

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: GW10									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD ₅	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	2	0.31	2.01	<0.005	1	3.9	<0.5	<1	<2
19/10/2010	184		2.82		112	11			
12/04/2011	384	0.09	0.92	<0.005	234	1.8	<0.5	<1	<2
12/10/2011	444		1.70		271	1.5			
10/04/2012	250	0.16	1.07	<0.005	152	9.0	<0.5	<1	<2
9/10/2012	332		2.78		202	5.4			
9/04/2013	314	0.32	2.77	<0.005	192	6.0	<0.5	<1	<2
9/04/2014	363	0.39	4.76	<0.005	220	10	<0.5	<1	<2
14/04/2015	311	0.20	6.06	<0.001	190	7.2	<0.5	<1	<2
13/10/2015	313		3.72		313	5.4			
12/04/2016	292	0.166	5.76	<0.001	292	7.5	<0.5	<1	<2
13/10/2016	319		6.3		319	11.7			
11/04/2017	307	0.197	6.02	0.001	307	10.5	<0.5	<1	<2
10/10/2017	309.04		6.46		309	8.1			
27/03/2018	278.95	0.23771	5.44	<0.001	279	6.9	9.44	9.9	19.7
9/10/2018	199.68		6.27		200	10.5			
9/04/2019	188.57	0.34147	6.17	0.00101	189	8.4	<0.5	<1	<2
22/10/2019	207		4.15		207	5.4			

... Monitoring Point GW10 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	Conductivity	Copper (Total)	Depth of Water
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)	(m)
13/04/2010	<1	<1	<0.01	101	47	0.01	832	0.04	1.8
19/10/2010				48	34		463		2.2
12/04/2011	<1	<1	<0.001	129	45	<0.01	968	0.03	2.1
12/10/2011				149	43		1121		1.9
10/04/2012	<1	<1	0.001	64	56	<0.01	733	0.02	2.0
9/10/2012				108	46		839		1.6
9/04/2013	<1	<1	<0.001	122	51	<0.01	864	<0.01	2.3
9/04/2014	<1	<1	<0.001	114	45	<0.01	803	<0.01	1.6
14/04/2015	<1	<1	<0.001	93	32	0.001	708	0.001	2.3
13/10/2015				93	31		704		1.8
12/04/2016	<1	<1	<0.001	81.572	33	0.001	688	0.001	2.4
13/10/2016				97.934	50		720.5		1.9
11/04/2017	<1	<1	<0.001	92.589	30	0.001	722.8	0.002	2.2
10/10/2017				94.3144	33		690.3		1.9
27/03/2018	10.2	9.9	<0.001	86.4516	37.5	<0.001	656.5	0.00126	2.2
9/10/2018				77.7169	117		807.7		2.0
9/04/2019	<1	2.45426	<0.001	76.1134	86.5	0.00121	642	0.00126	2.0
22/10/2019				77	70		632		1.7

... Monitoring Point GW10 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Depth to Water	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)	Nitrate	Nitrite
Date	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)	(N mg/L)	(N mg/L)
13/04/2010	0.9	2.63	0.01	11	0.15	<0.05	<0.01	<0.05	<0.05
19/10/2010	0.6			5.8		<0.05		<0.05	<0.05
12/04/2011	0.6	1.77	<0.01	18	0.12	<0.05	<0.01	0.19	<0.05
12/10/2011	0.8			18		<0.05		0.06	<0.05
10/04/2012	0.7	0.87	<0.01	11	0.12	<0.05	<0.01	0.03	<0.02
30/08/2012						<0.05			
9/10/2012	1.1			15		<0.05		0.03	<0.02
9/04/2013	0.5	0.83	<0.01	22	0.31	0.05	<0.01	0.06	<0.02
9/04/2014	1.2	1.61	0.01	17	0.21	0.15	<0.01	0.05	<0.02
14/04/2015	0.5	0.49	0.001	13	0.216	<0.05	<0.001	<0.02	<0.02
13/10/2015	1.0			14		<0.05		0.17	<0.02
12/04/2016	1.2	0.597	0.001	11.71	0.193	<0.05	0.001	0.04	<0.02
13/10/2016	1.7			13.857		<0.05		<0.02	<0.02
11/04/2017	1.4	0.609	0.001	11.371	0.198	<0.05	0.001	<0.02	<0.02
10/10/2017	1.8			11.5607		0.05		<0.02	<0.02
27/03/2018	1.4	2.31852	0.00139	9.7626	1.37324	<0.05	<0.001	<0.02	<0.02
9/10/2018	1.7			12.589		<0.05		<0.02	<0.02
9/04/2019	1.6	2.08021	0.0028	8.0923	1.44075	<0.05	<0.001	<0.02	<0.02
22/10/2019	2.0			9.6		<0.05		<0.02	<0.02

... Monitoring Point GW10 continued



Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)	Sulphate	Surrogate
Date	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(%)
13/04/2010	<0.05	2.47	6.5		0.24	7	23	7.7	<5
19/10/2010	<0.05	3.52	6.6	NP	0.24	<5	17	3.5	
12/04/2011	0.19	1.60	6.3	NP	0.16	7	24	111	<5
12/10/2011	0.06	2.56	6.5	NP	0.10	8	27	85	
10/04/2012	0.03	1.72	6.4	NP	0.27	6	24	26	<5
9/10/2012	0.03	3.56	6.4	NP	0.29	7	32	30	
9/04/2013	0.06	3.86	6.5	NP	0.41	6	49	87	101
9/04/2014	0.05	6.32	6.5	NP	0.30	10	35	14	93
14/04/2015	<0.02	3.36	6.5	NP	0.14	6.8	28	47	91
13/10/2015	0.17	5.06	6.6	NP	0.30	6.3	22	22	
12/04/2016	0.04	6.34	6.5	NP	0.29	6.499	23.547	17.469	100
13/10/2016	<0.02	7.69	6.6	0	0.34	7.175	23.387	15.587	
11/04/2017	<0.02	7.08	6.5	0	0.28	7.461	25.267	25.6	101
10/10/2017	<0.02	7.68	6.3	0	0.44	6.7006	21.9067	11.1496	
27/03/2018	<0.02	6.48	6.6	0	0.22	7.0398	22.5896	9.2215	113
9/10/2018	<0.02	7.37	6.6	0	0.38	7.8696	56.4546	23.0474	
9/04/2019	<0.02	6.65	6.4	0	0.19	6.4439	37.232	2.0333	97.55
22/10/2019	<0.02	4.62	6.5	0	0.17	4.6	31	6.9	

... Monitoring Point GW10 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C16	Total Petroleum Hydrocarbons C10-C36	Total Petroleum Hydrocarbons C10-C40	Total Petroleum Hydrocarbons C15-C28	Total Petroleum Hydrocarbons C16-C34
Date	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	<10*	2.47	10	<20		<20		<100	
19/10/2010		3.58							
12/04/2011	<10*	1.41	11	<20		<20		<100	
12/10/2011		2.50							
10/04/2012	<10*	1.69	15	<20		<20		<100	
9/10/2012		3.53							
9/04/2013	<4*	3.80	17	21		21		<100	
9/04/2014	10*	6.2700	12	<20		<20		<100	
14/04/2015	<10*	3.3600	12	<20		<20		<100	
13/10/2015		4.8900							
12/04/2016	1*	6.3000	10	<20		<20		<100	
13/10/2016		7.6900							
11/04/2017	2*	7.0800	10.79	<20		<20		<100	
10/10/2017		7.6800							
27/03/2018	<10*	6.4800	9.919		25.481		1624		126.165
9/10/2018		7.3700							
9/04/2019	<10*	6.6500	22.79		<50		<50		<100
22/10/2019		4.62							

... Monitoring Point GW10 continued

Pollutant	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C34-C40	Total Petroleum Hydrocarbons C6-C10 Volatile Fract	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction	Zinc (Total)
Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
13/04/2010	<100			<20	0.14
12/04/2011	<100			<20	0.02
10/04/2012	<100			<20	0.04
9/04/2013	<100			<20	0.06
9/04/2014	<100			<20	0.09
14/04/2015	<100			<20	0.061
12/04/2016	<100			<20	0.031
11/04/2017	<100			<20	0.043
27/03/2018		333.8	53		0.04774
9/04/2019		<100	<20		0.03705

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: GW16									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	2	0.95	0.97	<0.005	1	10	<0.5	<1	<2
19/10/2010	3		0.60		2	9.0			
12/04/2011	4	1.07	1.18	<0.005	2	9.9	<0.5	<1	<2
12/10/2011	NP		1.45		NP	11			
10/04/2012	<1	1.38	1.08	<0.005	<1	8.4	<0.5	<1	<2
9/10/2012	<1		1.36		<1	12			
9/04/2013	3	1.58	0.58	<0.005	2	6.6	<0.5	<1	<2
9/04/2014	1	1.41	0.98	<0.005	<1	8.7	<0.5	<1	<2
14/04/2015	4	1.61	0.48	<0.001	2	9.0	<0.5	<1	<2
13/10/2015	4		0.49		4	6.9			
12/04/2016	<1	1.553	1.12	0.001	<1	7.8	<0.5	<1	<2
13/10/2016	3.8		0.99		4	5.7			
11/04/2017	<1	1.165	0.57	0.001	NP	7.2	<0.5	<1	<2
10/10/2017	6.56		1.64		7	13.2			
9/04/2019	2.97	1.16146	1.12	<0.001	3	6.6	<0.5	<1	<2
22/10/2019	3		1.0		6.0	6.0			
... Monitoring Point GW16 continued									
Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	Conductivity	Copper (Total)	Depth of Water
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)	(m)
13/04/2010	<1	<1	<0.01	1.2	35	<0.01	194	0.03	2.1
19/10/2010				1.6	23		132		2.6
12/04/2011	<1	<1	<0.001	1.1	31	<0.01	157	0.02	2.3
12/10/2011				2.8	78		305		2.0
10/04/2012	<1	<1	<0.001	2.6	72	<0.01	321	0.01	2.2
9/10/2012				2.6	75		296		1.8
9/04/2013	<1	<1	<0.001	2.4	22	<0.01	135	<0.01	0.2
9/04/2014	<1	<1	<0.001	2.1	23	<0.01	119	<0.01	1.7
14/04/2015	<1	10	<0.001	2.2	30	0.001	150	0.007	2.4
13/10/2015				2.1	38		160		1.9
12/04/2016	<1	<1	<0.001	2.38	52	0.004	221	0.002	1.4
13/10/2016				1.862	38		161.1		2.0
11/04/2017	<1	<1	<0.001	2.204	42	0.004	183.4	0.002	2.5
10/10/2017				2.8051	63		253		2.1
9/04/2019	<1	2.27807	<0.001	1.6523	26	0.0041	133.2	0.00128	2.1
22/10/2019				1.6	38		159		1.6

