/01/1950
IDCJAC000 005026	1950 04	01	1/01/1950
IDCJAC000 005026	1950 04	02	2/01/1950
IDCJAC000 005026	1950 04	03	3/01/1950
IDCJAC000 005026	1950 04	04	4/01/1950
IDCJAC000 005026	1950 04	05	5/01/1950
IDCJAC000 005026	1950 04	06	6/01/1950
IDCJAC000 005026	1950 04	07	7/01/1950
IDCJAC000 005026	1950 04	08	8/01/1950

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BOM Statistics
Mean (all years) 457

Row Labels	Sum of Rainfall amount (millimetres)
2011	566
2012	604
2013	704.8
2014	394.8
2015	482.4
2016	316.6
2017	451
2018	428
2019	163.2
Grand Total	4110.8

IDCJAC0009_005001_1800_Data (accessed from <http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?>

Product code	Bureau of Meteorology	Year	Month	Day	Rainfall mm	Period over Quality	Date
IDCJAC000	005001	1923	01	01	0	Y	1/01/1923
IDCJAC000	005001	1923	01	02	0	Y	2/01/1923
IDCJAC000	005001	1923	01	03	11.2	1 Y	3/01/1923
IDCJAC000	005001	1923	01	04	29.2	1 Y	4/01/1923
IDCJAC000	005001	1923	01	05	0	Y	5/01/1923
IDCJAC000	005001	1923	01	06	0	Y	6/01/1923
IDCJAC000	005001	1923	01	07	0	Y	7/01/1923
IDCJAC000	005001	1923	01	08	2.3	1 Y	8/01/1923
IDCJAC000	005001	1923	01	09	0	Y	9/01/1923
IDCJAC000	005001	1923	01	10	0	Y	10/01/1923
IDCJAC000	005001	1923	01	11	0	Y	11/01/1923
IDCJAC000	005001	1923	01	12	0	Y	12/01/1923
IDCJAC000	005001	1923	01	13	0	Y	13/01/1923
IDCJAC000	005001	1923	01	14	0	Y	14/01/1923
IDCJAC000	005001	1923	01	15	2.8	1 Y	15/01/1923
IDCJAC000	005001	1923	01	16	0	Y	16/01/1923
IDCJAC000	005001	1923	01	17	0	Y	17/01/1923
IDCJAC000	005001	1923	01	18	0	Y	18/01/1923
IDCJAC000	005001	1923	01	19	4.1	1 Y	19/01/1923
IDCJAC000	005001	1923	01	20	0	Y	20/01/1923
IDCJAC000	005001	1923	01	21	0	Y	21/01/1923
IDCJAC000	005001	1923	01	22	0	Y	22/01/1923
IDCJAC000	005001	1923	01	23	0	Y	23/01/1923
IDCJAC000	005001	1923	01	24	0	Y	24/01/1923
IDCJAC000	005001	1923	01	25	0	Y	25/01/1923
IDCJAC000	005001	1923	01	26	0	Y	26/01/1923
IDCJAC000	005001	1923	01	27	3.8	1 Y	27/01/1923
IDCJAC000	005001	1923	01	28	1	1 Y	28/01/1923
IDCJAC000	005001	1923	01	29	0	Y	29/01/1923
IDCJAC000	005001	1923	01	30	0	Y	30/01/1923
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IDCJAC000	005001	1923	02	01	0	Y	1/01/1923
IDCJAC000	005001	1923	02	02	0	Y	2/01/1923
IDCJAC000	005001	1923	02	03	0	Y	3/01/1923
IDCJAC000	005001	1923	02	04	0	Y	4/01/1923
IDCJAC000	005001	1923	02	05	0	Y	5/01/1923
IDCJAC000	005001	1923	02	06	0	Y	6/01/1923
IDCJAC000	005001	1923	02	07	0	Y	7/01/1923
IDCJAC000	005001	1923	02	08	0	Y	8/01/1923
IDCJAC000	005001	1923	02	09	0	Y	9/01/1923
IDCJAC000	005001	1923	02	10	4.1	1 Y	10/01/1923
IDCJAC000	005001	1923	02	11	0	Y	11/01/1923
IDCJAC000	005001	1923	02	12	2.3	1 Y	12/01/1923
IDCJAC000	005001	1923	02	13	0	Y	13/01/1923
IDCJAC000	005001	1923	02	14	0	Y	14/01/1923
IDCJAC000	005001	1923	02	15	0	Y	15/01/1923
IDCJAC000	005001	1923	02	16	0	Y	16/01/1923
IDCJAC000	005001	1923	02	17	0	Y	17/01/1923

