Groundwater quality monthly monitoring data Q1 and Q2 2017

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There are 4 groundwater monitoring boreholes at the Preston New Road site where Cuadrilla collect samples. The company then send the analysis of these to us as a requirement of their Environmental Permit. All samples collected encountered shallow groundwater in the near surface glacial sands and gravels. These sands and gravel are separated by a clay into upper and lower units. The information in the pages below shows the water quality results from these 4 boreholes from the monthly samples taken in Q1 and Q2 2017.

The groundwater quality seen in the tables below is considered to be natural for agricultural land in this part of Lancashire. The parameters for analysis of the groundwater were chosen in the unlikely event of any contaminants that may result from future activities. The quality of the groundwater from these boreholes will act as the background to compare future samples in order to detect any potential variation.

Permit Number	EPR/AB3101MW	Operator	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	Form Number	Groundwater 1

Substance/ Parameter	BH01 (A)						
	Units	Test Method	Trigger Level	*Jan-17*	*Feb-17*	*Mar-17*	Uncertainty
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	3.5	2.5	2.5	0.65
Dissolved Barium #	ug/l	TM30/PM14	TBC	279	213	235	38.03
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	22	30	27	4.57
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	115.3	116.1	120.4	3.10
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	584	265	20	320.02
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	10	11	12	1.13
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	39.7	36.9	36.8	1.86
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	3	0.65
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2.6	2.4	2.7	0.17
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	33.6	31.1	31.2	1.60
Dissolved Strontium	ug/l	TM30/PM14	TBC	247	250	241	5.19
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.05	0.10	0.16	0.06
Chloride #	mg/l	TM38/PM0	TBC	65.9	63.8	65	1.19
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	36.1	31.3	37.2	3.55
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.04	0.43	0.14	0.23
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.38	0.01	0.01	0.24
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	36	31.8	40.1	4.70
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	-74.6	0	0	48.74
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-28.3	0	0	18.49
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	346	370	600	158.69
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	2	1	1	0.65
COD (Settled) #	mg/l	TM57/PM0	TBC	7	11	12	2.99
pH #	pH units	TM73/PM0	TBC	7.8	7.65	7.58	0.13
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	592	600	384	138.58
Total Suspended Solids #	mg/l	TM37/PM0	TBC	34	34	7669	4988.11

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited				
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1				

Substance/ Parameter	BH01 (B)						
	Units	**Test Method**	**Trigger Level**	***Jan-17***	***Feb-17***	***Mar-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	5.9	2.5	2.5	2.22
Dissolved Barium #	ug/l	TM30/PM14	TBC	397	365	322	42.59
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	29	30	32	1.73
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	104.1	113	110.1	5.14
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	197	20	40	109.69
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	9	11	10	1.13
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	38.6	37.7	36.4	1.25
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2.1	2.1	2.2	0.07
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	37.1	35.9	37.5	0.94
Dissolved Strontium	ug/l	TM30/PM14	TBC	318	275	243	42.59
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	7	7	18	7.19
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.06	0.09	0.11	0.03
Chloride #	mg/l	TM38/PM0	TBC	52.7	61.6	55.8	5.11
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	2	10.2	4.2	4.80
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.13	0.19	0.10
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.07	0.05	0.03	0.02
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	1.17	0.46	2.3	1.05
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	35.8	36.8	38.3	1.42
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	-73.6	-62.1	-72.4	7.15
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-29.2	0	0	19.08
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	386	388	382	3.46
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	4	2	3	1.13
COD (Settled) #	mg/l	TM57/PM0	TBC	7	11	7	2.61
pH #	pH units	TM73/PM0	TBC	7.76	7.6	7.6	0.10
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	523	545	532	12.52
Total Suspended Solids #	mg/l	TM37/PM0	TBC	72	350	197	157.56

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	BH02 (A)						
	Units	**Test Method**	**Trigger Level**	***Jan-17***	***Feb-17***	***Mar-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	3	2	2	0.65
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	2.5	2.5	2.5	0.00
Dissolved Barium #	ug/l	TM30/PM14	TBC	108	90	94	10.70
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	47	39	42	4.57
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	101.9	117.7	112.8	9.15
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	13	17	16	2.36
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	34	36.1	35.9	1.31
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2.4	2.6	2.6	0.13
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	24.1	27.2	25.7	1.75
Dissolved Strontium	ug/l	TM30/PM14	TBC	310	362	358	32.74
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	620	398.53
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.05	0.08	0.11	0.03
Chloride #	mg/l	TM38/PM0	TBC	52.3	51.5	51.3	0.60
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	28.7	29.3	42.6	8.89
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.03	0.03	0.03	0.00
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	39.7	32.2	40.5	5.18
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-22.9	0	0	14.96
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	332	352	338	11.61
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	7	0.00
pH #	pH units	TM73/PM0	TBC	7.69	7.54	7.67	0.09
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	572	560	492	48.82
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	10	0.00

