EPL20350 WATER MONITORING RESULTS 2018/2019 - QUARTER 4

LICENCE HOLDER	Santos NSW (Eastern) Pty Ltd
PREMISES	Narrabri Gas Field X Line Road, NARRABRI NSW 2390
LICENCE NUMBER	Environment Protection Licence 20350
EPL LINK (EPA SITE)	http://www.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=33816&SYSUID=1&LICID=20350
SCHEDULED ACTIVITY	Coal seam gas exploration, assessment and production
EPL PERIOD	May 1st 2018 to April 30th 2019
REPORTING PERIOD	Quarter 4 – Feb 2019 / Apr 2019
PUBLISHED DATE	May 2019
MONITORING BY	Santos
ANALYSIS BY	Australian Laboratory Services Pty Ltd

Table 1: EPL20350 WATER MONITORING LOCATIONS

Spatial reference: GDA94 MGA Zone 55

EPA Identification No.	Monitoring type	Location	Easting	Northing
7	Groundwater quality monitoring	BWD27PRORA01	755429.176	6604670.682
8	Groundwater quality monitoring	BWD27PRUPS02	755433.048	6604684.807
9	Groundwater quality monitoring	BWD26PRUPS01	749372.750	6609376.690
10	Groundwater quality monitoring	BWD26PRLPS02	749364.450	6609363.350
11	Groundwater quality monitoring	DWH14PRUPS01	764703.313	6617145.443
12	Groundwater quality monitoring	DWH14PRLPS02	764689.147	6617119.109
13	Groundwater quality monitoring	DWH14PRPUR03	764696.211	6617132.298
14	Groundwater quality monitoring	DWH3PRUPS01	762239.680	6605589.320
15	Groundwater quality monitoring	DWH3PRLPS02	762251.050	6605598.980
16	Groundwater quality monitoring	NYOPRORA01	736293.460	6643110.400
17	Groundwater quality monitoring	NYOPRUPS02	736308.800	6643107.840
18	Groundwater quality monitoring	BWD27PRLPS03	755436.361	6604699.035
20	Groundwater quality monitoring	BHN14PRORA01	747158.130	6626109.120
21	Groundwater quality monitoring	BHN14PRUPS02	747152.710	6626123.910
22	Groundwater quality monitoring	TULPRNAP01	774464.070	6612048.130
23	Groundwater quality monitoring	TULPRDGY02	774466.480	6612032.980
24	Groundwater quality monitoring	BWDMW13D	753863.300	6608108.510
25	Groundwater quality monitoring	BWDMW13S	753864.820	6608109.300
26	Groundwater quality monitoring	BWDMW12S	753830.650	6608202.740
27	Groundwater quality monitoring	BWDMW12D	753831.910	6608203.710
28	Groundwater quality monitoring	BWDMW12I	753832.680	6608202.250
29	Groundwater quality monitoring	BWDMW2	753912.830	6608241.350
30	Groundwater quality monitoring	BWDMW3	753935.870	6608254.020
31	Groundwater quality monitoring	BWDMW4D	753980.810	6608285.740
32	Groundwater quality monitoring	BWDMW4	753984.140	6608288.040
33	Groundwater quality monitoring	BWDMW15S	753868.090	6608258.340
34	Groundwater quality monitoring	BWDMW15D	753867.100	6608256.750
35	Groundwater quality monitoring	BWDMW16S	753858.950	6608316.490
36	Groundwater quality monitoring	BWDMW16D	753856.980	6608315.570
37	Groundwater quality monitoring	LWDMW1D	751387.930	6623862.960
38	Groundwater quality monitoring	LWDMW1S	751388.920	6623862.460
39	Groundwater quality monitoring	LWDMW1I	751390.640	6623861.850
40	Groundwater quality monitoring	LWDMW2S	751102.840	6622293.020
41	Groundwater quality monitoring	LWDMW2D	751101.810	6622293.150
42	Groundwater quality monitoring	LWDMW3D	751876.160	6622163.760
43	Groundwater quality monitoring	LWDMW3S	751876.470	6622164.930
44	Groundwater level monitoring	DWH8AGMB1	765546.740	6616987.990
45	Groundwater level monitoring	DWH8AGMB2	765546.740	6616987.990
46	Groundwater level monitoring	DWH8AGMB3	765546.740	6616987.990
47	Groundwater level monitoring	BWD28QGUPS01	752949.898	6604219.732

