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Purchase Order: None
ChemCentre Reference: 15S0377 R0

PO Box 1250, Bentley Delivery Centre
Bentley WA 6983
T +61 8 9422 9800
F +61 8 9422 9801
www.chemcentre.wa.gov.au
ABN 40 991 885 705

Dept of Parks and Wildlife
Locked Bag 104
Bentley Delivery Centre WA 6983

Attention: Adrian Pinder

Report on: 13 samples received on 14/08/2015

| <u>LAB ID</u> | <u>Material</u> | <u>Client ID and Description</u> |
|---------------|-----------------|--|
| 15S0377 / 001 | water | MDS001 Flat south-east of Cowra Claypan |
| 15S0377 / 002 | water | MDS002 Chaddolina Pool |
| 15S0377 / 003 | water | MDS005 Cowra Claypan east |
| 15S0377 / 004 | water | MDS007 Mungaratheena Claypan south |
| 15S0377 / 005 | water | MDS010 Mungaratheena Claypan east |
| 15S0377 / 006 | water | MDS012 Tecticornia flat north of Mungaratheena Claypan |
| 15S0377 / 007 | water | MDS014 Gnalka Gnoona Tecticornia Flat |
| 15S0377 / 008 | water | MDS016 Gidya Pool |
| 15S0377 / 009 | water | MDS017 Floodplain south of Koodjeepindarranna Pool |
| 15S0377 / 010 | water | MDS018 Pool south of Koodjeepindarranna Pool |
| 15S0377 / 011 | water | MDS019 Gnalka Gnoona south |
| 15S0377 / 012 | water | Nallan Lake Nallan Lake |
| 15S0377 / 013 | water | PSW040 Cowra Line Camp Wetland |

| <u>LAB ID</u> | | 001 | 002 | 003 | 004 | |
|-------------------------|---------------|-------------|------------|------------|------------|--------|
| <u>Client ID</u> | | MDS001 | MDS002 | MDS005 | MDS007 | |
| <u>Sampled</u> | | 26/04/2015 | 29/07/2015 | 30/07/2015 | 31/07/2015 | |
| <u>Analyte</u> | <u>Method</u> | <u>Unit</u> | | | | |
| Alkalinity, total | iALK1WATI | mg/L | 17 | 40 | 56 | 47 |
| Bicarbonate | iALK1WATI | mg/L | 21 | 49 | 69 | 57 |
| Calcium | iMET1WCICP | mg/L | 1.1 | 0.5 | 4.0 | 1.6 |
| Carbonate | iALK1WATI | mg/L | <1 | <1 | <1 | <1 |
| Chloride | iCO1WCDA | mg/L | 15 | 14 | 54 | 13 |
| Chlorophyll a | iCHLA1WACO | mg/L | | 0.009 | <0.001 | 0.001 |
| Colour, TCU | iCOL1WACO | TCU | 600 | 400 | 980 | 980 |
| Electrical Conductivity | iEC1WZSE | mS/m | 11.3 | 12.5 | 37.0 | 18.7 |
| Magnesium | iMET1WCICP | mg/L | 1.7 | 0.8 | 1.6 | 0.5 |
| Nitrogen, total | iNP1WTFIA | mg/L | 0.41 | 0.92 | 1.4 | 1.7 |
| Phaeophytin a | iCHLA1WACO | mg/L | | <0.001 | <0.001 | <0.001 |
| Phosphorus, total | iPP1WTFIA | mg/L | 0.17 | 0.17 | 0.29 | 0.54 |
| Potassium | iMET1WCICP | mg/L | 6.8 | 6.9 | 13.8 | 7.2 |
| Sodium | iMET1WCICP | mg/L | 19.5 | 23.8 | 58.7 | 36.0 |
| Sulphate | iCO1WCDA | mg/L | 9 | 10 | 20 | 6 |
| Turbidity | iTURB1WCZZ | NTU | 840 | 310 | 760 | 2300 |

| LAB ID | 005 | 006 | 007 | 008 | | |
|-------------------------|------------|------------|------------|------------|-------|-------|
| Client ID | MDS010 | MDS012 | MDS014 | MDS016 | | |
| Sampled | 01/08/2015 | 01/08/2015 | 02/08/2015 | 03/08/2015 | | |
| Analyte | Method | Unit | | | | |
| Alkalinity, total | iALK1WATI | mg/L | 51 | 72 | 131 | 127 |
| Bicarbonate | iALK1WATI | mg/L | 63 | 85 | 151 | 144 |
| Calcium | iMET1WCICP | mg/L | 1.7 | 2.6 | 5.8 | 6.1 |
| Carbonate | iALK1WATI | mg/L | <1 | 1 | 4 | 6 |
| Chloride | iCO1WCDA | mg/L | 14 | 30 | 88 | 142 |
| Chlorophyll a | iCHLA1WACO | mg/L | <0.001 | 0.007 | 0.003 | 0.070 |
| Colour, TCU | iCOL1WACO | TCU | 980 | 980 | 1100 | 310 |
| Electrical Conductivity | iEC1WZSE | mS/m | 18.0 | 27.4 | 65.3 | 91.5 |
| Magnesium | iMET1WCICP | mg/L | 0.8 | 1.4 | 2.0 | 1.5 |
| Nitrogen, total | iNP1WTFIA | mg/L | 1.7 | 1.8 | 3.9 | 0.80 |
| Phaeophytin a | iCHLA1WACO | mg/L | <0.001 | <0.001 | 0.002 | 0.019 |
| Phosphorus, total | iPP1WTFIA | mg/L | 0.56 | 0.59 | 0.65 | 0.17 |
| Potassium | iMET1WCICP | mg/L | 7.8 | 11.7 | 23.5 | 20.5 |
| Sodium | iMET1WCICP | mg/L | 35.3 | 48.4 | 116 | 175 |
| Sulphate | iCO1WCDA | mg/L | 7 | 12 | 37 | 23 |
| Turbidity | iTURB1WCZZ | NTU | 2400 | 2100 | 2600 | 24000 |