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



... Monitoring Point GW16 continued

Pollutant	Depth to Water	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)	Nitrate	Nitrite
Date	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)	(N mg/L)	(N mg/L)
13/04/2010	0.7	2.45	0.01	5.9	0.04	<0.05	<0.01	<0.05	<0.05
19/10/2010	0.2			3.5		<0.05		<0.05	<0.05
12/04/2011	0.5	1.84	<0.01	3.7	<0.01	<0.05	<0.01	<0.05	0.05
12/10/2011	0.8			8.9		<0.05		<0.05	<0.05
10/04/2012	0.6	3.88	<0.01	8.5	0.03	<0.05	<0.01	<0.02	0.06
30/08/2012						<0.05			
9/10/2012	1.0			9.0		<0.05		0.06	0.05
9/04/2013	2.6	3.67	<0.01	4.3	0.01	0.15	<0.01	<0.02	0.07
9/04/2014	1.1	3.27	0.01	3.4	0.03	<0.05	<0.01	<0.02	0.08
14/04/2015	0.4	3.58	0.001	4.2	0.064	<0.05	0.003	<0.02	0.14
13/10/2015	0.8			3.4		<0.05		<0.02	0.08
12/04/2016	1.9	2.965	0.002	5.064	0.058	<0.05	0.003	<0.02	0.09
13/10/2016	1.3			3.595		<0.05		<0.02	0.1
11/04/2017	0.7	3.034	0.002	4.932	0.057	<0.05	0.003	<0.02	0.09
10/10/2017	1.3			6.1879		<0.05		<0.02	0.04
9/04/2019	1.3	1.54477	0.00104	3.1893	0.03175	<0.05	0.0021	<0.02	0.05
22/10/2019	1.8			3.0		<0.05		<0.02	0.04

... Monitoring Point GW16 continued



Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)	Sulphate	Surrogate
Date	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(%)
13/04/2010	<0.05	1.97	4.9		0.10	<5	18	31	<5
19/10/2010	<0.05	1.55	4.9	NP	0.10	<5	11	3.6	
12/04/2011	<0.05	2.44	3.8	NP	0.11	<5	15	21	<5
12/10/2011	<0.05	2.86	4.4	NP	0.06	<5	22	75	
10/04/2012	0.04	3.12	4.4	NP	0.09	<5	21	7.8	<5
9/10/2012	0.11	3.19	4.4	NP	0.08	<5	29	16	
9/04/2013	0.03	2.49	4.5	NP	0.07	<5	17	23	97
9/04/2014	0.08	3.06	4.5	NP	0.11	<5	13	7.8	85
14/04/2015	0.13	2.37	4.6	NP	0.10	<5	18	16	93
13/10/2015	0.08	2.91	4.7	NP	0.27	<5	19	28	
12/04/2016	0.02	2.95	4.5	NP	0.11	<5	25.489	84.733	97
13/10/2016	0.03	2.99	4.6	0	0.09	<5	21.114	8.904	
11/04/2017	0.05	2.02	4.4	0	0.06	<5	19.08	8.9	106
10/10/2017	0.03	2.77	4.6	0	0.15	<5	29.3946	11.0931	
9/04/2019	<0.02	2.50	4.7	0	2.50	1.5611	17.4288	27.0814	99.91
22/10/2019	0.04	2.34	4.8	0	0.1	1.4	17	99	

... Monitoring Point GW16 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C16	Total Petroleum Hydrocarbons C10-C36	Total Petroleum Hydrocarbons C10-C40	Total Petroleum Hydrocarbons C15-C28	Total Petroleum Hydrocarbons C16-C34
Date	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	<10*	1.97	46	<20		<20		<100	
19/10/2010		1.55							
12/04/2011	<10*	2.44	75	<20		<20		<100	
12/10/2011		2.86							
10/04/2012	80*	3.08	112	<20		<20		<100	
9/10/2012		3.08							
9/04/2013	<10*	2.46	101	<20		<20		<100	
9/04/2014	<10*	2.9800	69	<20		<20		<100	
14/04/2015	<20*	2.2300	85	<20		<20		<100	
13/10/2015		2.8300							
12/04/2016	<2*	2.9500	90	<20		<20		<100	
13/10/2016		2.9500							
11/04/2017	80*	1.9700	63.56	<20		<20		<100	
10/10/2017		2.7400							
27/03/2018	-								
9/04/2019	<10*	2.4500	70.11		<125		<50		305.906
22/10/2019		2.29							

... Monitoring Point GW16 continued

Pollutant	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C34-C40	Total Petroleum Hydrocarbons C6-C10 Volatile Fract	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction	Zinc (Total)
Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
13/04/2010	<100			<20	0.13
12/04/2011	<100			<20	0.04
10/04/2012	<100			<20	0.45
9/04/2013	<100			<20	0.10
9/04/2014	<100			<20	0.50
14/04/2015	<100			<20	0.114
12/04/2016	<100			<20	0.108
11/04/2017	<100			<20	0.03
9/04/2019		<100	<20		0.01105

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: GW18									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	NP	0.47	0.11	<0.005	NP	4.8	<0.5	<1	<2
19/10/2010	NP		0.20		NP	3.6			
12/04/2011	<1	0.29	0.13	<0.005	<1	5.7	<0.5	<1	<2
12/10/2011	NP		0.13		NP	5.1			
10/04/2012	<1	0.32	0.16	<0.005	<1	4.5	<0.5	<1	<2
9/10/2012	12		0.69		7	15			
9/04/2013	NP	0.35	0.09	<0.005	NP	2.1	<0.5	<1	<2
9/04/2014	<1	0.48	0.20	<0.005	<1	7.0	<0.5	<1	<2
14/04/2015	<1	0.38	0.61	<0.001	<1	9.9	<0.5	<1	<2
13/10/2015	<1		0.20		<1	6.0			
12/04/2016	<1	0.641	0.47	0.001	<1	5.4	<0.5	<1	<2
13/10/2016	<1		2.42		NP	6.9			
11/04/2017	<1	0.371	0.1	0.001	NP	3.0	<0.5	<1	<2
10/10/2017	<1		0.12		NP	3.0			
27/03/2018	<1	0.35107	0.13	<0.001	NP	4.2	<0.5	<1	<2
9/10/2018	<1		0.2		NP	3.3			
9/04/2019	<1	0.6159	0.48	<0.001	NP	3.3	9.97	9.83	20.41
22/10/2019	<1		0.49		NP	16			

... Monitoring Point GW18 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	Conductivity	Copper (Total)	Depth of Water
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)	(m)
13/04/2010	<1	<1	<0.01	0.4	70	<0.01	355	0.02	1.7
19/10/2010				0.4	50		285		2.0
12/04/2011	<1	<1	<0.001	0.4	54	<0.01	250	0.03	2.0
12/10/2011				1.0	60		284		2.1
10/04/2012	<1	<1	<0.001	1.1	72	<0.01	330	0.01	1.8
9/10/2012				10	60		216		1.4
9/04/2013	<1	<1	<0.001	0.6	59	<0.01	338	0.01	2.1
9/04/2014	<1	1	<0.001	0.5	60	<0.01	319	<0.01	1.4
14/04/2015	<1	6	<0.001	0.3	68	0.002	313	0.005	1.9
13/10/2015				0.8	61		265		1.5
12/04/2016	<1	1	<0.001	1.968	58	0.004	270	0.008	1.7
13/10/2016				0.473	58		254.7		1.5
11/04/2017	<1	<1	<0.001	1.04	52	0.001	292.2	0.003	2.0
10/10/2017				0.4533	72		254.2		0.4
27/03/2018	<1	1.7	<0.001	1.4645	70	0.00114	272.4	0.00149	1.3
9/10/2018				0.4691	56		309.6		1.4
9/04/2019	9.97	3.43812	<0.001	1.2575	44	0.00255	289.4	0.00366	1.8
22/10/2019				0.4	51		258		1.2
... Monitoring Point GW18 continued									

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Depth to Water	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)	Nitrate	Nitrite
Date	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)	(N mg/L)	(N mg/L)
13/04/2010	1.0	0.65	<0.01	3.9	<0.01	<0.05	<0.01	<0.05	<0.05
19/10/2010	0.6			3.1		<0.05		<0.05	<0.05
12/04/2011	0.6	1.14	<0.01	2.4	<0.01	<0.05	<0.01	<0.05	0.07
12/10/2011	1.1			3.1		<0.05		<0.05	0.09
10/04/2012	0.9	1.70	<0.01	3.7	<0.01	<0.05	<0.01	<0.02	0.08
30/08/2012						<0.05			
9/10/2012	1.3			3.2		<0.05		<0.02	0.04
9/04/2013	0.6	0.47	<0.01	4.0	0.02	0.20	<0.01	<0.02	0.06
9/04/2014	1.3	1.19	0.01	5.8	<0.01	<0.05	<0.01	<0.02	0.14
14/04/2015	0.9	0.80	0.005	4.2	0.024	<0.05	0.002	<0.02	0.10
13/10/2015	1.2			3.4		<0.05		<0.02	0.14
12/04/2016	1.5	0.839	0.003	3.884	0.023	<0.05	0.002	<0.02	0.17
13/10/2016	1.7			2.852		<0.05		<0.02	0.11
11/04/2017	1.2	0.463	0.002	3.985	0.011	<0.05	0.001	<0.02	0.09
10/10/2017	1.8			3.3698		<0.05		<0.02	0.09
27/03/2018	1.9	0.90824	0.00138	3.2102	0.01018	<0.05	<0.001	<0.02	0.1
9/10/2018	1.8			3.7273		<0.05		<0.02	0.12
9/04/2019	1.4	0.71531	0.00148	4.593	0.02706	<0.05	0.00103	<0.02	0.15
22/10/2019	2.0			3.6		<0.05		<0.02	0.1