EPA Identification No.	Monitoring type	Location	Easting	Northing
48	Groundwater level monitoring	BWD28QGLPS01	752949.898	6604219.732
49	Groundwater level monitoring	BWD28QGPUR01	752949.898	6604219.732
50	Groundwater quality monitoring	WPKMW01	755684.140	6638105.310
51	Groundwater quality monitoring	WPKMW01D	755689.750	6638097.350
52	Groundwater quality monitoring	WPKMW02	755671.200	6638034.290
53	Groundwater quality monitoring	WPKMW04	755632.500	6637993.070
54	Groundwater quality monitoring	WPKMW07	755501.160	6638207.530
55	Groundwater quality monitoring	WPKMW08	755634.110	6638166.870
56	Groundwater quality monitoring	WPKMW09D	755663.980	6637988.200
57	Groundwater quality monitoring	WPKMW09S	755664.400	6637990.540
58	Groundwater quality monitoring	WPKMW12S	755456.180	6638228.910
59	Groundwater quality monitoring	WPKMW13I	755552.650	6638189.560
60	Groundwater quality monitoring	WPKMW13S	755554.880	6638189.050
61	Groundwater quality monitoring	WPKMW14D	755364.510	6638049.060
62	Groundwater quality monitoring	WPKMW14S	755364.770	6638048.260
63	Groundwater quality monitoring	WPKMW15D	755365.480	6638233.360
64	Groundwater quality monitoring	WPKMW15S	755365.500	6638230.740
65	Groundwater quality monitoring	WPKMW16D	755051.030	6637988.500
66	Groundwater quality monitoring	WPKMW16S	755050.530	6637986.640
67	Groundwater quality monitoring	WPKMW17D	756151.060	6638128.320
68	Groundwater quality monitoring	WPKMW17S	756149.540	6638128.050
69	Produced water storage dam	BWDPD2	753875.870	6607995.060
70	Produced water storage dam	BWDPD3	753992.170	6608125.970
71	Produced water storage dam	LWDPD1CELL4	751473.349	6623513.252
72	Produced water storage dam	LWDPD1CELL3	751460.723	6623323.850
73	Produced water storage dam	LWDPD1CELL2	751428.103	6623124.978
74	Produced water storage dam	LWDPD1CELL1	751390.223	6622935.575
75	Produced water storage dam	TFDPD1	755611.600	6638072.850
76	Produced water storage dam	TFDPD2	755480.110	6638099.040
77	Treated water quality monitoring	LWWTPDM1	751648.020	6622508.310
78	Groundwater quality monitoring	WPKMW18S	755944.010	6638100.840
79	Groundwater quality monitoring	WPKMW18I	755945.070	6638105.040
80	Groundwater quality monitoring	LWDMW4	752080.540	6623038.940
81	Groundwater quality monitoring	LWDMW5	752491.080	6623301.160
82	Groundwater quality monitoring	LWDMW6	752667.550	6623165.030
83	Soil quality monitoring	LWDSMP1	751942.34	6622941.21
84	Soil quality monitoring	LWDSMP2	752164.06	6623143.83
85	Soil quality monitoring	LWDSMP3	752572.60	6623126.32
86	Soil quality monitoring	LWDSMP4	752457.14	6622764.26

Table 2: Water Monitoring Results Quarter 4 – Feb 2019 / Apr 2019

	Units	EPA Identification No	7	8	9	10	11	12	13	14
		Location	BWD27PRORA01	BWD27PRUPS02	BWD26PRUPS01	BWD26PRLPS02	DWH14PRUPS01	DWH14PRLPS02	DWH14PRPUR03**	DWH3PRUPS01
		Date Sampled	9/04/2019	9/04/2019	9/04/2019	10/04/2019	30/04/2019	30/04/2019	30/04/2019	16/04/2019
		Sample obtained	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Sample Method	Dry well	In situ	In situ	In situ	In situ	In situ	In situ	In situ
		LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01								
Ammonia	mg/L	0.01								
Arsenic	mg/L	0.001								
Barium	mg/L	0.001								
Beryllium	mg/L	0.001								
Bicarbonate	mg/L	1								
Boron	mg/L	0.05								
Bromide	mg/L	0.01								
Cadmium	mg/L	0.0001								
Calcium	mg/L	1								
Carbonate	mg/L	1								
Chloride	mg/L	1								
Chromium	mg/L	0.001								
Cobalt	mg/L	0.001								
Copper	mg/L	0.001								
Dissolved Oxygen	mg/L	-		3.3	0.01	0.42	0.51	0.99		1.53
Electrical Conductivity	µS/cm	-		140	72	137	217	185		124
Fluoride	mg/L	0.1								
Iron	mg/L	0.05								
Lead	mg/L	0.001								
Magnesium	mg/L	1								
Manganese	mg/L	0.001								
Mercury	mg/L	0.0001								
Methane	mg/L	0.01								
Molybdenum	mg/L	0.001								
Nickel	mg/L	0.001								
Nitrate	mg/L	0.01								
Nitrite	mg/L	0.01								
pH	pH Unit	-		5.21	5.37	6.06	5.57	5.36		5.31
Potassium	mg/L	1								
Reactive Phosphorus	mg/L	0.01								
Redox Potential	mV	-		169	115	32	150	121		154
Selenium	mg/L	0.01								
Silica	mg/L									
Sodium	mg/L	1								
Sodium Adsorption Ratio (Storages)	-	0.01								
Standing Water Level	mTOC	-		38.83	29.62	29.07	53.38	54.14	53.21	67.57
Strontium	mg/L	0.001								
Sulfate	mg/L	1								
Total Alkalinity (as CaCO3)	mg/L	1								
Total Dissolved Solids	mg/L	10								
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1								
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001								
Vanadium	mg/L	0.01								
Zinc	mg/L	0.005								

*Monitoring event was attempted but no water was available for sampling in BWD27PRORA01
**Sample unable to be obtained at DWH14PRPUR03 at time of monitoring event due to downhole obstruction. Standing water level was recorded. Corrective actions being investigated.

