

Figure 25	Downhole geophysical log from petroleum well Mondarra 4 (1200–2200 m bgl) showing the Cattamarra Coal Measures and Eneabba Formation.....	86
Figure 26	Downhole geophysical log from petroleum well Eneabba 1 (1700–3000 m bgl) showing the Cattamarra Coal Measures and Eneabba Formation.....	87
Figure 27	Downhole geophysical log of petroleum well Ocean Hill 1 (2700–3700 m bgl) showing the Cadda Formation	92
Figure 28	Downhole geophysical log of petroleum well Warro 1 (600–4385 m bgl) showing the Yarragadee Formation	96
Figure 29	Downhole geophysical log of petroleum well Ocean Hill 1 (0–3000 m bgl) showing the Yarragadee Formation	97
Figure 30	Yarragadee Formation Unit A: contours on base of unit.....	100
Figure 31	Yarragadee Formation Unit B: contours on base of unit.....	101
Figure 32	Yarragadee Formation Unit C: contours on base of unit.....	102
Figure 33	Yarragadee Formation Unit D: contours on base of unit.....	103
Figure 34	Downhole geophysical log from Gillingarra Line GL6 (0–975 m bgl) showing the Parmelia Group.....	107
Figure 35	Parmelia Group: contours on base of unit.....	108
Figure 36	Downhole geophysical log from Gillingarra Line 2B (0–1000 m bgl) showing the Warnbro Group	114
Figure 37	Warnbro Group: contours on base of unit	115
Figure 38	Gage Sandstone: contours on base of unit	116
Figure 39	South Perth Shale: contours on base of unit	117
Figure 40	Leederville Formation: contours on base of unit.....	118
Figure 41	Downhole geophysical log from Gillingarra Line GL8 (0–1170 m bgl) showing the Coolyena Group.....	127
Figure 42	Coolyena Group: contours on base of unit.....	128
Figure 43	Henley Sandstone Member: contours on base of unit	129
Figure 44	Kardinya Shale Member: contours on base of unit.....	130
Figure 45	Mirrabooka Member: contours on base of unit	131
Figure 46	Molecap Greensand (including Gingin Chalk and Poison Hill Greensand) and Lancelin Formation: contours on base of unit.....	132
Figure 47	Surficial deposits: extent	137
Figure 48	Digital elevation mapping showing Yallalie Basin.....	138
Figure 49	Superficial formations: surface geology with geological cross-sections.....	141
Figure 50	Superficial formations: contours on base of unit.....	142
Figure 51	Geological cross-sections showing stratigraphical relationships of superficial formations.....	143
Figure 52	Ascot Formation: isopachs.....	146
Figure 53	Aquifers and aquitards below the superficial formations or surficial deposits	160
Figure 54	Bore sites with aquifer test data (bores in the Guilderton–Lancelin area are within the Superficial aquifer)	161
Figure 55	Hydrogeological cross-sections (hydraulic head)	162
Figure 56	Hydrogeological cross-sections (salinity)	165
Figure 57	Hydrogeological setting across the Northampton Inlier	168
Figure 58	Northern region: hydrogeology and potentiometric surface	169
Figure 59	Northern region: groundwater salinity.....	170
Figure 60	Representative depth to watertable (2015)	171
Figure 61	Water level change between mid-1980s and mid-2000s	172