... Monitoring Point GW18 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)	Sulphate	Surrogate
Date	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(%)
13/04/2010	<0.05	1.49	3.6		0.11	<5	31	6.1	<5
19/10/2010	<0.05	1.77	3.2	NP	0.10	<5	25	3.5	
12/04/2011	0.07	1.31	3.1	NP	0.10	<5	23	3.7	<5
12/10/2011	<0.05	1.63	3.7	NP	0.06	<5	25	7.0	
10/04/2012	0.08	1.70	3.6	NP	0.10	<5	22	2.4	<5
9/10/2012	0.04	1.85	5.2	NP	0.09	<5	25	4.9	
9/04/2013	0.02	1.56	3.4	NP	0.03	<5	31	7.0	98
9/04/2014	0.14	2.47	3.5	NP	0.10	<5	33	9.6	85
14/04/2015	0.10	2.57	3.6	NP	0.17	<5	33	6.8	92
13/10/2015	0.14	2.69	3.7	NP	0.18	<5	28	3.5	
12/04/2016	0.05	2.87	3.8	NP	0.19	<5	35.531	6.266	99
13/10/2016	0.02	5.22	3.8	0	0.3	<5	29.383	3.43	
11/04/2017	0.04	1.65	3.6	0	0.16	<5	27.866	9.1	106
10/10/2017	0.06	2.01	3.4	0	0.11	<5	23.7534	6.3171	
27/03/2018	0.05	1.61	3.7	0	0.11	<5	26.5796	7.0489	114
9/10/2018	0.05	2.36	3.6	0	0.11	0.7074	32.0703	6.6357	
9/04/2019	0.02	3.26	3.6	0	0.28	0.7511	29.4996	15.6937	103.14
22/10/2019	0.1	4.37	3.7	0	0.20	<0.5	26	27	

... Monitoring Point GW18 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C16	Total Petroleum Hydrocarbons C10-C36	Total Petroleum Hydrocarbons C10-C40	Total Petroleum Hydrocarbons C15-C28	Total Petroleum Hydrocarbons C16-C34
Date	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	<20*	1.52	88	<20		<20		<100	
19/10/2010		1.77							
12/04/2011	<10*	1.24	74	<20		<20		<100	
12/10/2011		1.66							
10/04/2012	<10*	1.66	103	<20		<20		<100	
9/10/2012		1.80							
9/04/2013	<20*	1.54	98	<20		<20		<100	
9/04/2014	<10*	2.3300	98	<20		<20		<100	
14/04/2015	120*	2.4700	82	<20		<20		<100	
13/10/2015		2.5500							
12/04/2016	<10*	2.8200	125	39		39		<100	
13/10/2016		5.2000							
11/04/2017	<10*	1.6100	76.24	<20		<20		<100	
10/10/2017		1.9200							
27/03/2018	<10*	1.5600	89.95		99.011		246		146.642
9/10/2018		2.3100							
9/04/2019	<10*	3.2400	131.3		<125		481		480.928
22/10/2019		4.27							

... Monitoring Point GW18 continued

Pollutant	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C34-C40	Total Petroleum Hydrocarbons C6-C10 Volatile Fract	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction	Zinc (Total)
Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
13/04/2010	<100			<20	0.02
12/04/2011	<100			<20	0.01
10/04/2012	<100			<20	0.02
9/04/2013	<100			<20	0.03
9/04/2014	<100			<20	0.08
14/04/2015	<100			<20	0.114
12/04/2016	<100			<20	0.074
11/04/2017	<100			<20	0.069
27/03/2018		<100	<20		0.03538
9/04/2019		<250	79.15		0.02259

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: GW20									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
20/10/2010	NP		0.81		NP	8.7			
13/04/2011	NP	1.22	0.82	<0.005	NP	5.1	<0.5	<1	<2
13/10/2011	NP		1.48		NP	6.3			
10/10/2012	18		6.43		11	9.6			
9/04/2014	22	0.72	7.20	<0.005	13	12	<0.5	<1	<2
14/04/2015	69	0.83	23.0	<0.001	42	3.6	<0.5	<1	<2
13/10/2015	19		5.99		19	4.2			
12/04/2016	<1	0.985	0.81	0.001	<1	5.1	<0.5	<1	<2
13/10/2016	7.9		3.05		8	15.9			
11/04/2017	<1	0.65	1.08	0.001	NP	5.4	<0.5	<1	<2
10/10/2017	<1		1.29		NP	5.4			
27/03/2018	<1	1.03062	0.79	<0.001	NP	5.1	<0.5	<1	<2
9/10/2018	<1		1.45		NP	4.2			
... Monitoring Point GW20 continued									
Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	Conductivity	Copper (Total)	Depth of Water
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)	(m)
20/10/2010				0.2	13		98		1.2
13/04/2011	<1	<1	<0.001	0.4	17	<0.01	118	0.03	1.1
13/10/2011				0.2	21		115		1.5
10/10/2012				0.4	20		134		1.0
9/04/2014	<1	<1	<0.001	0.3	17	<0.01	134	<0.01	1.1
14/04/2015	<1	<1	<0.001	<0.1	24	0.003	241	0.003	1.7
13/10/2015				0.4	25		125		1.3
12/04/2016	<1	<1	<0.001	0.285	24	0.002	104	0.005	1.6
13/10/2016				0.916	22		118.4		1.2
11/04/2017	<1	<1	<0.001	0.348	18	0.002	98	0.004	1.9
10/10/2017				0.1946	38		102.8		1.3
27/03/2018	<1	<1	<0.001	0.2023	12.5	0.00214	97.1	0.00573	1.7
9/10/2018				0.2169	19		101		1.4
... Monitoring Point GW20 continued									

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Depth to Water	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)	Nitrate
Date	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)	(N mg/L)
20/10/2010	0.7				2.6		<0.05		<0.05
13/04/2011	0.4		0.28	0.01	3.4	<0.01	<0.05	<0.01	<0.05
13/10/2011	1.2				2.9		<0.05		<0.05
30/08/2012							<0.05		
10/10/2012	0.8				2.7		<0.05		<0.02
9/04/2014	1.5	2.8	0.32	0.01	3.2	<0.01	<0.05	<0.01	<0.02
14/04/2015	0.8		0.24	0.005	1.5	0.009	<0.05	0.001	<0.02
13/10/2015	1.3				3.1		<0.05		<0.02
12/04/2016	1.4		0.211	0.01	3.126	0.004	<0.05	0.001	<0.02
13/10/2016	1.5				3.393		<0.05		<0.02
11/04/2017	1.1		0.157	0.007	2.771	0.008	<0.05	<0.001	<0.02
10/10/2017	1.7				3.4358		<0.05		<0.02
27/03/2018	1.3		0.23113	0.0112	3.0968	0.00595	<0.05	<0.001	<0.02
9/10/2018	1.6				3.3623		<0.05		<0.02

... Monitoring Point GW20 continued

Pollutant	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)	Sulphate
Date	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
20/10/2010	<0.05	<0.05	4.13	5.1	NP	0.20	<5	6.5	2.1
13/04/2011	0.06	<0.05	4.38	3.5	NP	0.13	<5	9.4	3.0
13/10/2011	0.09	0.06	3.61	4.4	NP	0.17	<5	8.7	14
10/10/2012	0.06	0.07	9.73	5.5	NP	0.54	<5	9.0	5.3
9/04/2014	0.08	0.08	9.88	5.5	NP	0.56	<5	11	3.0
14/04/2015	0.09	0.10	24.8	6.5	NP	1.42	<5	9.0	5.3
13/10/2015	0.10	0.10	8.58	5.6	NP	0.26	<5	10	3.9
12/04/2016	0.05	0.02	5.17	4.3	NP	0.31	<5	9.887	4.585
13/10/2016	0.05	0.02	11.92	5.0	0	1.42	<5	11.475	5.953
11/04/2017	0.07	0.03	3.24	4.3	0	0.19	<5	9.334	4.5
10/10/2017	0.07	0.05	4.9	4.1	0	0.31	<5	10.5163	4.5289
27/03/2018	0.07	0.04	3.22	4.5	0	0.14	<5	10.4774	3.8467
9/10/2018	0.07	0.06	4.6	4.6	0	0.31	0.7067	11.5795	4.6432

... Monitoring Point GW20 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019

Pollutant	Surrogate	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C16	Total Petroleum Hydrocarbons C10-C36	Total Petroleum Hydrocarbons C10-C40	Total Petroleum Hydrocarbons C15-C28
Date	(%)	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
20/10/2010			4.13						
13/04/2011	<5	<4*	4.38	64	<20		<20		<100
13/10/2011			3.55						
10/04/2012		-							
10/10/2012			9.67						
9/04/2014	83	10*	9.8000	51	<20		<20		<100
14/04/2015	91	<50*	24.7000	54	<20		<20		<100
13/10/2015			8.4800						
12/04/2016	96	2*	5.1500	46	<20		<20		<100
13/10/2016			11.9000						
11/04/2017	103	<10*	3.2100	54.96	<20		<20		<100
10/10/2017			4.8500						
27/03/2018	111	<10*	3.1800	56.92		53.446		306	
9/10/2018			4.5400						