	Units	EPA Identification No	15	16	17	18	20	21	22	23
		Location	DWH3PRLPS02	NYOPRORA01	NYOPRUPS02	BWD27PRLPS03	BHN14PRORA01	BHN14PRUPS02	TULPRNAP01	TULPRDGY02
		Date Sampled	16/04/2019	16/04/2019	16/04/2019	9/04/2019	15/04/2019	15/04/2019	15/04/2019	15/04/2019
		Sample obtained	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Sample Method	In situ	In situ	In situ	In situ	In situ	In situ	In situ	In situ
		LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01								
Ammonia	mg/L	0.01								
Arsenic	mg/L	0.001								
Barium	mg/L	0.001								
Beryllium	mg/L	0.001								
Bicarbonate	mg/L	1								
Boron	mg/L	0.05								
Bromide	mg/L	0.01								
Cadmium	mg/L	0.0001								
Calcium	mg/L	1								
Carbonate	mg/L	1								
Chloride	mg/L	1								
Chromium	mg/L	0.001								
Cobalt	mg/L	0.001								
Copper	mg/L	0.001								
Dissolved Oxygen	mg/L	-	0.87	0.01	7.88	0.01	0.9	0.01	0.56	1.95
Electrical Conductivity	µS/cm	-	133	1280	1235	242	493	475	7648	8621
Fluoride	mg/L	0.1								
Iron	mg/L	0.05								
Lead	mg/L	0.001								
Magnesium	mg/L	1								
Manganese	mg/L	0.001								
Mercury	mg/L	0.0001								
Methane	mg/L	0.01								
Molybdenum	mg/L	0.001								
Nickel	mg/L	0.001								
Nitrate	mg/L	0.01								
Nitrite	mg/L	0.01								
pH	pH Unit	-	5.32	8.00	8.19	5.85	7.23	6.93	7.10	6.98
Potassium	mg/L	1								
Reactive Phosphorus	mg/L	0.01								
Redox Potential	mV	-	177	-193	-53	-25	-110	-107	-100	-133
Selenium	mg/L	0.01								
Silica	mg/L									
Sodium	mg/L	1								
Sodium Adsorption Ratio (Storages)	-	0.01								
Standing Water Level	mTOC	-	67.64	0	0	38.36	26.44	15.30	89.76	74.02
Strontium	mg/L	0.001								
Sulfate	mg/L	1								
Total Alkalinity (as CaCO3)	mg/L	1								
Total Dissolved Solids	mg/L	10								
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1								
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001								
Vanadium	mg/L	0.01								
Zinc	mg/L	0.005								

	Units	EPA Identification No	24	25	26	27	28	29	30	31
		Location	BWDMW13D	BWDMW13S	BWDMW12S	BWDMW12D	BWDMW12I	BWDMW2	BWDMW3	BWDMW4D
		Date Sampled	18/03/2019	18/03/2019	18/03/2019	18/03/2019	18/03/2019	18/03/2019	18/03/2019	18/03/2019
		Sample obtained	Yes	No	No	Yes	Yes	No	Yes	Yes
		Sample Method	Grab Sample	Dry well	Dry well	Grab Sample	Grab Sample	Dry well	Grab Sample	Grab Sample
	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01	0.01			0.12	< 0.05**		0.03	0.10
Ammonia	mg/L	0.01	0.03			0.01	0.01		0.10	0.03
Arsenic	mg/L	0.001	< 0.001			< 0.001	< 0.005**		< 0.001	< 0.001
Barium	mg/L	0.001	0.489			2.14	7.81		0.156	0.051
Beryllium	mg/L	0.001	< 0.001			< 0.001	< 0.005**		< 0.001	< 0.001
Bicarbonate	mg/L	1	50			3510	6020		48	39
Boron	mg/L	0.05	< 0.05			< 0.05	< 0.05		< 0.05	< 0.05
Bromide	mg/L	0.01	0.961			4.83	8.52		0.902	0.134
Cadmium	mg/L	0.0001	< 0.0001			< 0.0001	< 0.0005**		< 0.0001	< 0.0001
Calcium	mg/L	1	5			20	3		6	< 1
Carbonate	mg/L	1	< 1			< 1	< 1		< 1	< 1
Chloride	mg/L	1	369			1090	1860		271	40
Chromium	mg/L	0.001	< 0.001			< 0.001	< 0.005**		< 0.001	< 0.001
Cobalt	mg/L	0.001	0.016			< 0.001	0.011		0.008	< 0.001
Copper	mg/L	0.001	< 0.001			< 0.001	< 0.005**		< 0.001	0.007
Dissolved Oxygen	mg/L	-	1.18			3.3	4.87		0.92	2.65
Electrical Conductivity	µS/cm	-	1257			8661	14105		1068	254
Fluoride	mg/L	0.1	< 0.1			1.1	1.1		< 0.1	< 0.1
Iron	mg/L	0.05	3.72			0.07	< 0.05		5.27	0.42
Lead	mg/L	0.001	< 0.001			< 0.001	< 0.005**		< 0.001	< 0.001
Magnesium	mg/L	1	31			304	593		16	2
Manganese	mg/L	0.001	0.103			0.005	0.012		0.455	0.009
Mercury	mg/L	0.0001	< 0.0001			< 0.0001	< 0.0001		< 0.0001	< 0.0001
Methane	mg/L	0.01	< 0.01			< 0.01	< 0.01		0.014	< 0.01
Molybdenum	mg/L	0.001	< 0.001			< 0.001	< 0.005**		< 0.001	< 0.001
Nickel	mg/L	0.001	0.008			0.004	0.008		0.011	0.002
Nitrate	mg/L	0.01	0.04			0.22	0.34		0.21	0.27
Nitrite	mg/L	0.01	< 0.01			< 0.01	< 0.01		0.01	< 0.01
pH	pH Unit	-	5.2			7.28	7.31		5.82	6.0
Potassium	mg/L	1	16			41	57		13	8
Reactive Phosphorus	mg/L	0.01	< 0.01			0.02	0.17		< 0.01	< 0.01
Redox Potential	mV	-	130			37.7	42.5		89	87
Selenium	mg/L	0.01	< 0.01			< 0.01	< 0.05**		< 0.01	< 0.01
Silica	mg/L									
Sodium	mg/L	1	163			1660	3150		159	39
Sodium Adsorption Ratio (Storages)	-	0.01								
Standing Water Level	mTOC	-	30.78			31.08	21.05		31.02	30.13
Strontium	mg/L	0.001	0.100			0.721	0.268		0.090	0.010
Sulfate	mg/L	1	17			48	< 1		57	14
Total Alkalinity (as CaCO3)	mg/L	1	50			3510	6020		48	39
Total Dissolved Solids	mg/L	10	684			5280	9420		1900	205
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1								
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001	< 0.001			0.042	0.081		< 0.001	< 0.001
Vanadium	mg/L	0.01	< 0.01			< 0.01	< 0.05**		< 0.01	< 0.01
Zinc	mg/L	0.005	3.64			0.013	0.032		0.020	0.017