IDCJAC000 005001	1923 02		18	3	1 Y	18/01/1923
IDCJAC000 005001	1923 02		19	0	Y	19/01/1923
IDCJAC000 005001	1923 02		20	0	Y	20/01/1923
IDCJAC000 005001	1923 02		21	0	Y	21/01/1923
IDCJAC000 005001	1923 02		22	0	Y	22/01/1923
IDCJAC000 005001	1923 02		23	0	Y	23/01/1923
IDCJAC000 005001	1923 02		24	0	Y	24/01/1923
IDCJAC000 005001	1923 02		25	0	Y	25/01/1923
IDCJAC000 005001	1923 02		26	0	Y	26/01/1923
IDCJAC000 005001	1923 02		27	31.5	1 Y	27/01/1923
IDCJAC000 005001	1923 02		28	6.4	1 Y	28/01/1923
IDCJAC000 005001	1923 03	01		0	Y	1/01/1923
IDCJAC000 005001	1923 03	02		0	Y	2/01/1923
IDCJAC000 005001	1923 03	03		0.3	1 Y	3/01/1923
IDCJAC000 005001	1923 03	04		2	1 Y	4/01/1923
IDCJAC000 005001	1923 03	05		13.2	1 Y	5/01/1923
IDCJAC000 005001	1923 03	06		2.5	1 Y	6/01/1923
IDCJAC000 005001	1923 03	07		0	Y	7/01/1923
IDCJAC000 005001	1923 03	08		0	Y	8/01/1923
IDCJAC000 005001	1923 03	09		0	Y	9/01/1923
IDCJAC000 005001	1923 03		10	4.8	1 Y	10/01/1923
IDCJAC000 005001	1923 03		11	0	Y	11/01/1923
IDCJAC000 005001	1923 03		12	0	Y	12/01/1923
IDCJAC000 005001	1923 03		13	0	Y	13/01/1923
IDCJAC000 005001	1923 03		14	0	Y	14/01/1923
IDCJAC000 005001	1923 03		15	0	Y	15/01/1923
IDCJAC000 005001	1923 03		16	0	Y	16/01/1923
IDCJAC000 005001	1923 03		17	0	Y	17/01/1923
IDCJAC000 005001	1923 03		18	0	Y	18/01/1923
IDCJAC000 005001	1923 03		19	0.8	1 Y	19/01/1923
IDCJAC000 005001	1923 03		20	0.8	1 Y	20/01/1923
IDCJAC000 005001	1923 03		21	2	1 Y	21/01/1923
IDCJAC000 005001	1923 03		22	6.6	1 Y	22/01/1923
IDCJAC000 005001	1923 03		23	11.2	1 Y	23/01/1923
IDCJAC000 005001	1923 03		24	0	Y	24/01/1923
IDCJAC000 005001	1923 03		25	0	Y	25/01/1923
IDCJAC000 005001	1923 03		26	0	Y	26/01/1923
IDCJAC000 005001	1923 03		27	0	Y	27/01/1923
IDCJAC000 005001	1923 03		28	0	Y	28/01/1923
IDCJAC000 005001	1923 03		29	0	Y	29/01/1923
IDCJAC000 005001	1923 03		30	0	Y	30/01/1923
IDCJAC000 005001	1923 03		31	0	Y	31/01/1923
IDCJAC000 005001	1923 04	01		0	Y	1/01/1923
IDCJAC000 005001	1923 04	02		0	Y	2/01/1923
IDCJAC000 005001	1923 04	03		0	Y	3/01/1923
IDCJAC000 005001	1923 04	04		0	Y	4/01/1923
IDCJAC000 005001	1923 04	05		0	Y	5/01/1923
IDCJAC000 005001	1923 04	06		7.9	1 Y	6/01/1923
IDCJAC000 005001	1923 04	07		0	Y	7/01/1923
IDCJAC000 005001	1923 04	08		0	Y	8/01/1923

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BOM Statistics
Mean (all years) 348.8

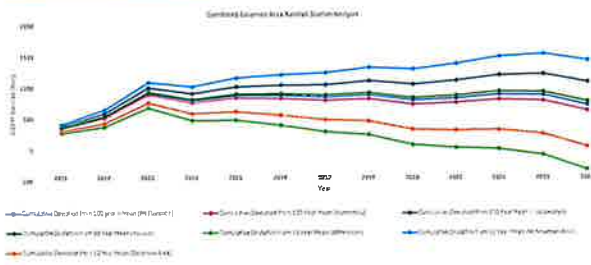
Row Labels	Sum of Rainfall amount (millimetres)
2011	579.6
2012	347.5
2013	647.2
2014	360.6
2015	493.7
2016	288.3
2017	306.8
2018	336.8
2019	276.1
2020	502.3
2021	416.2
2022	449
2023	363.1
Grand Total	5367.2

Adjusted annual mean 1 (pre)	377	From 8th February's long term record
Adjusted annual mean 2 (pre)	428	From Solihull's long term record with data only since 2010
Adjusted annual mean 3 (pre)	373	Yelland
Adjusted annual mean 4 (pre)	323	Mt. Pleasant Area
Adjusted annual mean 5 (pre)	367	Harveston
Adjusted annual mean 6 (pre)	437	Wittondon
Adjusted annual mean 7 (pre)	349	Codnameryn