... Monitoring Point GW20 continued

Pollutant	Total Petroleum Hydrocarbons C16-C34	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C34-C40	Total Petroleum Hydrocarbons C6-C10 Volatile Fract	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction	Zinc (Total)
Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
13/04/2011		<100			<20	0.58
9/04/2014		<100			<20	0.24
14/04/2015		<100			<20	0.188
12/04/2016		<100			<20	0.368
11/04/2017		<100			<20	0.12
27/03/2018	252.975		<100	<20		0.30145

Monitoring Point: GW22

Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO3	BOD5	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO3)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
20/10/2010	3		<0.05		2	1.5			
10/04/2012	4	5.52	0.04	<0.005	2	4.2	<0.5	<1	<2
10/04/2013	6	2.04	0.09	<0.005	4	3.3	<0.5	<1	<2
14/04/2015	5	1.65	0.28	<0.001	3	11	<0.5	<1	<2
12/04/2016							--	--	--
11/04/2017							[NT]	[NT]	[NT]

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



... Monitoring Point GW22 continued

Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	Conductivity	Copper (Total)	Depth of Water
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)	(m)
20/10/2010				1.3	16		92		0.6
10/04/2012	<1	<1	<0.001	1.8	18	<0.01	88	0.01	0.1
10/04/2013	<1	<1	<0.001	3.0	16	<0.01	86	<0.01	0.4
14/04/2015	<1	<1	<0.001	2.5	30	<0.001	114	0.006	0.3
12/04/2016	--	--							
11/04/2017	[NT]	[NT]							

... Monitoring Point GW22 continued

Pollutant	Depth to Water	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)	Nitrate	Nitrite
Date	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)	(N mg/L)	(N mg/L)
20/10/2010	0.8			0.5		<0.05		<0.05	<0.05
10/04/2012	1.2	4.22	0.02	0.8	0.03	<0.05	<0.01	0.04	<0.02
30/08/2012						<0.05			
10/04/2013	1.0	3.86	<0.01	0.6	0.04	<0.05	<0.01	0.04	<0.02
14/04/2015	0.9	3.20	0.032	0.6	0.068	<0.05	0.001	0.03	<0.02

... Monitoring Point GW22 continued

Pollutant	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)	Sulphate	Surrogate
Date	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO3)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(%)
20/10/2010	<0.05	1.52	6.3	NP	0.35	<5	8.6	5.1	
10/04/2012	0.04	2.72	5.0	NP	1.00	<5	6.5	4.7	<5
10/04/2013	0.04	1.23	5.1	NP	0.23	<5	10	5.8	95
14/04/2015	0.03	2.83	5.0	NP	0.46	<5	15	2.4	96
12/04/2016									--
11/04/2017									[NT]

... Monitoring Point GW22 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C36	Total Petroleum Hydrocarbons C15-C28	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction	Zinc (Total)
Date	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
20/10/2010		1.52							
10/04/2012	<10*	2.68	6.7	<20	<20	<100	<100	<20	0.68
10/04/2013	<10*	1.19	4.7	<20	<20	<100	<100	<20	<0.01
9/04/2014	-								
14/04/2015	<50*	2.8000	4.1	<20	<20	<100	<100	<20	1.365
12/04/2016	-			--	--	--	--	--	
11/04/2017				[NT]	[NT]	[NT]	[NT]	[NT]	
27/03/2018	-								

Monitoring Point: GW26

Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO3	BOD5	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO3)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
14/04/2010	10	0.31	<0.05	<0.005	5	3.0	<0.5	<1	<2
20/10/2010	8		0.13		5	2.7			
13/04/2011	6	0.92	0.14	<0.005	4	2.7	<0.5	<1	<2
13/10/2011	8		0.07		5	2.4			
10/04/2012	5	0.14	0.06	<0.005	3	1.5	<0.5	<1	<2
10/10/2012	7		0.08		4	1.8			
10/04/2013	5	0.29	0.08	<0.005	3	2.4	<0.5	<1	<2
9/04/2014	8	0.13	0.09	<0.005	5	3.0	<0.5	<1	<2
14/04/2015	5	0.27	0.07	<0.001	3	1.8	<0.5	<1	<2
13/10/2015	7		0.07		7	<1.0			
12/04/2016	5	0.34	0.08	<0.001	5	1.5	<0.5	<1	<2
13/10/2016	3.5		0.14		4	<1.0			
11/04/2017	4.8	0.419	0.1	<0.001	5	3.0	<0.5	<1	<2
10/10/2017	5.63		0.06		6	<1.0			
27/03/2018	6.24	0.23022	0.05	<0.001	6	1.5	<0.5	<1	<2
9/10/2018	6.43		0.06		6	<1.0			
22/10/2019	8		0.07		8.0	3.0			

... Monitoring Point GW26 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	Conductivity	Copper (Total)	Depth of Water
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)	(m)
14/04/2010	<1	<1	<0.01	4.2	18	<0.01	106	0.06	3.0
20/10/2010				5.1	14		108		3.4
13/04/2011	<1	<1	<0.001	6.1	13	<0.01	111	0.02	3.3
13/10/2011				2.9	15		84		3.1
10/04/2012	<1	<1	<0.001	2.6	13	<0.01	77	<0.01	0.7
10/10/2012				3.0	15		92		2.9
10/04/2013	<1	<1	<0.001	4.8	18	<0.01	99	<0.01	4.0
9/04/2014	<1	<1	<0.001	3.3	16	<0.01	106	<0.01	2.6
14/04/2015	<1	<1	<0.001	7.5	16	<0.001	121	0.003	3.1
13/10/2015				3.4	16		98		2.9
12/04/2016	<1	<1	<0.001	3.609	12	<0.001	78	0.002	3.1
13/10/2016				2.822	12		75.5		3.0
11/04/2017	<1	<1	<0.001	2.506	11	<0.001	67	0.001	3.3
10/10/2017				2.702	16		88.5		2.9
27/03/2018	<1	<1	<0.001	4.1775	16	<0.001	79.2	<0.001	3.2
9/10/2018				3.3357	15		94		3.0
22/10/2019				3.1	18		110		2.9

... Monitoring Point GW26 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Depth to Water	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)	Nitrate
Date	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)	(N mg/L)
14/04/2010	1.0		0.28	0.01	1.5	0.11	<0.05	<0.01	0.17
20/10/2010	0.5				1.9		<0.05		<0.05
13/04/2011	0.6		1.15	<0.01	2.1	0.18	0.1	<0.01	<0.05
13/10/2011	0.7				1.2		<0.05		0.05
10/04/2012	3.3		0.40	<0.01	1.2	0.01	<0.05	<0.01	<0.02
30/08/2012							<0.05		
10/10/2012	1.0				1.3		<0.05		<0.02
10/04/2013	0.6		0.92	0.03	1.3	0.04	<0.05	<0.01	0.02
9/04/2014	1.3	3.0	0.67	<0.01	1.5	0.01	<0.05	<0.01	0.04
14/04/2015	0.8		0.91	<0.001	1.9	0.139	<0.05	0.001	<0.02
13/10/2015	1.0				1.3		<0.05		0.02
12/04/2016	1.3		0.554	<0.001	0.989	0.043	<0.05	<0.001	<0.02
13/10/2016	1.4				1.074		<0.05		<0.02
11/04/2017	1.1		0.763	<0.001	0.713	0.032	<0.05	0.001	<0.02
10/10/2017	1.5				1.0678		<0.05		<0.02
27/03/2018	1.2		0.61239	<0.001	1.1367	0.06767	<0.05	<0.001	<0.02
9/10/2018	1.4				1.2745		<0.05		<0.02
22/10/2019	1.5				2.1		<0.05		<0.02

... Monitoring Point GW26 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)	Solids Suspended
Date	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	<0.05	0.17	0.56	5.2		<0.05	<5	8.6	51
20/10/2010	<0.05	<0.05	0.56	5.2	NP	0.15	<5	6.2	
13/04/2011	<0.05	<0.05	1.07	4.4	NP	0.06	<5	9.0	
13/10/2011	<0.05	0.05	0.24	5.4	NP	<0.05	<5	6.3	
10/04/2012	<0.02	<0.02	0.22	5.0	NP	0.06	<5	4.8	
10/10/2012	<0.02	<0.02	0.18	5.4	NP	0.05	<5	9.1	
10/04/2013	<0.02	0.02	0.40	5.0	NP	0.03	<5	10	
9/04/2014	<0.02	0.04	0.19	5.1	NP	0.06	<5	14	
14/04/2015	<0.02	<0.02	0.29	5.1	NP	0.05	<5	8.9	
13/10/2015	<0.02	0.02	0.22	5.2	NP	0.08	<5	11	
12/04/2016	<0.02	<0.02	0.32	5.1	NP	0.08	<5	6.699	
13/10/2016	<0.02	<0.02	0.26	4.9	0	0.05	<5	7.157	
11/04/2017	<0.02	<0.02	0.46	4.9	0	0.07	<5	6.574	
10/10/2017	<0.02	<0.02	0.21	4.7	0	0.04	<5	10.3069	
27/03/2018	<0.02	<0.02	0.27	5.2	0	0.06	<5	7.2032	
9/10/2018	<0.02	<0.02	0.19	5.2	0	0.05	<0.5	11.9256	
22/10/2019	<0.02	<0.02	0.62	5.4	0	0.20	1.3	13	

... Monitoring Point GW26 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019