*Monitoring event was attempted but no water was available for sampling from BWDMW13S, BWDMW12S and BWDMW2
**Limit of Reporting raised due to sample matrix

	Units	EPA Identification No	32	33	34	35	36	37	38	39
		Location	BWDMW4	BWDMW15S	BWDMW15D	BWDMW16S	BWDMW16D	LWDMW1D	LWDMW1S	LWDMW1I
		Date Sampled	18/03/2019	18/03/2019	18/03/2019	18/03/2019	18/03/2019	20/03/2019	20/03/2019	20/03/2019
		Sample obtained	No	No	Yes	No	Yes	Yes	No	No
		Sample Method	Insufficient Liquid**	Dry well	Grab Sample	Grab Sample	Grab Sample	Grab Sample	Dry well	Dry well
		LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01			0.02		0.01	< 0.01		
Ammonia	mg/L	0.01			0.04		0.03	0.03		
Arsenic	mg/L	0.001			< 0.001		< 0.001	< 0.001		
Barium	mg/L	0.001			0.046		0.072	0.442		
Beryllium	mg/L	0.001			< 0.001		< 0.001	< 0.001		
Bicarbonate	mg/L	1			12		5	199		
Boron	mg/L	0.05			< 0.05		< 0.05	0.14		
Bromide	mg/L	0.01			0.234		0.218	1.32		
Cadmium	mg/L	0.0001			< 0.0001		< 0.0001	< 0.0001		
Calcium	mg/L	1			1		< 1	7		
Carbonate	mg/L	1			< 1		< 1	< 1		
Chloride	mg/L	1			86		93	595		
Chromium	mg/L	0.001			< 0.001		< 0.001	< 0.001		
Cobalt	mg/L	0.001			< 0.001		< 0.001	< 0.001		
Copper	mg/L	0.001			< 0.001		< 0.001	< 0.001		
Dissolved Oxygen	mg/L	-			3.89		4.96	1.12		
Electrical Conductivity	µS/cm	-			406		330	2279		
Fluoride	mg/L	0.1			< 0.1		< 0.1	0.3		
Iron	mg/L	0.05			0.16		< 0.05	< 0.05		
Lead	mg/L	0.001			< 0.001		< 0.001	< 0.001		
Magnesium	mg/L	1			3		2	13		
Manganese	mg/L	0.001			0.009		0.008	0.003		
Mercury	mg/L	0.0001			< 0.0001		< 0.0001	< 0.0001		
Methane	mg/L	0.01			< 0.01		< 0.01	< 0.01		
Molybdenum	mg/L	0.001			< 0.001		< 0.001	0.001		
Nickel	mg/L	0.001			< 0.001		0.001	< 0.001		
Nitrate	mg/L	0.01			0.28		0.21	0.12		
Nitrite	mg/L	0.01			< 0.01		< 0.01	< 0.01		
pH	pH Unit	-			6.29		5.84	6.43		
Potassium	mg/L	1			8		6	13		
Reactive Phosphorus	mg/L	0.01			< 0.01		0.02	0.08		
Redox Potential	mV	-			109		151	120		
Selenium	mg/L	0.01			< 0.01		< 0.01	< 0.01		
Silica	mg/L									
Sodium	mg/L	1			64		53	420		
Sodium Adsorption Ratio (Storages)	-	0.01								
Standing Water Level	mTOC	-	20.54		30.47	22.43	30.27	29.94		
Strontium	mg/L	0.001			0.010		0.008	0.125		
Sulfate	mg/L	1			28		< 1	17		
Total Alkalinity (as CaCO3)	mg/L	1			12		5	199		
Total Dissolved Solids	mg/L	10			286		232	1360		
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1								
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001			< 0.001		< 0.001	< 0.001		
Vanadium	mg/L	0.01			< 0.01		< 0.01	< 0.01		
Zinc	mg/L	0.005			0.011		0.010	< 0.005		

*Monitoring event was attempted but no water was available for sampling from BWDMW15S, LWDMW1S & LWDMW1I