38.95
-683.5889414

Cumulative Deviation from Mean 1

Year Label	Annual Rainfall from PM5 Stations	Deviation from Mean 1	Cumulative Deviation from 100	Deviation from Mean 2	Cumulative Deviation 1	Deviation 1	Cumulative Deviation 1	Deviation 1	Cumulative Deviation 1	Cumulative Deviation 1	Cumulative Deviation 1	Cumulative Deviation from 100 Year Mean (End of year)
Year	Annual Rainfall from PM5 Stations	Deviation from Mean 1	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use
2010	341.2083333	364.2083333	364.2083333	312.2083333	312.2083333	312.208	368	368	419	419	357	357
2011	504.4993333	177.4993333	541.7986667	124.4993333	437.707	182	550.187	203	652.197	170	532.757	57
2012	760.1483333	385.1483333	921.455	331.1483333	768.855	387	937.455	438	1090.46	376	902.555	503
2013	335.3383333	-121.7616667	803.0933333	-173.7616667	595.093	-118	818.893	-87	1023.89	-128	779.023	-302
2014	468.8123333	83.85233333	886.9457143	31.85233333	628.546	88	907.546	239	1143.25	76	819.446	4
2015	373.3933333	-110.7616667	851.8693333	-83.10733333	571.841	1	900.041	52	1215.04	-11	838.841	-83
2016	333.8333333	-28.07428571	860.7666667	-75.07428571	498.767	-19	890.187	33	1247.17	-31	808.267	-103
2017	415.0833333	34.08333333	894.8500000	-17.31416667	478.451	38	928.451	80	1326.45	77	824.823	-46
2018	796.1130000	461.8923333	813.9714286	135.8923333	949.971	-77	821.771	-36	1310.77	-48	746.471	-161
2019	408.3073333	31.30733333	845.8728571	-20.92142857	335.879	16	887.879	87	1397.88	24	770.879	-48
2020	438.3130000	61.21300000	907.0853333	8.100333333	335.098	65	953.298	116	1514.5	54	824.528	-19
2021	363.3373333	-13.84333333	893.2420000	-85.84333333	249.255	-10	943.655	41	1555.66	-21	902.355	-94
2022	322.8110000	-154.3803333	738.8673333	-208.3803333	63.874	-150	793.667	-99	1456.47	-162	641.367	-234
2023	1.45	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use	Incomplete year - do not use



“JAB-2”

WAD 37 of 2022

Federal Court of Australia

District Registry: Western Australia

Division: General

YINDJIBARNDI NGURRA ABORIGINAL CORPORATION RNTBC

Applicant

STATE OF WESTERN AUSTRALIA & ORS

Respondents

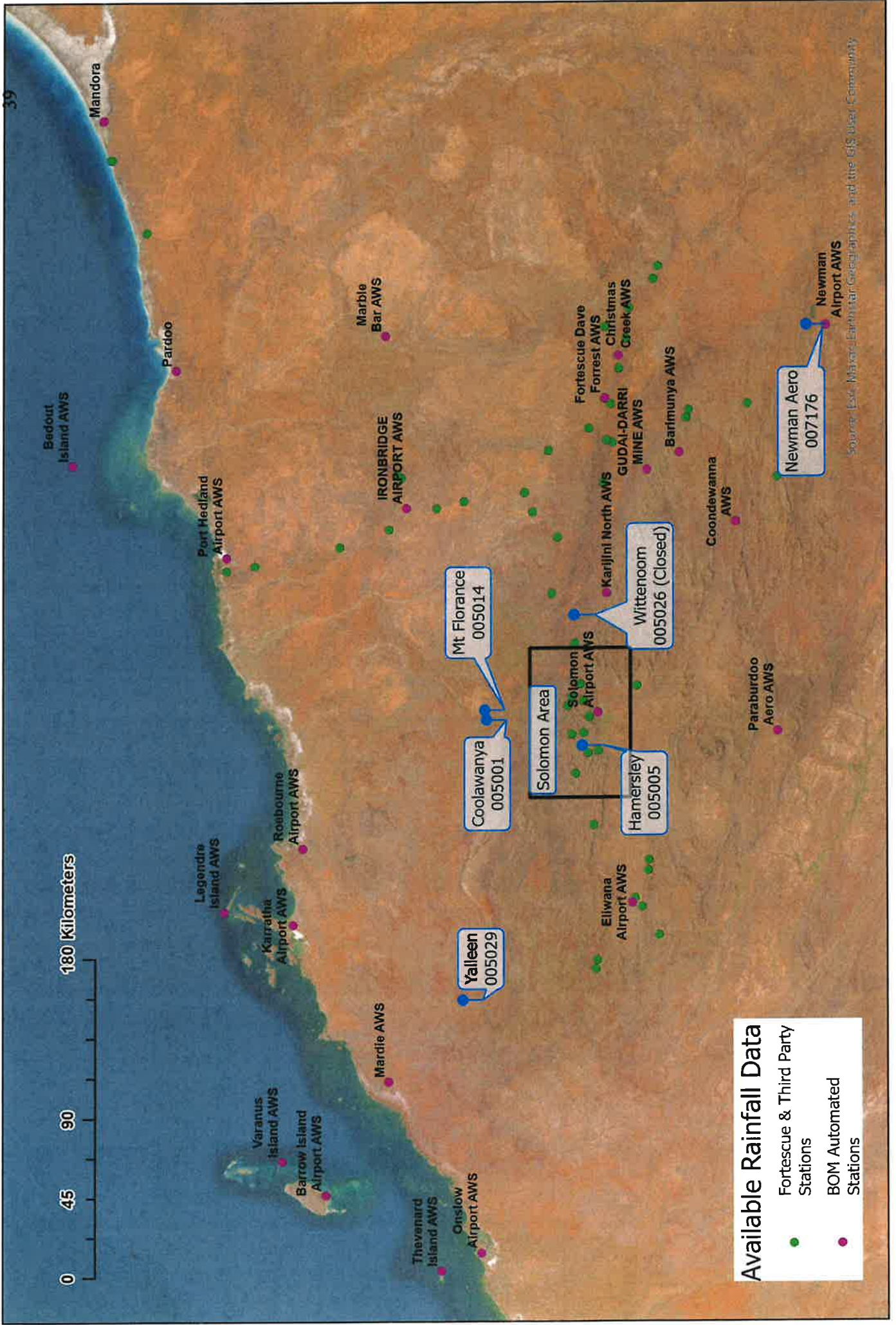
This is the annexure marked **JAB-2** referred to in the affidavit of Jordin Alexander Barclay sworn on 22 February 2024.