Pollutant	Sulphate	Surrogate	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C16	Total Petroleum Hydrocarbons C10-C36	Total Petroleum Hydrocarbons C10-C40
Date	(mg/L)	(%)	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
14/04/2010	6.9	<5	<10*	0.38	9.3	<20		<20	
20/10/2010	9.3			0.56					
13/04/2011	8.2	<5	<4*	1.07	45	<20		<20	
13/10/2011	6.0			0.19					
10/04/2012	4.7	<5	<10*	0.20	4.4	<20		<20	
10/10/2012	12			0.18					
10/04/2013	7.0	94	<10*	0.35	10.5	<20		<20	
9/04/2014	12	83	<10*	0.1500	3.5	<20		<20	
14/04/2015	22	99	<10*	0.2900	6.0	<20		<20	
13/10/2015	11			0.2000					
12/04/2016	8.059	99	<2*	0.3200	7.1	<20		<20	
13/10/2016	9.974			0.2600					
11/04/2017	4.7	107	<1*	0.4600	11.48	<20		<20	
10/10/2017	10.6401			0.2100					
27/03/2018	8.9982	117	<10*	0.2700	5.344		<20		<20
9/10/2018	11.4351			0.1900					
22/10/2019	14			0.62					

... Monitoring Point GW26 continued

Pollutant	Total Petroleum Hydrocarbons C15-C28	Total Petroleum Hydrocarbons C16-C34	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C34-C40	Total Petroleum Hydrocarbons C6-C10 Volatile Fract	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction	Zinc (Total)
Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
14/04/2010	<100		<100			<20	0.02
13/04/2011	<100		<100			<20	0.05
10/04/2012	<100		<100			<20	<0.01
10/04/2013	<100		<100			<20	0.02
9/04/2014	<100		<100			<20	0.02
14/04/2015	<100		<100			<20	0.150
12/04/2016	<100		<100			<20	0.01
11/04/2017	<100		<100			<20	0.008
27/03/2018		<100		<100	<20		0.00778

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: GW7									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
14/04/2010	56	3.38	0.48	<0.005	34	1.2	<0.5	<1	<2
20/10/2010	8		0.07		5	<1.0			
13/04/2011	16	11	0.10	<0.005	10	1.2	<0.5	<1	<2
13/10/2011	9		0.11		5	1.8			
10/04/2012	10	12	0.29	<0.005	6	1.2	<0.5	<1	<2
10/10/2012	54		0.08		33	1.5			
10/04/2013	13	12	0.10	<0.005	8	<1.0	<0.5	<1	<2
14/04/2015	12	13.0	0.07	<0.001	7	2.1	<0.5	<1	<2
13/10/2015	132		3.92		132	1.2			
12/04/2016	19	30.739	0.08	0.005	19	5.7	<0.5	<1	<2
13/10/2016	16.6		0.08		17	<1.0			
11/04/2017	8	9.213	0.05	0.003	8	<1.0	<0.5	<1	<2
... Monitoring Point GW7 continued									
Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	Conductivity	Copper (Total)	Depth of Water
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)	(m)
14/04/2010	<1	<1	<0.01	27	33	0.01	250	0.09	0.4
20/10/2010				5.3	32		180		1.4
13/04/2011	<1	<1	<0.001	6.4	37	0.01	204	0.03	0.7
13/10/2011				16	28		265		0.7
10/04/2012	<1	<1	<0.001	3.1	10	0.01	80	0.01	0.6
10/10/2012				61	40		522		0.5
10/04/2013	<1	<1	<0.001	4.8	15	0.01	99	<0.01	0.7
14/04/2015	<1	<1	<0.001	3.8	12	0.008	86	0.004	0.5
13/10/2015				50	52		488		1.5
12/04/2016	<1	<1	<0.001	6.423	14	0.026	90	0.012	0.5
13/10/2016				6.737	30		124.6		0.3
11/04/2017	<1	<1	<0.001	3.36	20	0.007	83.1	0.006	0.5
... Monitoring Point GW7 continued									

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019

Pollutant	Depth to Water	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)	Nitrate	Nitrite
Date	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)	(N mg/L)	(N mg/L)
14/04/2010	1.5	9.34	<0.01	1.7	0.03	<0.05	0.01	0.80	0.17
20/10/2010	1.1			2.3		<0.05		<0.05	<0.05
13/04/2011	1.2	11	<0.01	3.0	<0.01	<0.05	<0.01	<0.05	<0.05
13/10/2011	1.2			6.01		<0.05		4.95	<0.05
10/04/2012	1.2	14	<0.01	1.3	0.02	<0.05	<0.01	0.04	<0.02
30/08/2012						<0.05			
10/10/2012	1.4			4.0		<0.05		0.40	0.06
10/04/2013	1.2	18	<0.01	3.1	<0.01	<0.05	<0.01	0.04	0.03
14/04/2015	2.0	16.9	0.003	2.1	0.087	<0.05	0.006	0.02	0.08
13/10/2015	1.5			6.4		<0.05		<0.02	0.03
12/04/2016	2.1	21.735	0.01	1.757	0.117	<0.05	0.012	<0.02	0.03
13/10/2016	2.2			1.313		<0.05		0.39	0.08
11/04/2017	2.0	8.627	0.004	1.505	0.029	<0.05	0.003	<0.02	0.04
... Monitoring Point GW7 continued									
Pollutant	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)	Solids Suspended	Sulphate
Date	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO3)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	0.97	5.48	6.0		0.60	<5	11	1074	19
20/10/2010	<0.05	1.67	6.6	NP	0.21	<5	12		10
13/04/2011	<0.05	2.43	5.5	NP	0.39	9	16		11
13/10/2011	4.95	6.07	5.2	NP	0.22	<5	9.5		41
10/04/2012	0.04	3.37	5.5	NP	1.00	<5	4.2		4.4
10/10/2012	0.46	1.91	5.8	NP	0.33	5	22		135
10/04/2013	0.07	2.61	5.3	NP	0.54	<5	8.6		5.2
14/04/2015	0.10	3.69	5.4	NP	1.24	<5	6.4		3.0
13/10/2015	0.03	6.67	6.2	NP	0.37	<5	26		46
12/04/2016	<0.02	4.65	6.1	NP	0.45	<5	5.959		2.73
13/10/2016	0.47	3.55	5.8	0	0.82	<5	9.732		7.616
11/04/2017	0.02	2.78	5.2	0	0.43	<5	7.555		4.9
... Monitoring Point GW7 continued									

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Surrogate	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C36	Total Petroleum Hydrocarbons C15-C28	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction
Date	(%)	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
14/04/2010	<5	90*	4.51	32	<20	<20	<100	<100	<20
20/10/2010			1.61						
13/04/2011	<5	440	2.43	9.1	<20	<20	<100	<100	<20
13/10/2011			1.07						
10/04/2012	<5	<10*	3.33	32	<20	<20	<100	<100	<20
10/10/2012			1.45						
10/04/2013	99	<20*	2.54	28	<20	<20	<100	<100	<20
9/04/2014		-							
14/04/2015	89	<100*	3.5900	34	<20	<20	<100	<100	<20
13/10/2015			6.6400						
12/04/2016	99	<10*	4.6500	24	<20	<20	<100	<100	<20
13/10/2016			3.0800						
11/04/2017	107	<20*	2.7600	32.95	<20	<20	<100	<100	<20
27/03/2018		-							

... Monitoring Point GW7 continued

Pollutant	Zinc (Total)
Date	(mg/L)
14/04/2010	1.17
13/04/2011	0.09
10/04/2012	0.04
10/04/2013	0.14
14/04/2015	0.310
12/04/2016	1.01
11/04/2017	0.193

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: GWT2									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	BTEX Benzene	BTEX Ethyl Benzene	BTEX meta-para-Xylene
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	391	0.43	<0.05	<0.005	239	8.4	<0.5	<1	<2
19/10/2010	397	0.19	7.32	<0.005	242	5.7			
30/08/2012	220	0.31	2.44	<0.005	134	11			
9/10/2012	240	4.19	4.69	<0.005	146	35			
10/04/2013	230	2.58	3.76	<0.005	140	7.0	<0.5	<1	<2
9/04/2014	361	1.69	3.64	<0.005	220	17	<0.5	<1	<2
14/04/2015	402	1.20	8.37	<0.001	245	15	<0.5	<1	<2
13/10/2015	323	1.26	4.56	0.003	323	16			
12/04/2016							--	--	--
13/10/2016	275	1.087	4.82	0.002	275	11			
11/04/2017							[NT]	[NT]	[NT]
10/10/2017	296.11	0.15636	6.95	<0.001	296	11.0			
27/03/2018	253.01	0.65227	4.46	<0.001	253	12	<0.5	<1	<2
9/10/2018	238.1	0.31439	5.96	<0.001	238	8			
9/04/2019	194.56	0.53215	4.6	<0.001	195	8.1	<0.5	<1	<2
... Monitoring Point GWT2 continued									
Pollutant	BTEX ortho-Xylene	BTEX Toluene	Cadmium (Total)	Calcium (Total)	Chloride	Chromium (Total)	COD Total	Conductivity	Copper (Total)
Date	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µScm-1)	(mg/L)
13/04/2010	<1	<1	<0.01	116	50	0.01		898	0.02
19/10/2010			<0.001	124	45		98	885	0.01
30/08/2012			<0.001	52	42		89	626	<0.01
9/10/2012			<0.001	53	6.5		858	605	0.02
10/04/2013	<1	<1	<0.001	72	49	0.03		645	0.01
9/04/2014	<1	<1	<0.001	109	43	0.01	390	895	<0.01
14/04/2015	<1	<1	<0.001	118	46	0.009	150	881	0.005
13/10/2015			<0.001	93	47		201	754	0.008
12/04/2016	--	--							
13/10/2016			<0.001	88.402	38		195	667.9	0.004
11/04/2017	[NT]	[NT]							
10/10/2017			<0.001	99.7919	52		103	765.1	0.0012
27/03/2018	<1	<1	<0.001	79.2225	50	0.00676	118	638.4	0.0045
9/10/2018			<0.001	84.3568	36		79	633.9	0.00149
9/04/2019	<1	<1	<0.001	79.7334	27.5	0.00534	99.8	534.4	0.00322
... Monitoring Point GWT2 continued									