**Monitoring event was attempted but insufficient water was available for sampling from BWDMW4 & BWDMW16S

	Units	EPA Identification No	40	41	42	43	50	51	52	53
		Location	LWDMW2S	LWDMW2D	LWDMW3D	LWDMW3S	WPKMW1	WPKMW1D	WPKMW2	WPKMW4
		Date Sampled	20/03/2019	20/03/2019	20/03/2019	20/03/2019	27/03/2019	27/03/2019	27/03/2019	27/03/2019
		Sample obtained	No	Yes	Yes	No	Yes	Yes	Yes	Yes
		Sample Method	Dry well*	Grab Sample	Grab Sample	Dry well*	Grab Sample	Grab Sample	Grab Sample	Grab Sample
	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01
Ammonia	mg/L	0.01		0.03	0.04		0.01	0.11	< 0.01	< 0.01
Arsenic	mg/L	0.001		0.001	0.003		0.002	0.004	0.004	0.004
Barium	mg/L	0.001		0.511	0.078		0.024	0.106	0.060	0.018
Beryllium	mg/L	0.001		< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Bicarbonate	mg/L	1		421	110		577	504	1200	843
Boron	mg/L	0.05		0.13	0.09		0.24	0.21	0.28	0.30
Bromide	mg/L	0.01		0.727	0.413		0.302	0.154	1.24	0.619
Cadmium	mg/L	0.0001		< 0.0001	< 0.0001		< 0.0001	< 0.0001	< 0.0001	< 0.0001
Calcium	mg/L	1		18	2		3	8	5	2
Carbonate	mg/L	1		< 1	< 1		< 1	7	7	19
Chloride	mg/L	1		420	236		125	58	462	239
Chromium	mg/L	0.001		< 0.001	< 0.001		0.001	< 0.001	< 0.001	< 0.001
Cobalt	mg/L	0.001		< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Copper	mg/L	0.001		< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Dissolved Oxygen	mg/L	-		0.69	1.12		2.5	0.3	1.14	1.36
Electrical Conductivity	µS/cm	-		2068	632		1506	1204	3675	2331
Fluoride	mg/L	0.1		0.4	0.2		0.6	0.8	0.6	1.0
Iron	mg/L	0.05		< 0.05	0.63		< 0.05	< 0.05	< 0.05	< 0.05
Lead	mg/L	0.001		< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	< 0.001
Magnesium	mg/L	1		24	4		1	2	2	< 1
Manganese	mg/L	0.001		0.058	0.008		< 0.001	0.106	0.046	< 0.001
Mercury	mg/L	0.0001		< 0.0001	< 0.0001		< 0.0001	< 0.0001	< 0.0001	< 0.0001
Methane	mg/L	0.01		< 0.01	0.016		< 0.01	0.068	< 0.01	< 0.01
Molybdenum	mg/L	0.001		0.004	0.001		0.001	< 0.001	0.002	0.002
Nickel	mg/L	0.001		0.007	0.006		< 0.001	< 0.001	< 0.001	< 0.001
Nitrate	mg/L	0.01		0.01	< 0.01		0.14	< 0.01	0.03	0.14
Nitrite	mg/L	0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01
pH	pH Unit	-		6.92	6.15		8.01	8.05	8.00	7.99
Potassium	mg/L	1		26	9		4	3	9	6
Reactive Phosphorus	mg/L	0.01		0.17	0.08		0.39	0.10	0.60	0.58
Redox Potential	mV	-		70.9	19		36	22	41	67.2
Selenium	mg/L	0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	< 0.01
Silica	mg/L									
Sodium	mg/L	1		365	178		346	288	887	564
Sodium Adsorption Ratio (Storages)	-	0.01								
Standing Water Level	mTOC	-		25.94	21.04		16.39	16.17	15.5	16.23
Strontium	mg/L	0.001		0.268	0.024		0.035	0.060	0.080	0.033
Sulfate	mg/L	1		20	5		< 1	< 1	< 1	< 1
Total Alkalinity (as CaCO3)	mg/L	1		421	110		577	511	1200	862
Total Dissolved Solids	mg/L	10		2310	522		893	717	2160	1370
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1								
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001		0.003	< 0.001		< 0.001	< 0.001	0.004	0.002
Vanadium	mg/L	0.01		< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	0.01
Zinc	mg/L	0.005		0.012	< 0.005		< 0.005	< 0.005	< 0.005	< 0.005

*Monitoring event was attempted but no water was available for sampling from LWDMW2S and LWDMW3S

	Units	EPA Identification No	55	56	57	58	59	60	61	62
		Location	WPKMW8	WPKMW9D	WPKMW9S	WPKMW12S	WPKMW13I	WPKMW13S	WPKMW14D	WPKMW14S
		Date Sampled	27/03/2019	27/03/2019	27/03/2019	28/03/2019	28/03/2019	28/03/2019	28/03/2019	28/03/2019
		Sample obtained	Yes	Yes	Yes	No	Yes	Yes	Yes	No
		Sample Method	Grab Sample	Grab Sample	Grab Sample	Dry well*	Grab Sample	Grab Sample	Grab Sample	Dry well*
	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	
Ammonia	mg/L	0.01	< 0.01	0.05	0.03		0.01	0.02	0.05	
Arsenic	mg/L	0.001	0.002	0.004	0.002		0.002	0.002	0.002	
Barium	mg/L	0.001	0.031	0.088	0.303		0.041	0.105	0.307	
Beryllium	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	
Bicarbonate	mg/L	1	846	502	1750		527	1100	515	
Boron	mg/L	0.05	0.26	0.20	0.40		0.21	0.32	0.21	
Bromide	mg/L	0.01	0.766	0.434	1.10		0.187	1.15	0.154	
Cadmium	mg/L	0.0001	< 0.0001	< 0.0001	< 0.0001		< 0.0001	< 0.0001	< 0.0001	
Calcium	mg/L	1	4	5	13		4	5	8	
Carbonate	mg/L	1	< 1	11	< 1		16	< 1	2	
Chloride	mg/L	1	322	51	466		58	414	50	
Chromium	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	
Cobalt	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	
Copper	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	
Dissolved Oxygen	mg/L	-	1.32	0.84	1.32		0.64	0.79	0.56	
Electrical Conductivity	µS/cm	-	2498	1203	4630		1298	3342	1198	
Fluoride	mg/L	0.1	0.6	0.9	0.8		0.7	0.6	0.7	
Iron	mg/L	0.05	< 0.05	< 0.05	0.09		< 0.05	< 0.05	< 0.05	
Lead	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	
Magnesium	mg/L	1	1	1	4		< 1	2	2	
Manganese	mg/L	0.001	< 0.001	0.066	0.082		0.004	0.031	0.018	
Mercury	mg/L	0.0001	< 0.0001	< 0.0001	< 0.0001		< 0.0001	< 0.0001	< 0.0001	
Methane	mg/L	0.01	< 0.01	0.046	< 0.01		< 0.01	< 0.01	< 0.01	
Molybdenum	mg/L	0.001	0.002	0.002	0.003		< 0.001	0.003	0.001	
Nickel	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001	< 0.001	< 0.001	
Nitrate	mg/L	0.01	0.39	< 0.01	0.17		0.02	< 0.01	< 0.01	
Nitrite	mg/L	0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	
pH	pH Unit	-	7.65	8.18	7.9		8.28	7.49	7.49	
Potassium	mg/L	1	7	3	11		4	10	5	
Reactive Phosphorus	mg/L	0.01	0.34	0.28	0.33		0.27	0.29	0.22	
Redox Potential	mV	-	61	34.5	0.5		61	70.8	70.8	
Selenium	mg/L	0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	
Silica	mg/L									
Sodium	mg/L	1	579	286	1150		312	792	282	
Sodium Adsorption Ratio (Storages)	-	0.01								
Standing Water Level	mTOC	-	16.80	15.71	15.91		16.98	17.05	21.0	
Strontium	mg/L	0.001	0.043	0.061	0.156		0.022	0.049	0.045	
Sulfate	mg/L	1	< 1	< 1	87		< 1	< 1	< 1	
Total Alkalinity (as CaCO3)	mg/L	1	846	512	1750		543	1100	517	
Total Dissolved Solids	mg/L	10	1440	810	2830		765	1870	745	
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1								
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001	0.001	< 0.001	0.009		< 0.001	0.002	< 0.001	
Vanadium	mg/L	0.01	< 0.01	< 0.01	< 0.01		< 0.01	< 0.01	< 0.01	
Zinc	mg/L	0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005	< 0.005	