Signature of witness

KARL WELNER

a legal practitioner who has held a practice certificate for at least 2 years and who holds a current practice certificate.



Source: Esri, Maxar, Earthstar, GeoEye, Aero, and the GIS User Community

Available Rainfall Data

- Fortescue & Third Party Stations
- BOM Automated Stations

“JAB-3”

WAD 37 of 2022

Federal Court of Australia

District Registry: Western Australia

Division: General

YINDJIBARNDI NGURRA ABORIGINAL CORPORATION RNTBC

Applicant

STATE OF WESTERN AUSTRALIA & ORS

Respondents

This is the annexure marked **JAB-3** referred to in the affidavit of Jordin Alexander Barclay sworn on 22 February 2024.



Signature of witness

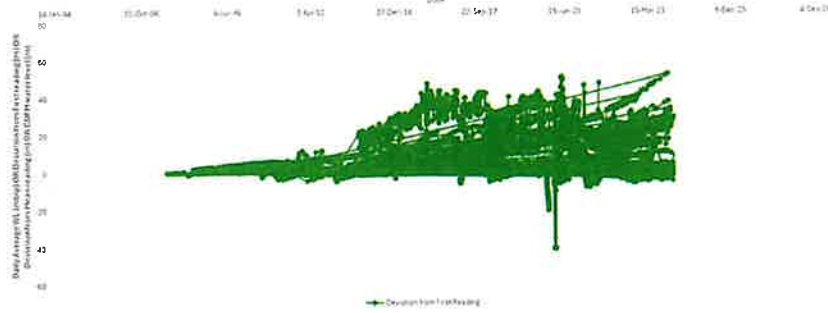
KARL WELNER

a legal practitioner who has held a practice certificate for at least 2 years and who holds a current practice certificate.