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Depth of Water	Depth to Water	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Methane	Nickel (Total)
Date	(m)	(m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(% (v/v))	(mg/L)
13/04/2010	0.8	3.5		29	<0.01	19	1.25	0.15	0.04
19/10/2010			1.6	10	<0.01	15	0.35	0.1	0.01
30/08/2012			1.4	52	<0.01	7.4	0.86	0.10	<0.01
12/09/2012								0.05	
9/10/2012			0.2	81	<0.01	7.4	1.04	<0.05	0.02
10/04/2013	2.5	3.0	<0.1	78	0.01	8.1	1.03	<0.05	0.01
9/04/2014	1.6	7.1		109	0.01	8.9	1.26	<0.05	<0.01
14/04/2015	2.5	6.2		86.5	0.004	7.8	0.860	<0.05	0.010
13/10/2015	2.0	<0.05		81.1	0.004	6.2	1.18	<0.05	0.007
13/10/2016				52.468	0.004	5.329	0.585	<0.05	0.005
10/10/2017				59.14793	<0.001	6.4895	0.60643	<0.05	0.00324
27/03/2018	2.3	7.3		49.20943	0.00254	5.6546	0.57476	<0.05	0.00445
9/10/2018				37.33531	<0.001	5.9805	0.45472	<0.05	0.0021
9/04/2019	3.1	7.5		31.93942	0.00198	4.8687	0.3716	<0.05	0.00322

... Monitoring Point GWT2 continued

Pollutant	Nitrate	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)
Date	(N mg/L)	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)
13/04/2010	<0.05	<0.05	<0.05	11.3	6.6		0.23	10	22
19/10/2010	<0.05	<0.05	<0.05	8.09	7.5	NP	0.17	9	21
30/08/2012	0.06	<0.02	0.06	3.67	6.5	NP	0.14	9	22
9/10/2012	<0.02	0.07	0.04	3.45	6.6	NP	0.33	7	18
10/04/2013	0.13	<0.02	0.13	5.92	6.5	NP	0.10	7	24
9/04/2014	0.17	<0.02	0.17	5.94	6.5	NP	0.18	6	28
14/04/2015	0.04	<0.02	0.04	2.68	6.5	NP	0.46	8.8	26
13/10/2015	0.04	<0.02	0.04	6.69	6.6	NP	0.25	<5	19
13/10/2016	<0.02	0.27	<0.02	7.26	6.6	0	0.4	<5	15.282
10/10/2017	<0.02	0.46	0.11	7.41	6.6	0	0.15	<5	15.1096
27/03/2018	0.05	<0.02	0.05	5.81	6.6	0	0.12	<5	14.6631
9/10/2018	<0.02	0.16	0.13	7.32	6.7	0	0.21	5.0652	17.4219
9/04/2019	0.15	0.06	0.21	5.39	6.7	0	0.35	4.4826	15.1083

... Monitoring Point GWT2 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Solids Suspended	Sulphate	Surrogate	Thermotolerant Coliforms	TKN	TOC	Total Petroleum Hydrocarbons C10-C14	Total Petroleum Hydrocarbons C10-C16	Total Petroleum Hydrocarbons C10-C36
Date	(mg/L)	(mg/L)	(%)	(cfu/100ml)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
13/04/2010	405	26	<5	80*	11.30	28	<20		<20
19/10/2010	91	15			8.09	28			
30/08/2012	264	4.1			3.62	17			
9/10/2012	2637	4.7			3.41	15			
10/04/2013		15	96	<50*	5.79	18	107		302
9/04/2014		9.7	87	<10*	5.7700	5.6	<20		<20
14/04/2015		7.6	89	100*	2.6400	25	<20		136
13/10/2015		5.4			6.6500	14.4			
12/04/2016			--	-			--		--
13/10/2016		7.809			7.2600	14.25			
11/04/2017			[NT]				[NT]		[NT]
10/10/2017		2.2152			7.3000	16.95			
27/03/2018		1.9253	114	<10*	5.7600	17.22		30.577	
9/10/2018		1.6064			7.1900	27.5			
9/04/2019		1.6846	102.84	<10*	5.1800	17.6		<50	

... Monitoring Point GWT2 continued

Pollutant	Total Petroleum Hydrocarbons C10-C40	Total Petroleum Hydrocarbons C15-C28	Total Petroleum Hydrocarbons C16-C34	Total Petroleum Hydrocarbons C29-C36	Total Petroleum Hydrocarbons C34-C40	Total Petroleum Hydrocarbons C6-C10 Volatile Fract	Total Petroleum Hydrocarbons C6-C9 Volatile Fraction	Zinc (Total)
Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
13/04/2010		<100		<100			<20	0.13
19/10/2010								0.03
30/08/2012								0.06
9/10/2012								0.94
10/04/2013		195		<100			<20	0.80
9/04/2014		<100		<100			<20	0.38
14/04/2015		136		<100			<20	1.26
13/10/2015								1.097
12/04/2016		--		--			--	
13/10/2016								3.521
11/04/2017		[NT]		[NT]			[NT]	
10/10/2017								0.70832
27/03/2018	314		283.636		<100	<20		1.26069
9/10/2018								1.0072
9/04/2019	268		267.5		<100	<20		1.23409

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019

Monitoring Point: SW17									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	Cadmium (Total)	Calcium (Total)	Chloride
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
19/10/2010	104		4.78		63	15		60	45
12/04/2011	229	0.72	3.63	<0.005	140	5.1	<0.001	49	51
12/10/2011	232		2.44		141	44		50	45
10/04/2012	200	2.83	1.70	<0.005	122	14	<0.001	37	50
9/04/2013	144	1.24	0.07	<0.005	88	15	<0.001	44	36
... Monitoring Point SW17 continued									
Pollutant	Chromium (Total)	Conductivity	Copper (Total)	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Nickel (Total)
Date	(mg/L)	(µScm-1)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
19/10/2010		612		5.5			11		
12/04/2011	<0.01	556	0.01	3.8	4.71	<0.01	9.1	0.38	<0.01
12/10/2011		649		1.9			9.1		
10/04/2012	<0.01	577	0.01	<1.0	30	0.01	8.0	0.59	<0.01
9/04/2013	<0.01	372	<0.01	<1.0	14	<0.01	7.7	0.54	<0.01
... Monitoring Point SW17 continued									
Pollutant	Nitrate	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)
Date	(N mg/L)	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)
19/10/2010	0.06	0.05	0.11	11.6	7.1	NP	1.15	8	25
12/04/2011	0.57	<0.05	0.57	7.11	6.8	NP	0.34	10	30
12/10/2011	0.07	<0.05	0.07	6.99	7.0	NP	0.61	10	26
10/04/2012	0.09	<0.02	0.09	15.3	6.7	NP	3.43	6	24
9/04/2013	<0.02	<0.02	<0.02	5.40	6.6	NP	0.68	<5	26
... Monitoring Point SW17 continued									
Pollutant	Solids Suspended	Sulphate	Thermotolerant Coliforms	TKN	TOC	Zinc (Total)			
Date	(mg/L)	(mg/L)	(cfu/100ml)	(mg/L)	(mg/L)	(mg/L)			
19/10/2010		3.5		11.49					
12/04/2011	162	5.2	70*	6.54	37	0.01			
12/10/2011	381	5.6		6.92					
10/04/2012	474	5.4	370	15.21	40	0.03			
9/04/2013	1524	6.4	4840*	5.40	41	0.04			
14/04/2015			-						
12/04/2016			-						
27/03/2018			-						

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: SW18									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	Cadmium (Total)	Calcium (Total)	Chloride
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
13/04/2010	NP	1.68	0.05	<0.005	NP	<1.0	<0.01	1.0	30
19/10/2010	NP		0.09		NP	4.5		0.9	26
12/04/2011	<1	1.02	0.07	<0.005	<1	3.9	<0.001	0.8	34
12/10/2011	NP		0.08		NP	3.9		0.8	40
10/04/2012	<1	0.77	0.08	<0.005	<1	3.3	<0.001	0.9	26
9/04/2013	NP	1.06	0.04	<0.005	NP	2.4	<0.001	0.8	29
9/04/2014	<1	1.04	0.08	<0.005	<1	9.3	<0.001	1.5	59
14/04/2015	<1	0.88	0.05	<0.001	<1	5.1	<0.001	0.7	24
13/10/2015	<1		0.03		<1	3.9		1.0	45
12/04/2016	<1	0.773	<0.02	<0.001	<1	4.2	<0.001	1.431	24
13/10/2016	<1		0.05		NP	2.4		1.215	30
11/04/2017	<1	0.95	0.04	0.001	NP	2.1	<0.001	0.963	25
10/10/2017	<1		0.04		NP	3.3		1.5958	42
27/03/2018	<1	0.87353	0.04	<0.001	NP	3.0	<0.001	0.7916	45
9/10/2018	<1		0.04		NP	8.4		1.1173	30
9/04/2019	<1	1.10148	0.05	<0.001	NP	3.6	<0.001	1.197	32
... Monitoring Point SW18 continued									
Pollutant	Chromium (Total)	Conductivity	Copper (Total)	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Nickel (Total)
Date	(mg/L)	(µScm-1)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
13/04/2010	<0.01	170	0.02		1.83	<0.01	3.6	0.02	<0.01
19/10/2010		164		11.2			2.2		
12/04/2011	<0.01	172	0.01	11	0.99	<0.01	2.2	<0.01	<0.01
12/10/2011		200		10.7			2.3		
10/04/2012	<0.01	141	<0.01	6.4	1.11	<0.01	2.0	<0.01	<0.01
9/04/2013	<0.01	160	<0.01	12	0.98	<0.01	2.8	<0.01	<0.01
9/04/2014	<0.01	268	<0.01	10	1.71	<0.01	4.7	0.01	<0.01
14/04/2015	<0.001	129	0.005	4.7	1.09	<0.001	2.1	0.016	0.002
13/10/2015		184		5.4			3.0		
12/04/2016	0.001	120	<0.001	2.8	1.056	<0.001	2.09	0.015	0.001
13/10/2016		143.2		4.7			2.592		
11/04/2017	0.002	145.6	0.001	8.9	0.901	<0.001	2.544	0.017	0.001
10/10/2017		188.6		1.8			3.392		
27/03/2018	0.00189	160.2	<0.001	5.1	1.01643	<0.001	2.5947	0.01395	<0.001
9/10/2018		137.9		11.5			2.4509		
9/04/2019	0.002	157.1	<0.001	6.6	1.11832	<0.001	3.0301	0.01237	0.00109