*Monitoring event was attempted but no water was available for sampling from WPKMW12S and WPKMW14S

		EPA Identification No	63	64	65	66	67	68	78	79
		Location	WPKMW15D	WPKMW15S	WPKMW16D	WPKMW16S	WPKMW17D	WPKMW17S	WPKMW18S	WPKMW18I
		Date Sampled	28/03/2019	28/03/2019	28/03/2019	28/03/2019	28/03/2019	28/03/2019	28/03/2019	28/03/2019
		Sample obtained	Yes	Yes	Yes	No	Yes	Yes	No	Yes
		Sample Method	Grab Sample	Grab Sample	Grab Sample	Dry well*	Grab Sample	Insufficient Liquid**	Insufficient Liquid**	Grab Sample
	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01	0.06	< 0.01	< 0.01		< 0.01			< 0.01
Ammonia	mg/L	0.01	0.07	0.01	0.02		0.06			< 0.01
Arsenic	mg/L	0.001	0.003	0.004	0.002		0.002			0.001
Barium	mg/L	0.001	0.348	2.27	0.193		0.128			0.081
Beryllium	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001			< 0.001
Bicarbonate	mg/L	1	535	3110	492		483			476
Boron	mg/L	0.05	0.17	0.58	0.07		< 0.05			0.20
Bromide	mg/L	0.01	0.167	2.57	0.178		0.164			0.097
Cadmium	mg/L	0.0001	< 0.0001	< 0.0001	< 0.0001		< 0.0001			< 0.0001
Calcium	mg/L	1	7	8	7		3			1
Carbonate	mg/L	1	< 1	< 1	< 1		< 1			6
Chloride	mg/L	1	53	894	57		51			47
Chromium	mg/L	0.001	< 0.001	0.011	< 0.001		< 0.001			< 0.001
Cobalt	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001			< 0.001
Copper	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001			< 0.001
Dissolved Oxygen	mg/L	-	0.84	2.84	1.01		0.58			1.3
Electrical Conductivity	µS/cm	-	1314	8841	1279		1134			1134
Fluoride	mg/L	0.1	0.4	0.9	0.5		0.8			0.6
Iron	mg/L	0.05	0.10	< 0.05	< 0.05		< 0.05			< 0.05
Lead	mg/L	0.001	< 0.001	< 0.001	< 0.001		< 0.001			< 0.001
Magnesium	mg/L	1	2	14	2		1			< 1
Manganese	mg/L	0.001	0.067	0.002	0.010		0.038			< 0.001
Mercury	mg/L	0.0001	< 0.0001	< 0.0001	< 0.0001		< 0.0001			< 0.0001
Methane	mg/L	0.01	0.266	< 0.01	< 0.01		< 0.01			< 0.01
Molybdenum	mg/L	0.001	0.012	0.005	0.005		0.008			0.004
Nickel	mg/L	0.001	0.001	< 0.001	0.001		< 0.001			< 0.001
Nitrate	mg/L	0.01	< 0.01	0.58	< 0.01		< 0.01			1.59
Nitrite	mg/L	0.01	< 0.01	< 0.01	< 0.01		< 0.01			< 0.01
pH	pH Unit	-	7.94	7.91	7.96		7.52			8.07
Potassium	mg/L	1	8	34	11		6			4
Reactive Phosphorus	mg/L	0.01	0.31	0.65	0.28		0.06			0.36
Redox Potential	mV	-	-86	52	113		85			79
Selenium	mg/L	0.01	< 0.01	< 0.01	< 0.01		< 0.01			< 0.01
Silica	mg/L									
Sodium	mg/L	1	306	2310	287		266			276
Sodium Adsorption Ratio (Storages)	-	0.01								
Standing Water Level	mTOC	-	22.21	22.49	26.59		18.89	22.79	16.91	16.44
Strontium	mg/L	0.001	0.054	0.295	0.055		0.020			0.012
Sulfate	mg/L	1	12	< 1	10		< 1			< 1
Total Alkalinity (as CaCO3)	mg/L	1	535	3110	492		483			482
Total Dissolved Solids	mg/L	10	936	5640	784		712			710
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1								
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001	< 0.001	0.011	0.004		0.002			< 0.001
Vanadium	mg/L	0.01	< 0.01	0.03	< 0.01		< 0.01			< 0.01
Zinc	mg/L	0.005	< 0.005	< 0.005	< 0.005		< 0.005			< 0.005

*Monitoring event was attempted but no water was available for sampling from WPKMW16S