Sample Point Name	Sample Point Easting	Sample Point Northing	Average of Daily Avg. Water Level mbi	Date of first water level reading	Date of final water level reading	First water level	Final water level	Overall Rate of Change
16 Mile Bore	584625	7581156	8.892777777	21/07/2017	19/12/2023	8.72	10.62	0.0004
AS-MB038D	598043.75	7538075.726	18.76536696	26/09/2017	10/01/2024	18.97	17.44	-0.0007
AS-MB038E	598043.75	7538075.726	18.2764377	26/09/2017	6/01/2024	18.66	14.05	-0.0020
AS-MB038S	598043.194	7538063.336	18.18323364	26/09/2017	6/01/2024	17.57	18.29	0.0003
AS-MB041D	599197.107	7534495.314	18.59918266	14/10/2017	6/01/2024	17.84	18.60	0.0003
AS-MB041I	599197.107	7534495.314	18.51281498	14/10/2017	6/01/2024	17.8	18.57	0.0003
AS-MB041S	599197.581	7534507.334	19.04067087	14/10/2017	6/01/2024	18.16	19.12	0.0004
AS-MB042D	598005.937	7531356.865	24.90363951	17/03/2018	10/10/2023	24.24	25.27	0.0005
AS-MB042I	598005.937	7531356.865	24.94610143	17/03/2018	10/10/2023	24.27	25.31	0.0005
AS-MB042S	598005.236	7531368.959	23.61648107	17/03/2018	10/10/2023	22.96	23.99	0.0005
Cabbage Gum Bore	553851	7563228	3.232960418	26/05/2008	19/10/2022	2.34	3.70	0.0003
Cattle Well	585877	7535255	13.99431592	30/07/2008	10/01/2024	9.29	38.60	0.0052
Colman Bore	605159	7548447	52.30338663	11/07/2012	20/10/2023	50.94	55.89	0.0012
Colyean Bore	592955	7578596	3.235434783	5/08/2008	21/10/2023	3.1	3.40	0.0001
CPM01081F	553184	7543003	33.00163396	30/03/2023	30/03/2023	33.04	37.39	0.0010
CPM010D	553171	7542997	31.62515061	10/08/2011	30/03/2023	31.99	37.50	0.0013
CPM010S	553171	7542997	32.25095106	10/08/2011	30/03/2023	32.01	37.50	0.0013
CPM011D	555016.41	7552200.24	23.58458277	12/01/2011	30/03/2023	23.76	24.78	0.0002
CPM011S	555016	7552200	23.92114416	12/01/2011	30/03/2023	23.94	24.95	0.0002
CPM013B1F	565414	7540104	58.73636643	10/08/2011	21/05/2023	56.76	59.04	0.0005
CPM013S	565414	7540092	57.7323913	10/08/2011	27/09/2022	56.74	58.86	0.0005
CPM017D	570669	7541398	8.006451897	10/09/2011	20/05/2023	5.62	7.36	0.0004
CPM017D1D	570669	7541403	12.13469987	10/09/2011	20/05/2023	10.94	12.51	0.0004
CPM017S	570673	7541397	6.525696332	10/09/2011	6/01/2024	5.53	7.82	0.0005
CPP010	553174	7543009	32.78913043	10/08/2011	3/03/2023	32.17	37.34	0.0002
Encounter Bore	585378	7581929	3.640139747	4/08/2008	19/12/2023	3.56	3.94	0.0001
Kangli Well	583757.79	7537697.363	9.043161411	30/07/2008	6/01/2024	7.36	11.76	0.0008
KMB017	597598	7560985	19.1357252	9/04/2016	21/10/2023	20.39	20.82	0.0001
KMB15S	590451.019	7555998.011	1.50549645	13/02/2015	6/01/2024	1.73	1.78	0.0000
LF-MB001D	602781.827	7559814.438	20.73770527	15/02/2015	21/10/2023	19.29	21.27	0.0006
LF-MB001S	602786.588	7559816.729	21.00081346	15/02/2015	21/10/2023	19.54	21.54	0.0006
LF-MB002D	604821.121	7551031.32	31.46130435	15/02/2015	20/10/2023	31.2	33.07	0.0006
LF-MB002S	604823.04	7551025.68	36.61636364	15/02/2015	20/10/2023	35.08	38.41	0.0011
LF-MB004D	614364.214	7552252.813	13.01056818	15/02/2015	22/10/2023	11.98	14.09	0.0007
LF-MB004I	614351.745	7552256.559	12.86855556	15/02/2015	22/10/2023	11.83	13.92	0.0007
LF-MB004S	614345.308	7552260.973	13.04288889	15/02/2015	22/10/2023	12.01	14.11	0.0007
LF-MB005D	601639.39	7584166.092	13.01366667	15/02/2015	22/10/2023	11.97	14.07	0.0007
LF-MB005S	601622.627	7584165.947	27.75488372	15/02/2015	21/10/2023	26.25	28.66	0.0008
LF-PB004	614349.685	7552253.411	26.30529782	15/02/2015	20/10/2023	26.35	28.16	0.0006
Lucindae Bore	563643	7574391	13.03875	19/01/2011	19/05/2020	23.75	27.07	0.0010
Macca Bore	574751.715	7551632.441	27.32848837	3/08/2008	20/05/2023	3.56	7.37	0.0007
Matapan Well	565919	7563837	5.821374825	21/12/2010	10/01/2024	3.57	4.27	0.0001
Nelsons(Hamersley)	553968	7530709	3.262083333	30/07/2008	7/12/2022	11.93	12.93	0.0002
New Salt Bore	604111	7567290	8.052857143	5/08/2008	21/10/2023	6.4	9.08	0.0005
Old Millers Bore	598886	7567449	19.8449455	12/09/2008	21/08/2018	17.77	22.22	0.0012
Quarrina Bore	577828	7579767	14.28341463	17/09/2008	19/12/2023	13.74	23.57	0.0018
Stellas Bore	546972	7533064	12.12818182	30/07/2008	18/12/2023	11.27	12.89	0.0003
Tripod Bore	608627	7556031	8.435208333	5/08/2008	30/10/2023	6	10.44	0.0008
TRRRDR3	571345	7544857	13.35212121	4/09/2010	7/11/2022	12.17	15.70	0.0008
Wallina Bore	565011	7564812	5.272063205	28/11/2009	7/01/2024	4.13	4.49	0.0001
Warp 16	575633	7553523	4.919569554	1/08/2007	21/12/2023	4.3	6.48	0.0004
Wheelunura Well	572638	7556983	5.938666452	3/08/2008	7/01/2024	5.69	6.42	0.0001
TRP153	586450.86	7554254.16	31.27906566	24/07/2020	11/11/2023	17.02	54.70	0.0313
TRP067	586539.812	7550469.638	30.41237187	10/06/2014	2/12/2023	20.9	53.05	0.0093
TRM132	586432.102	7554249.238	24.2832206	19/05/2019	15/12/2023	18.88	46.13	0.0163
Trinity Old Rio Bore	586150.956	7554752.216	13.80376358	4/09/2010	18/05/2023	7.71	36.35	0.0062
SWB-008	583170.818	7551023.061	69.37551834	26/11/2022	26/11/2022	50.73	92.20	0.0109
SPR1003	589223	7550795	47.94593772	4/09/2010	1/12/2023	17.5	43.74	0.0054
SOM001	576409.45	7553387.55	8.424656563	2/06/2008	2/11/2023	5.82	16.87	0.0020