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019

... Monitoring Point SW18 continued

Pollutant	Nitrate	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)
Date	(N mg/L)	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO3)	(mg/L)	(mg/L)	(mg/L)
13/04/2010	<0.05	<0.05	<0.05	2.11	4.2		0.14	<5	17
19/10/2010	<0.05	0.05	<0.05	1.52	3.6	NP	0.05	<5	14
12/04/2011	<0.05	<0.05	0.05	1.36	3.4	NP	<0.05	<5	16
12/10/2011	<0.05	<0.05	<0.05	1.73	4.0	NP	0.07	<5	16
10/04/2012	<0.02	0.03	0.03	1.79	3.8	NP	0.12	<5	9.5
9/04/2013	<0.02	0.03	<0.02	1.20	3.8	NP	0.02	<5	18
9/04/2014	<0.02	0.09	0.09	4.38	4.0	NP	0.83	10	32
14/04/2015	<0.02	0.07	0.07	2.43	3.9	NP	0.17	<5	14
13/10/2015	<0.02	0.05	0.05	2.0	4.0	NP	0.11	<5	22
12/04/2016	<0.02	0.05	<0.02	1.29	4.2	NP	0.07	<5	13.079
13/10/2016	<0.02	0.04	<0.02	2.11	4.0	0	0.14	<5	17.047
11/04/2017	<0.02	0.06	0.03	1.16	3.9	0	0.02	<5	15.492
10/10/2017	<0.02	0.05	0.03	1.89	4.0	0	0.12	<5	21.1912
27/03/2018	<0.02	0.06	0.03	1.58	4.0	0	0.07	<5	17.9281
9/10/2018	<0.02	0.04	0.02	1.98	4.3	0	0.15	<0.5	17.9909
9/04/2019	<0.02	0.05	<0.02	1.38	4.0	0	0.05	<0.5	19.4969

... Monitoring Point SW18 continued

Pollutant	Solids Suspended	Sulphate	Thermotolerant Coliforms	TKN	TOC	Zinc (Total)
Date	(mg/L)	(mg/L)	(cfu/100ml)	(mg/L)	(mg/L)	(mg/L)
13/04/2010	104	8.0	70*	2.95	61	0.01
19/10/2010		6.2		1.52		
12/04/2011	1.0	5.2	40	1.34	67	<0.01
12/10/2011	7.7	5.6		1.73		
10/04/2012	2.8	2.5	60*	1.76	55	0.01
9/04/2013	<1.0	4.6	36*	1.20	66	0.03
9/04/2014	32	7.5	<10*	4.2900	80	0.01
14/04/2015	8.8	3.7	<20*	2.3600	66	0.044
13/10/2015	18	4.6		1.9500		
12/04/2016	2.5	3.488	330	1.2900	59	0.01
13/10/2016	2.5	3.495		2.1100		
11/04/2017	1	5.5	<10*	1.1300	58.4	0.01
10/10/2017	12	6.5964		1.8600		
27/03/2018	6.0	4.6734	<10*	1.5500	61.42	0.00933
9/10/2018	122	3.8879		1.9600		
9/04/2019	16	5.4799	<10*	1.3800	61.8	0.00795

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: SW22									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD5	Cadmium (Total)	Calcium (Total)	Chloride
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	10	0.54	0.36	<0.005	6	3.3	<0.01	4.8	34
20/10/2010	17		<0.05		10	4.8		3.3	20
12/04/2011	7	0.73	0.08	<0.005	4	5.4	<0.001	2.7	34
13/10/2011	15		<0.05		49	3.9		2.1	24
10/04/2012	12	0.24	0.03	<0.005	7	4.5	<0.001	1.5	21
10/10/2012	14		0.09		8	13		1.8	22
9/04/2013	6	0.60	0.02	<0.005	4	4.2	<0.001	2.4	24
14/04/2015	10	0.78	0.05	<0.001	6	6.6	<0.001	3.0	27
13/10/2015	11		0.02		11	3.0		2.3	32
12/04/2016	11	0.806	<0.02	0.001	11	3.6	<0.001	2.43	28
13/10/2016	8.8		0.02		9	3.6		1.793	20
11/04/2017	4	2.039	0.05	0.001	4	5.4	<0.001	4.071	45
27/03/2018	20.98	1.21141	0.03	0.00118	21	5.7	<0.001	4.0245	55
9/10/2018	11.44		0.03		11	1.8		2.8394	25
... Monitoring Point SW22 continued									
Pollutant	Chromium (Total)	Conductivity	Copper (Total)	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Nickel (Total)
Date	(mg/L)	(µScm-1)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	<0.01	231	0.05		6.78	<0.01	4.9	0.30	<0.01
20/10/2010		142		2.0			3.2		
12/04/2011	<0.01	161	0.01	1.2	5.95	<0.01	3.1	0.11	<0.01
13/10/2011		130		1.4			1.7		
10/04/2012	<0.01	116	<0.01	<1.0	3.36	<0.01	1.8	0.07	<0.01
10/10/2012		101		1.2			1.6		
9/04/2013	<0.01	121	<0.01	1.3	11	<0.01	2.2	0.10	<0.01
14/04/2015	<0.001	146	<0.001	<1.0	9.05	<0.001	2.9	0.189	0.003
13/10/2015		123		2.0			2.2		
12/04/2016	0.001	142	0.001	1.3	11.174	<0.001	2.61	0.145	0.001
13/10/2016		114.7		1.4			1.77		
11/04/2017	0.002	190.1	0.002	0.8	22.07	0.001	3.83	0.24	0.002
27/03/2018	0.00123	176.3	<0.001	0.9	17.10146	<0.001	3.5277	0.20936	0.00155
9/10/2018		123.2		2.5			2.7141		
... Monitoring Point SW22 continued									

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Nitrate	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)
Date	(N mg/L)	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	<0.05	<0.05	<0.05	1.47	5.5		0.19	<5	25
20/10/2010	<0.05	<0.05	<0.05	3.66	5.4	NP	0.35	<5	15
12/04/2011	<0.05	<0.05	<0.05	1.89	4.4	NP	0.10	<5	18
13/10/2011	<0.05	<0.05	<0.05	5.61	5.9	NP	1.90	<5	14
10/04/2012	0.02	<0.02	0.02	0.76	5.4	NP	0.10	<5	10
10/10/2012	0.02	0.02	0.05	2.96	5.8	NP	0.87	<5	13
9/04/2013	<0.02	0.02	<0.02	0.97	5.3	NP	0.09	<5	18
14/04/2015	<0.02	0.05	0.05	1.53	5.4	NP	0.25	<5	18
13/10/2015	<0.02	0.04	0.04	1.66	5.6	NP	0.37	<5	18
12/04/2016	<0.02	0.04	<0.02	1.56	5.6	NP	0.23	<5	19.573
13/10/2016	<0.02	0.03	<0.02	1.78	5.5	0	0.16	<5	17.739
11/04/2017	<0.02	0.17	0.03	8.69	5.3	0	0.89	<5	20.987
27/03/2018	<0.02	0.1	0.03	2.01	5.9	0	0.33	<5	22.2198
9/10/2018	<0.02	0.05	0.02	1.47	5.7	0	0.09	<0.5	20.2413

... Monitoring Point SW22 continued

Pollutant	Solids Suspended	Sulphate	Thermotolerant Coliforms	TKN	TOC	Zinc (Total)
Date	(mg/L)	(mg/L)	(cfu/100ml)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	36	29	110*	1.47	34	0.01
20/10/2010	40	5.3		3.66		
12/04/2011	18	3.4	50	1.89	73	<0.01
13/10/2011	42	3.9		5.61		
10/04/2012	10	3.5	30*	0.74	18	<0.01
10/10/2012	130	6.0		2.92		
9/04/2013	101	7.2	40*	0.97	23	0.03
14/04/2015	23	11	20*	1.4800	42	0.061
13/10/2015	34	6.0		1.6200		
12/04/2016	27	7.898	2600	1.5600	34	0.005
13/10/2016	69	7.169		1.7800		
11/04/2017	122	23.9	100*	8.6600	86.97	0.015
27/03/2018	12	8.0625	40*	1.9800	64.49	<0.005
9/10/2018	15	5.6672		1.4500		

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Monitoring Point: SW-P1									
Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD ₅	Cadmium (Total)	Calcium (Total)	Chloride
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	53	0.88	0.05	<0.005	32	20	<0.001	72	56
14/04/2015	54	0.06	<0.02	<0.001	33	11	<0.001	21	47
13/10/2015	154		0.02		154	10		44	53
12/04/2016	103	0.024	<0.02	0.001	103	12	<0.001	28.115	44
27/03/2018	108.84	0.01406	0.02	<0.001	109	4.5	<0.001	33.479	43
9/10/2018	125.86		0.2		126	9.9		37.9515	43.5
22/10/2019	143		<0.02		143	3.0		43	58
... Monitoring Point SW-P1 continued									
Pollutant	Chromium (Total)	Conductivity	Copper (Total)	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Nickel (Total)
Date	(mg/L)	(µScm-1)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	<0.01	580	<0.01	12.2	9.27	<0.01	8.2	0.18	<0.01
14/04/2015	<0.001	279	0.014	4.8	1.99	<0.001	4.4	0.170	0.001
13/10/2015		487		8.4			9.2		
12/04/2016	<0.001	359	<0.001	5.7	0.434	<0.001	7.627	0.107	0.001
27/03/2018	<0.001	351.1	<0.001	3.6	0.83318	<0.001	8.4941	0.14676	<0.001
9/10/2018		392.9		7.7			9.464		
22/10/2019		463		7.7			11		
... Monitoring Point SW-P1 continued									
Pollutant	Nitrate	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)
Date	(N mg/L)	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	0.04	<0.02	0.04	6.37	6.4	NP	0.51	5	36
14/04/2015	<0.02	0.02	0.02	2.47	6.3	NP	0.18	<5	27
13/10/2015	<0.02	<0.02	<0.02	2.68	7.5	NP	0.16	5.9	41
12/04/2016	<0.02	<0.02	<0.02	1.99	7.1	NP	0.11	<5	29.12
27/03/2018	<0.02	0.02	<0.02	1.52	7.0	0	0.07	<5	28.2033
9/10/2018	<0.02	<0.02	<0.02	2.55	7.6	0	0.17	5.9806	30.2328
22/10/2019	<0.02	<0.02	<0.02	1.38	7.5	0	0.07	4.7	37
... Monitoring Point SW-P1 continued									