**Monitoring event was attempted but insufficient water was available for sampling from WPKMW17S & WPKMW18S

	Units	EPA Identification No	80	81	82	77	77	77
		Location	LWDMW4	LWDMW5	LWDMW6	LWWTPDM1*	LWWTPDM1*	LWWTPDM1*
		Date Sampled	20/03/2019	20/03/2019	20/03/2019	15/2/2019	15/3/2019	15/4/2019
		Sample obtained	Yes	Yes	Yes	No	No	No
		Sample Method	Grab Sample	Grab Sample	Grab Sample	No Irrigation	No Irrigation	No Irrigation
	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01	< 0.01	< 0.01	< 0.01			
Ammonia	mg/L	0.01	0.02	0.02	0.02			
Arsenic	mg/L	0.001	0.002	0.002	0.002			
Barium	mg/L	0.001	0.397	0.319	0.258			
Beryllium	mg/L	0.001	< 0.001	< 0.001	< 0.001			
Bicarbonate	mg/L	1	189	191	80			
Boron	mg/L	0.05	0.10	0.14	0.09			
Bromide	mg/L	0.01	0.780	0.844	0.837			
Cadmium	mg/L	0.0001	< 0.0001	< 0.0001	< 0.0001			
Calcium	mg/L	1	6	3	3			
Carbonate	mg/L	1	< 1	< 1	< 1			
Chloride	mg/L	1	420	384	365			
Chromium	mg/L	0.001	< 0.001	< 0.001	< 0.001			
Cobalt	mg/L	0.001	0.001	0.001	< 0.001			
Copper	mg/L	0.001	< 0.001	< 0.001	< 0.001			
Dissolved Oxygen	mg/L	-	1.22	0.17	0.62			
Electrical Conductivity	µS/cm	-	1696	1560	1333			
Fluoride	mg/L	0.1	0.2	0.4	0.2			
Iron	mg/L	0.05	4.67	3.18	3.50			
Lead	mg/L	0.001	< 0.001	< 0.001	< 0.001			
Magnesium	mg/L	1	11	5	6			
Manganese	mg/L	0.001	0.166	0.244	0.104			
Mercury	mg/L	0.0001	< 0.0001	< 0.0001	< 0.0001			
Methane	mg/L	0.01	0.242	0.321	0.079			
Molybdenum	mg/L	0.001	0.003	0.002	< 0.001			
Nickel	mg/L	0.001	0.001	0.004	< 0.001			
Nitrate	mg/L	0.01	0.01	0.01	0.02			
Nitrite	mg/L	0.01	< 0.01	< 0.01	< 0.01			
pH	pH Unit	-	6.4	6.56	6.26			
Potassium	mg/L	1	17	13	14			
Reactive Phosphorus	mg/L	0.01	< 0.01	< 0.01	< 0.01			
Redox Potential	mV	-	-10	-25	-12			
Selenium	mg/L	0.01	< 0.01	< 0.01	< 0.01			
Silica	mg/L							
Sodium	mg/L	1	304	297	239			
Sodium Adsorption Ratio	-	0.01						
Standing Water Level	mTOC	-	23.52	25.2	20.22			
Strontium	mg/L	0.001	0.079	0.043	0.053			
Sulfate	mg/L	1	6	6	13			
Total Alkalinity (as CaCO3)	mg/L	1	189	191	80			
Total Dissolved Solids	mg/L	10	971	1110	847			
Total Hardness (as CaCO3)	mg/L	1						
Total Nitrogen (as N)	mg/L	0.1						
Total Organic Carbon (Storages)	mg/L	1						
Total Phosphorus (as P)	mg/L	0.01						
Total Residual Chlorine	mg/L							
Turbidity	NTU	0.1						
Uranium	mg/L	0.001	< 0.001	< 0.001	< 0.001			
Vanadium	mg/L	0.01	< 0.01	< 0.01	< 0.01			
Zinc	mg/L	0.005	< 0.005	< 0.005	0.005			

*Monitoring event was attempted but no water was available for sample due to no irrigation at LWWTPDM1