SMB10003a	581681	7550801	59.81917055	5/10/2010	5/11/2020	52.33	77.19	0.0087
SMB1033	593835.529	7546714.235	29.39310823	17/06/2012	12/11/2023	19.39	41.95	0.0054
SMB1030	595302.267	7546401.173	7.294447874	14/03/2012	12/11/2023	4.09	21.62	0.0041
SMB1021	586141.977	7547088.421	34.14368966	27/05/2012	7/08/2023	25.57	40.90	0.0037
SMB1020	588120.406	7552220.325	23.23073327	17/06/2012	16/12/2023	11.01	36.70	0.0061
SMB1007	586401	7550497	23.6779711	4/09/2010	2/12/2023	20.99	55.08	0.0070
SMB1004	584285	7552005	37.39733689	4/09/2010	2/11/2023	35.27	87.62	0.0109
KMB01S	588026.03	7553361.16	5.553492063	17/11/2011	3/10/2022	2.21	6.50	0.0011
KMB012	588023.24	7553357.95	19.95883415	19/11/2011	16/12/2023	2.23	30.59	0.0064
KMB011	588024.846	7553369.767	12.40860911	17/06/2012	31/10/2022	2.77	24.65	0.0058
KMB01D	588027.085	7553362.22	15.54058183	17/06/2012	16/12/2023	2.92	30.56	0.0066
Jipba Bora	583340.99	7547646.25	25.06018609	1/09/2007	4/05/2019	18.38	40.41	0.0052
Hoggye MB1	584488.58	7543598.41	56.41013369	4/09/2010	4/12/2023	55.77	52.80	-0.0006
Hoggye Bora	584494.1	7543593.8	56.27313131	4/09/2010	4/12/2023	55.47	52.46	-0.0006
KMB12S	590528	7555054	1.554	16/12/2011	27/01/2024	1.77	1.53	-0.0001

Analysis of Daily Avg. Water Levels mbpr



Sample Point Name
16 Mile Bore
AS-MB040
AS-MB041
AS-MB042
AS-MB043
AS-MB044
AS-MB045
AS-MB046
AS-MB047
AS-MB048
AS-MB049
AS-MB050
AS-MB051
AS-MB052
AS-MB053
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AS-MB096
AS-MB097
AS-MB098
AS-MB099
AS-MB100