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



Pollutant	Solids Suspended	Sulphate	Thermotolerant Coliforms	TKN	TOC	Zinc (Total)
Date	(mg/L)	(mg/L)	(cfu/100ml)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	163	144	40*	6.3300	13	0.11
14/04/2015	24	13	<10*	2.4500	26	0.110
13/10/2015	16	15		2.6800		
12/04/2016	14	9.361	13*	1.9900	27	0.008
27/03/2018	4.3	8.8786	20*	1.5200	25.41	<0.005
9/10/2018	22	3.3054		2.5500		
22/10/2019	6.7	4.9		1.38		

Monitoring Point: SW-P2

Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD ₅	Cadmium (Total)	Calcium (Total)	Chloride
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	13	1.19	0.07	0.009	8	6.6	<0.001	15	39
14/04/2015	18	0.52	0.08	0.003	11	8.7	<0.001	7.4	42
13/10/2015	11		0.45		11	22		3.0	37
12/04/2016	29	0.483	0.22	0.001	29	18	<0.001	8.391	40
13/10/2016	7.2		0.03		7	1.8		1.974	28
11/04/2017	11.7	0.547	0.05	0.006	12	5.0	<0.001	6.232	25
10/10/2017	10.83		0.04		11	13.5		4.0402	50
27/03/2018	5.94	0.48484	0.08	0.00554	6	5.5	<0.001	3.8318	37.5
9/10/2018	3.38		0.08		3	30		2.9535	28
9/04/2019	4.04	0.58668	0.07	0.00615	4	2.7	<0.001	5.4987	38

... Monitoring Point SW-P2 continued

Pollutant	Chromium (Total)	Conductivity	Copper (Total)	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Nickel (Total)
Date	(mg/L)	(µScm-1)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	<0.01	272	<0.01	6.9	1.94	<0.01	9.0	0.09	<0.01
14/04/2015	0.001	187	<0.001	1.1	2.30	<0.001	4.0	0.087	0.002
13/10/2015		121		1.5			2.0		
12/04/2016	0.002	217	0.002	0.8	1.853	<0.001	5.157	0.078	0.001
13/10/2016		130.5		2.6			2.973		
11/04/2017	0.002	135.5	0.002	1.5	2.127	<0.001	4.021	0.115	0.002
10/10/2017		148.7		1.4			2.9759		
27/03/2018	0.00254	136	0.00241	1.3	1.79404	<0.001	3.4361	0.05709	0.00147
9/10/2018		117.9		1.7			2.2615		
9/04/2019	0.00224	179.9	0.00147	1.4	1.61096	<0.001	4.5968	0.08321	0.00146

... Monitoring Point SW-P2 continued

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019

Pollutant	Nitrate	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)
Date	(N mg/L)	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	<0.02	0.03	0.03	6.98	6.0	NP	0.70	<5	26
14/04/2015	<0.02	0.07	0.07	2.16	5.6	NP	0.14	<5	23
13/10/2015	<0.02	0.07	0.07	6.63	5.5	NP	0.59	<5	16
12/04/2016	<0.02	0.04	<0.02	3.65	6.1	NP	0.45	<5	21.973
13/10/2016	<0.02	0.03	<0.02	1.27	5.4	0	0.05	<5	18.725
11/04/2017	<0.02	0.07	0.03	2.06	5.4	0	0.11	<5	14.05
10/10/2017	0.03	0.05	0.08	2.75	5.5	0	0.18	<5	19.4005
27/03/2018	<0.02	0.06	0.03	1.82	5.3	0	0.1	<5	16.6108
9/10/2018	<0.02	0.04	0.02	15.27	5.2	0	1.47	2.5112	16.1773
9/04/2019	<0.02	0.05	<0.02	2.01	5.1	0	0.11	3.2905	21.8905

... Monitoring Point SW-P2 continued

Pollutant	Solids Suspended	Sulphate	Thermotolerant Coliforms	TKN	TOC	Zinc (Total)
Date	(mg/L)	(mg/L)	(cfu/100ml)	(mg/L)	(mg/L)	(mg/L)
9/04/2014	117	51	280*	6.9500	32	0.08
14/04/2015	8.5	6.8	40*	2.0900	54	0.050
13/10/2015	172	6.2		6.5600		
12/04/2016	43	16.595	3600	3.6500	33	0.06
13/10/2016	8.3	4.151		1.2700		
11/04/2017	9	14.3	<10*	2.0300	47.33	0.009
10/10/2017	34	5.7701		2.6700		
27/03/2018	5.7	7.6263	80*	1.7900	44.78	0.01401
9/10/2018	480	5.4347		15.2500		
9/04/2019	6	13.3451	<10*	2.0100	50.95	0.02087

Monitoring Point: SW-P3

Pollutant	Alkalinity	Aluminium (Total)	Ammonia	Arsenic (Total)	Bicarbonate HCO ₃	BOD ₅	Cadmium (Total)	Calcium (Total)	Chloride
Date	(mg/L as CaCO ₃)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	12	0.28	0.06	<0.005	7	6.6	<0.01	5.7	27
14/04/2015	61	0.87	0.25	<0.001	37	12	<0.001	12	54
13/10/2015	52		0.13		52	18		11	37
12/04/2016	14	0.385	0.04	0.005	14	4.2	<0.001	4.942	23
13/10/2016	45.7		0.08		46	9.3		10.253	38
11/04/2017	35.7	0.664	0.18	0.001	36	2.0	<0.001	10.537	42
10/10/2017	59.27		0.02		59	15.9		12.7275	45
27/03/2018	11.5	0.69716	0.04	<0.001	12	5.0	<0.001	7.303	62.5
9/10/2018	50.42		0.29		50	13.5		12.8108	35.5

Old Bogangar Rd Disused Landfill Monitoring

1/01/2010 to 4/11/2019



... Monitoring Point SW-P3 continued

Pollutant	Chromium (Total)	Conductivity	Copper (Total)	DO (Membrane Electrode)	Iron Total	Lead (Total)	Magnesium (Total)	Manganese Total	Nickel (Total)
Date	(mg/L)	(µScm-1)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	<0.01	143	0.04		2.10	<0.01	2.1	0.06	<0.01
14/04/2015	0.001	307	<0.001	<1.0	3.08	<0.001	8.0	0.122	0.001
13/10/2015		226		<1.0			6.7		
12/04/2016	0.002	123	0.003	0.7	1.599	<0.001	3.275	0.057	0.001
13/10/2016		233.2		1.0			6.452		
11/04/2017	0.002	243.8	0.003	0.8	2.05	0.001	6.535	0.112	0.002
10/10/2017		234.1		1.4			6.9771		
27/03/2018	0.00226	257.7	<0.001	1.3	1.94046	<0.001	5.6477	0.05606	0.00162
9/10/2018		244.1		1.1			7.6663		

... Monitoring Point SW-P3 continued

Pollutant	Nitrate	Nitrite	Nitrogen Oxidised	Nitrogen Total	pH	Phenol Alkalinity	Phosphorus Total	Potassium Total	Sodium (Total)
Date	(N mg/L)	(N mg/L)	(mg/L)	(mg/L)	(pH units)	(mg/L as CaCO3)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	<0.05	<0.05	<0.05	1.98	5.7		0.20	<5	15
14/04/2015	<0.02	0.07	0.05	3.52	6.0	NP	0.51	<5	36
13/10/2015	<0.02	0.03	0.03	3.49	6.3	NP	0.38	<5	23
12/04/2016	<0.02	0.04	<0.02	1.92	5.9	NP	0.12	<5	13.408
13/10/2016	<0.02	0.02	<0.02	1.85	6.2	0	0.2	<5	25.636
11/04/2017	<0.02	0.08	0.05	6.56	5.8	0	1.33	<5	24.93
10/10/2017	<0.02	0.03	0.04	7.62	6.2	0	1	<5	23.7104
27/03/2018	<0.02	0.05	0.03	1.51	5.4	0	0.3	5.0084	30.5854
9/10/2018	<0.02	0.02	<0.02	2.39	6.4	0	0.36	4.9121	25.1987

... Monitoring Point SW-P3 continued

Pollutant	Solids Suspended	Sulphate	Thermotolerant Coliforms	TKN	TOC	Zinc (Total)
Date	(mg/L)	(mg/L)	(cfu/100ml)	(mg/L)	(mg/L)	(mg/L)
14/04/2010	26	5.2		1.98	27	0.03
9/04/2014			-			
14/04/2015	35	38	40*	3.4700	43	0.155
13/10/2015	70	7.2		3.4600		
12/04/2016	11	5.38	2400	1.9200	41	0.011
13/10/2016	35	8.894		1.8500		
11/04/2017	126	89.5	20*	6.5100	47.79	0.026
10/10/2017	218	6.7215		7.5800		
27/03/2018	7.3	17.2912	80*	1.4800	41.86	0.01773
9/10/2018	17	10.8899		2.3900		