| LAB ID | 009 | 010 | 011 | 012 | | |
|-------------------------|------------|------------|------------|-------------|-------|--------|
| Client ID | MDS017 | MDS018 | MDS019 | Nallan Lake | | |
| Sampled | 04/08/2015 | 04/08/2015 | 04/08/2015 | 06/08/2015 | | |
| Analyte | Method | Unit | | | | |
| Alkalinity, total | iALK1WATI | mg/L | 40 | 37 | 99 | 16 |
| Bicarbonate | iALK1WATI | mg/L | 49 | 45 | 116 | 19 |
| Calcium | iMET1WCICP | mg/L | 3.9 | 3.6 | 3.4 | 2.7 |
| Carbonate | iALK1WATI | mg/L | <1 | <1 | 2 | <1 |
| Chloride | iCO1WCDA | mg/L | 19 | 24 | 50 | 2 |
| Chlorophyll a | iCHLA1WACO | mg/L | 0.006 | 0.001 | 0.008 | 0.002 |
| Colour, TCU | iCOL1WACO | TCU | 1700 | 3000 | 1600 | 100 |
| Electrical Conductivity | iEC1WZSE | mS/m | 18.3 | 16.9 | 39.1 | 4.5 |
| Magnesium | iMET1WCICP | mg/L | 5.9 | 4.7 | 1.6 | 1.2 |
| Nitrogen, total | iNP1WTFIA | mg/L | 2.9 | 4.4 | 1.9 | 0.63 |
| Phaeophytin a | iCHLA1WACO | mg/L | 0.003 | <0.001 | 0.002 | <0.001 |
| Phosphorus, total | iPP1WTFIA | mg/L | 0.63 | 0.65 | 0.47 | 0.12 |
| Potassium | iMET1WCICP | mg/L | 14.1 | 10.6 | 17.7 | 4.8 |
| Sodium | iMET1WCICP | mg/L | 33.9 | 30.5 | 73.3 | 2.2 |
| Sulphate | iCO1WCDA | mg/L | 12 | 43 | 23 | 2 |
| Turbidity | iTURB1WCZZ | NTU | 3200 | 2700 | 1600 | 150 |

| LAB ID | 013 | | | |
|-------------------|------------|------|-----|--|
| Client ID | PSW040 | | | |
| Sampled | 26/04/2015 | | | |
| Analyte | Method | Unit | | |
| Alkalinity, total | iALK1WATI | mg/L | 24 | |
| Bicarbonate | iALK1WATI | mg/L | 29 | |
| Calcium | iMET1WCICP | mg/L | 1.2 | |
| Carbonate | iALK1WATI | mg/L | <1 | |
| Chloride | iCO1WCDA | mg/L | 15 | |

LAB ID 013
Client ID PSW040

Sampled 26/04/2015

| Analyte | Method | Unit | |
|-------------------------|------------|------|------|
| Colour, TCU | iCOL1WACO | TCU | 400 |
| Electrical Conductivity | IEC1WZSE | mS/m | 11.8 |
| Magnesium | iMET1WCICP | mg/L | 0.7 |
| Nitrogen, total | iNP1WTFIA | mg/L | 0.70 |
| Phosphorus, total | iPP1WTFIA | mg/L | 0.25 |
| Potassium | iMET1WCICP | mg/L | 5.6 |
| Sodium | iMET1WCICP | mg/L | 20.9 |
| Sulphate | iCO1WCDA | mg/L | 9 |
| Turbidity | iTURB1WCZZ | NTU | 1900 |

| Method | Method Description |
|------------|---|
| iALK1WATI | Alkalinity (as CaCO ₃) and constituents by acid titration (APHA 2320B). |
| iCHLA1WACO | Chlorophyll A, B, C and phaeophytin by colourimetry, APHA 10200. |
| iCO1WCDA | Colourimetric analysis by DA (Discrete Autoanalyser), APHA and in house methods. |
| iCOL1WACO | Colour by spectrometry (APHA 2120-C) |
| IEC1WZSE | Electrical conductivity in water compensated to 25C (APHA 2510B). |
| iMET1WCICP | Total dissolved metals by ICPAES (APHA 3120). |
| iNP1WTFIA | Total Nitrogen by persulphate digestion and analysis by FIA (APHA 4500N-C,I). |
| iPP1WTFIA | Total Phosphorus by persulphate digestion and FIA (APHAP-J,G). |
| iTURB1WCZZ | Turbidity of water by Nephelometer (APHA 3130 B). |

These results apply only to the sample(s) as received. Unless arrangements are made to the contrary, these samples will be disposed of after 30 days of the issue of this report.
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Hannah Burton
Team Leader
Scientific Services Division
28-Aug-2015