Day of Sample	Sample Date	Sample Point Name	Sample	Sample	Sample	Sample	Daily Avg. Water Level mbpr	Deviation from First Reading	Deviation from All Cumulaf
3	Jul-08	Weelumura Well	572638	-22	117.7	BE+06	5.59	0	0.24866452
14	Sep-08	Weelumura Well	572638	-22	117.7	BE+06	5.7	0.01	-0.23866452
19	Oct-08	Weelumura Well	572638	-22	117.7	BE+06	5.79	0.1	-0.14866452
15	Nov-08	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
10	Dec-08	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
12	Jan-09	Weelumura Well	572638	-22	117.7	BE+06	5.87	0.18	-0.06866452
26	Mar-09	Weelumura Well	572638	-22	117.7	BE+06	5.76	0.07	-0.17866452
12	May-09	Weelumura Well	572638	-22	117.7	BE+06	5.79	0.1	-0.14866452
20	Jun-09	Weelumura Well	572638	-22	117.7	BE+06	5.82	0.13	-0.11866452
20	Jul-09	Weelumura Well	572638	-22	117.7	BE+06	5.77	0.08	-0.16866452
23	Aug-09	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
25	Oct-09	Weelumura Well	572638	-22	117.7	BE+06	5.83	0.13	-0.11866452
28	Nov-09	Weelumura Well	572638	-22	117.7	BE+06	5.91	0.22	-0.02866452
11	Jan-10	Weelumura Well	572638	-22	117.7	BE+06	5.96	0.27	-0.02133548
17	Feb-10	Weelumura Well	572638	-22	117.7	BE+06	5.97	0.28	-0.03133548
19	Mar-10	Weelumura Well	572638	-22	117.7	BE+06	5.95	0.27	-0.02133548
20	Apr-10	Weelumura Well	572638	-22	117.7	BE+06	5.41	0.72	-0.47133548
19	May-10	Weelumura Well	572638	-22	117.7	BE+06	5.9	0.21	-0.03866452
18	Jun-10	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
26	Jun-10	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
22	Jul-10	Weelumura Well	572638	-22	117.7	BE+06	5.82	0.13	-0.11866452
20	Sep-10	Weelumura Well	572638	-22	117.7	BE+06	5.77	0.08	-0.16866452
20	Oct-10	Weelumura Well	572638	-22	117.7	BE+06	5.88	0.19	-0.05866452
19	Nov-10	Weelumura Well	572638	-22	117.7	BE+06	5.96	0.27	-0.02133548
21	Dec-10	Weelumura Well	572638	-22	117.7	BE+06	5.83	0.14	-0.10866452
19	Jan-11	Weelumura Well	572638	-22	117.7	BE+06	5.71	0.02	-0.22866452
18	Mar-11	Weelumura Well	572638	-22	117.7	BE+06	5.56	-0.13	-0.37866452
6	Apr-11	Weelumura Well	572638	-22	117.7	BE+06	5.71	0.02	-0.22866452
18	Apr-11	Weelumura Well	572638	-22	117.7	BE+06	5.73	0.04	-0.20866452
21	May-11	Weelumura Well	572638	-22	117.7	BE+06	5.72	0.03	-0.21866452
19	Jun-11	Weelumura Well	572638	-22	117.7	BE+06	5.7	0.01	-0.23866452
19	Jul-11	Weelumura Well	572638	-22	117.7	BE+06	5.76	0.07	-0.17866452
21	Aug-11	Weelumura Well	572638	-22	117.7	BE+06	5.8	0.11	-0.13866452
10	Jan-12	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
16	Mar-12	Weelumura Well	572638	-22	117.7	BE+06	5.69	0	-0.24866452
5	Jun-12	Weelumura Well	572638	-22	117.7	BE+06	5.79	0.1	-0.14866452
12	Jun-12	Weelumura Well	572638	-22	117.7	BE+06	5.7	0.01	-0.23866452
7	Sep-12	Weelumura Well	572638	-22	117.7	BE+06	5.82	0.13	-0.11866452
19	Sep-12	Weelumura Well	572638	-22	117.7	BE+06	5.8	0.11	-0.13866452
26	Oct-12	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
7	Nov-12	Weelumura Well	572638	-22	117.7	BE+06	5.84	0.15	-0.09866452
26	Nov-12	Weelumura Well	572638	-22	117.7	BE+06	5.92	0.23	-0.01866452
21	Mar-13	Weelumura Well	572638	-22	117.7	BE+06	5.85	0.16	-0.08866452
12	May-13	Weelumura Well	572638	-22	117.7	BE+06	5.63	-0.06	-0.30866452
22	Jun-13	Weelumura Well	572638	-22	117.7	BE+06	5.67	-0.17	-0.35866452
27	Jun-13	Weelumura Well	572638	-22	117.7	BE+06	5.66	-0.13	-0.37866452
7	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.57	-0.12	-0.36866452
8	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.5775	-0.1125	-0.361166452
9	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.5825	-0.1075	-0.356166452
10	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.58	-0.11	-0.35866452
11	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.585	-0.105	-0.35566452
12	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.59	-0.1	-0.34866452
13	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6	-0.09	-0.33866452
14	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6	-0.09	-0.33866452
15	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.605	-0.085	-0.33366452
16	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6225	-0.0675	-0.30666452
17	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.628	-0.062	-0.30166452
18	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.635	-0.055	-0.29666452
19	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6225	-0.0675	-0.30666452
20	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.615	-0.075	-0.31666452
21	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6225	-0.0675	-0.30666452
22	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6225	-0.0675	-0.30666452
23	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.62	-0.07	-0.31666452
24	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6175	-0.0725	-0.321166452
25	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6125	-0.0775	-0.326166452
26	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.6225	-0.0675	-0.30666452
27	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.63	-0.06	-0.30866452
28	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.62	-0.07	-0.31666452
29	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.615	-0.075	-0.32666452
30	Jul-13	Weelumura Well	572638	-22	117.7	BE+06	5.62	-0.07	-0.31666452

“JAB-4”

WAD 37 of 2022

Federal Court of Australia

District Registry: Western Australia

Division: General

YINDJIBARNDI NGURRA ABORIGINAL CORPORATION RNTBC

Applicant

STATE OF WESTERN AUSTRALIA & ORS

Respondents

This is the annexure marked **JAB-4** referred to in the affidavit of Jordin Alexander Barclay sworn on 22 February 2024.



Signature of witness

KARL WELNER

a legal practitioner who has held a practice certificate for at least 2 years and who holds a current practice certificate.

“JAB-5”

WAD 37 of 2022

Federal Court of Australia

District Registry: Western Australia

Division: General

YINDJIBARNDI NGURRA ABORIGINAL CORPORATION RNTBC

Applicant

STATE OF WESTERN AUSTRALIA & ORS

Respondents

This is the annexure marked **JAB-5** referred to in the affidavit of Jordin Alexander Barclay sworn on 22 February 2024.