		EPA Identification No	69	70	71	72	73	74	75	76
		Location	BWDPD2***	BWDPD3***	LWDPD1CELL4	LWDPD1CELL3	LWDPD1CELL2	LWDPD1CELL1	TFDPD1	TFDPD2
		Date Sampled	n/a	n/a	27/03/2019	27/03/2019	27/03/2019	27/03/2019	27/03/2019	27/03/2019
		Sample obtained	No	No	Yes	Yes	Yes	Yes	No	No
		Sample Method	n/a	n/a	Grab Sample	Grab Sample	Grab Sample	Grab Sample	Insufficient Liquid**	Insufficient Liquid**
	Units	LOR	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT	RESULT
Aluminium	mg/L	0.01			< 0.10	< 0.10	< 0.10	0.17		
Ammonia	mg/L	0.01			< 0.10*	0.33	< 0.10*	< 0.10*		
Arsenic	mg/L	0.001			0.034	< 0.010	< 0.010	0.071		
Barium	mg/L	0.001			22.8	2.24	10.8	5.47		
Beryllium	mg/L	0.001			< 0.010	< 0.010	< 0.010	< 0.010		
Bicarbonate	mg/L	1			47000	8360	16200	34700		
Boron	mg/L	0.05			9.44	1.12	3.00	16.9		
Bromide	mg/L	0.01			63.1	3.17	12.1	124		
Cadmium	mg/L	0.0001			< 0.0010	< 0.0010	< 0.0010	0.0011		
Calcium	mg/L	1			35	10	25	26		
Carbonate	mg/L	1			38200	3000	11700	37800		
Chloride	mg/L	1			15700	1690	5410	24100		
Chromium	mg/L	0.001			< 0.010	< 0.010	< 0.010	< 0.010		
Cobalt	mg/L	0.001			< 0.010	< 0.010	< 0.010	< 0.010		
Copper	mg/L	0.001			< 0.010	< 0.010	< 0.010	0.011		
Dissolved Oxygen	mg/L	-			2.00	4.16	3.93	1.92		
Electrical Conductivity	µS/cm	-			108503	24329	54533	120346		
Fluoride	mg/L	0.1			69.5	7.5	21.0	98.5		
Iron	mg/L	0.05			0.56	< 0.10	0.28	0.74		
Lead	mg/L	0.001			< 0.010	< 0.010	< 0.010	< 0.010		
Magnesium	mg/L	1			64	9	23	61		
Manganese	mg/L	0.001			0.074	< 0.010	0.030	0.090		
Mercury	mg/L	0.0001			< 0.0010*	< 0.0001	< 0.0010*	< 0.0010*		
Methane	mg/L	0.01			0.012	0.092	0.331	0.062		
Molybdenum	mg/L	0.001			0.021	< 0.010	< 0.010	0.057		
Nickel	mg/L	0.001			< 0.010	< 0.010	< 0.010	< 0.010		
Nitrate	mg/L	0.01			0.16	0.90	0.12	< 0.2*		
Nitrite	mg/L	0.01			< 0.01	< 0.01	< 0.01	< 0.01		
pH	pH Unit	-			9.57	9.41	9.68	9.78		
Potassium	mg/L	1			1150	68	249	2600		
Reactive Phosphorus	mg/L	0.01			7.17	0.08	1.15	16.0		
Redox Potential	mV	-			57	52	43	50		
Selenium	mg/L	0.01			< 0.10	< 0.10	< 0.10	< 0.10		
Silica	mg/L									
Sodium	mg/L	1			58600	7690	19200	41600		
Sodium Adsorption Ratio (Storages)	-	0.01			1360	425	666	1020		
Standing Water Level	mTOC	-								
Strontium	mg/L	0.001			7.15	1.10	3.10	4.92		
Sulfate	mg/L	1			1270	< 10	39	1570		
Total Alkalinity (as CaCO3)	mg/L	1			85200	11400	27900	72500		
Total Dissolved Solids	mg/L	10			161000	19000	54100	204000		
Total Hardness (as CaCO3)	mg/L	1								
Total Nitrogen (as N)	mg/L	0.1								
Total Organic Carbon (Storages)	mg/L	1			236	1300	49	27200		
Total Phosphorus (as P)	mg/L	0.01								
Total Residual Chlorine	mg/L									
Turbidity	NTU	0.1								
Uranium	mg/L	0.001			< 0.010	< 0.010	< 0.010	< 0.010		
Vanadium	mg/L	0.01			< 0.10	< 0.10	< 0.10	< 0.10		
Zinc	mg/L	0.005			< 0.050	< 0.050	< 0.050	< 0.050		

*LOR raised due to sample matrix
**Monitoring event was attempted but insufficient water was available for sampling from TFDPD1 & TFDPD2
***No monitoring required at sample point BWDPD2 and BWDPD3 in accordance with EPL20350 Condition M2.6

	Units	EPA Identification No Location Date Sampled Sample obtained Sample Method LOR	83 LWDSMP1 n/a N n/a RESULT	84 LWDSMP2 n/a N n/a RESULT	85 LWDSMP3 n/a N n/a RESULT	86 LWDSMP4 n/a N n/a RESULT
Aluminium	mg/kg	0.01				
Boron	mg/kg	0.05				
Calcium	mg/kg	1				
Cation Exchange Capacity (CEC)	cmol(+)/kg					
Chloride	mg/kg	1				
Copper	mg/kg	0.001				
Electrical Conductivity	µS/cm	-				
Hydraulic Conductivity	m/sec^{-1}					
Iron	mg/kg	0.05				
Magnesium	mg/kg	1				
Manganese	mg/kg	0.001				
Nitrogen (nitrate)	mg/kg					
Organic Carbon	%					
pH	pH Unit	-				
Phosphorus	mg/kg					
Phosphorus (Available)	mg/kg					
Potassium	mg/kg	1				
Sodium	mg/kg	0.01				
Sodium Adsorption Ratio	-	0.01				
Sodium (Exchangeable Percentage)	%					
Sulfate	mg/kg	1				
Zinc	mg/kg	0.005				

LWDSMP1, LWDSMP2, LWDSMP3 & LWDSMP4 not due within reporting period

Table 3: GROUNDWATER LEVEL RESULTS FOR 4th QUARTER – Feb 2019/Apr 2019

EPA Identification No	44	45	46	47	48	49
Location	Dewhurst 8A-1 (DWH8AQGDGY01)	Dewhurst 8A-2 (DWH8AQGARK)	Dewhurst 8A-3 (DWH8AQGPOR03)	Bibblewindi 28A (BWD28QGUPS01)	Bibblewindi 28B (BWD28QGLPS01)	Bilbbewindi 28C (BWD28QGPUR01)
Date Sampled	1st Feb 2019 – 30th Apr 2019	1st Feb 2019 – 30th Apr 2019	1st Feb 2019 – 30th Apr 2019	1st Feb 2019 – 30th Apr 2019	1st Feb 2019 – 30th Apr 2019	1st Feb 2019 – 30th Apr 2019
Sample Obtained	Standing Water Level	Standing Water Level	Standing Water Level	Standing Water Level	Standing Water Level	Standing Water Level
Number of Samples Required	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Lowest sample value	-35.800	16.800	-66.200	11.800	4.500	15.400
Mean of sample	-35.496	17.144	-65.591	11.800	4.500	15.400
Highest sample value	-35.200	17.400	-64.900	11.800	4.500	15.400