Signature of witness

KALL WELNER

a legal practitioner who has held a practice certificate for at least 2 years and who holds a current practice certificate.

Annual Abstraction Volumes - Check

Year	Source	License	Volume
2022	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Potable Water Supply - OWL177110	388,963.0000
2021	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Potable Water Supply - OWL177110	371,667.0000
2020	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Potable Water Supply - OWL177110	340,278.0000
2019	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Dewatering Supply (Including Queens) - OWL175139 and OWL178913	14,949,125.0000
2018	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Dewatering Supply (Including Queens) - OWL175139 and OWL178913	15,844,343.0000
2017	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Dewatering Supply (Including Queens) - OWL175139 and OWL178913	15,985,812.0000
2022	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Southern Fortescue Supply - OWL177974 and OWL177976	2,822,127.0000
2021	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Southern Fortescue Supply - OWL177974 and OWL177976	1,400,968.0000
2020	Solomon Triennial Groundwater Monitoring Review - 2022 (SO-PP-WM-0010)	Southern Fortescue Supply - OWL177974 and OWL177976	2,659,943.0000
2019	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Potable Water Supply - OWL177110	545,178.0000
2018	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Potable Water Supply - OWL177110	409,695.0000
2017	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Potable Water Supply - OWL177110	170,978.0000
2019	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Stockyard Supply - OWL174095	58,271.0000
2018	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Dewatering Supply OWL175139	1,831,098.0000
2017	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Dewatering Supply OWL175139	1,008,764.0000
2019	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Dewatering Supply OWL175139	121,017.0000
2018	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Queens OWL178913	8,852,484.0000
2017	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Queens OWL178913	8,773,761.0000
2019	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Southern Fortescue Supply - OWL177974 and OWL177976	4,886,120.0000
2018	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Southern Fortescue Supply - OWL177974 and OWL177976	3,122,888.0000
2017	Solomon Triennial Aquifer Review - to 31 December 2018 (SO-PP-HY-0006, Rev1)	Southern Fortescue Supply - OWL177974 and OWL177976	1,456,405.0000
2016/2017	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Dewatering Supply OWL175139	11,877,485.0000
2015/2016	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Dewatering Supply OWL175139	12,273,691.0000
2014/2015	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Dewatering Supply OWL175139	8,370,400.0000
2016/2017	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Southern Fortescue Supply - OWL177974 and OWL177976	2,163,823.0000
2015/2016	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Southern Fortescue Supply - OWL177974 and OWL177976	891,337.0000
2014/2015	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Southern Fortescue Supply - OWL177974 and OWL177976	2,362,773.0000
2019/2018	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Queens OWL178913	741,263.0000
2018/2017	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Stockyard Supply - OWL174095	30,254.0000
2017/2016	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Stockyard Supply - OWL174095	212,179.0000
2016/2017	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Potable Water Supply - OWL177110	530,055.0000
2015/2016	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Potable Water Supply - OWL177110	464,453.0000
2014/2015	Solomon Triennial Aquifer Review - 1 August 2014 to 31 July 2017 (SO-PP-HY-0004)	Potable Water Supply - OWL177110	448,478.0000
2013/2014	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Construction Supply - OWL173689 and OWL177720	1,560,998.0000
2012/2013	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Construction Supply - OWL173689 and OWL177720	1,854,167.0000
2011/2012	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Construction Supply - OWL173689 and OWL177720	1,190,839.0000
2013/2014	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Dewatering Supply OWL175139	2,080,188.0000
2012/2013	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Airstrip Supply - OWL173720	10,426.0000
2011/2012	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Airstrip Supply - OWL173720	26,433.0000
2013/2014	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Southern Fortescue Supply - OWL177974 and OWL177976	3,038,787.0000
2012/2013	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Queens OWL178913	809,944.0000
2011/2012	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Queens OWL178913	62,269.0000
2013/2014	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Stockyard Supply - OWL174095	313,211.0000
2012/2013	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Stockyard Supply - OWL174095	448,943.0000
2011/2012	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Stockyard Supply - OWL174095	635,316.0000
2013/2014	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Potable Water Supply - OWL177110	445,566.0000
2012/2013	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Potable Water Supply - OWL177110	355,393.0000
2011/2012	Solomon Triennial Aquifer Review - 1 August 2011 to 31 July 2014 (SO-PP-HY-0003)	Potable Water Supply - OWL177110	165,489.0000

License	(Multiple Items)
Row Labels	Sum of Volume
2017	5,176,116
2018	11,192,215
2019	12,026,710
2020	16,378,080
2021	16,218,010
2022	15,338,068
2011/2012	1,356,328
2012/2013	2,471,789
2013/2014	4,905,236
2014/2015	9,660,141
2015/2016	12,738,144
2016/2017	12,589,518
Grand Total	158,888,488