Permit Number	EPR/AB3101MW	Operator	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	Form Number	Groundwater 1

Substance/ Parameter	BH02 (B)						
	Units	Test Method	Trigger Level	*Jan-17*	*Feb-17*	*Mar-17*	Uncertainty
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	17.6	12.2	12.4	3.46
Dissolved Barium #	ug/l	TM30/PM14	TBC	69	65	65	2.61
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	37	42	48	6.23
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	116.3	115.6	112.9	2.03
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	781	710	574	119.03
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	15	15	17	1.31
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	36.7	34.3	34.7	1.46
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	1.8	1.7	1.8	0.07
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	30.3	28.1	27.9	1.51
Dissolved Strontium	ug/l	TM30/PM14	TBC	596	607	592	8.79
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.06	0.07	0.15	0.06
Chloride #	mg/l	TM38/PM0	TBC	49.1	49.5	50.1	0.57
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.2	0.2	0.2	0.00
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.04	0.05	0.03	0.01
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	36.7	30.8	32.2	3.49
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-25.1	0	0	16.40
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	342	360	328	18.15
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	9	1.31
pH #	pH units	TM73/PM0	TBC	7.81	7.63	7.58	0.14
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	559	540	536	13.91
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	10	0.00

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	BH03 (CMT 1)						
	Units	**Test Method**	**Trigger Level**	***Jan-17***	***Feb-17***	***Mar-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	12.7	2.5	2.5	6.66
Dissolved Barium #	ug/l	TM30/PM14	TBC	47	45	47	1.31
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	51	47	49	2.26
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	114.3	114	119.1	3.24
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	330	179	183	97.37
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	14	18	14	2.61
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	36.3	33.6	34.3	1.59
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	1.9	1.8	2	0.11
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	33.1	30.2	30.7	1.75
Dissolved Strontium	ug/l	TM30/PM14	TBC	549	568	536	18.21
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.05	0.08	0.14	0.05
Chloride #	mg/l	TM38/PM0	TBC	55.9	54.9	56	0.69
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.4	0.4	0.4	0.00
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.03	0.02	0.01
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.03	0.08	0.03	0.03
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.02	0.01	0.01
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	32.1	17.4	27.9	8.57
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-25.2	0	0	16.46
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	332	360	382	28.36
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	14	7	4.57
pH #	pH units	TM73/PM0	TBC	7.78	7.82	7.54	0.17
Salinity	%	TM64/PM0	TBC	0.1	0.2	0.1	0.07
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	504	534	597	53.71
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	43	21.56

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited				
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1				

Substance/ Parameter	**BH03 (CMT 5)**						
	Units	**Test Method**	**Trigger Level**	***Jan-17***	***Feb-17***	***Mar-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	3	2	0.65
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	6	2.5	2.5	2.29
Dissolved Barium #	ug/l	TM30/PM14	TBC	58	56	59	1.73
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	40	48	45	4.57
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	110.8	112.1	114.7	2.25
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	669	606	606	41.16
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	15	14	16	1.13
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	35.3	32.8	32.7	1.67
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	1.9	1.7	1.9	0.13
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	28.6	26.7	26.5	1.31
Dissolved Strontium	ug/l	TM30/PM14	TBC	507	510	476	21.30
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	11	0.65
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.4	0.07
Bromide	mg/l	TM27/PM0	TBC	0.05	0.08	0.16	0.06
Chloride #	mg/l	TM38/PM0	TBC	48.9	48.6	49.3	0.40
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.2	0.2	0.2	0.00
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.03	0.03	0.03	0.00
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	21.5	16.2	27.6	6.46
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-25.2	0	0	16.46
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	318	338	338	13.07
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	12	3.27
pH #	pH units	TM73/PM0	TBC	7.98	7.76	7.56	0.24
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	545	550	555	5.66
Total Suspended Solids #	mg/l	TM37/PM0	TBC	13	10	69	37.60

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	BH04 (A)						
	Units	**Test Method**	**Trigger Level**	***Jan-17***	***Feb-17***	***Mar-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	4.2	2.5	2.5	1.11
Dissolved Barium #	ug/l	TM30/PM14	TBC	137	133	136	2.36
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	23	30	26	3.97
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	116.2	116.4	119.8	2.29
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	11	13	11	1.31
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	38.6	35.6	35.7	1.93
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	1.6	1.5	1.6	0.07
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	41.9	39.6	38.9	1.78
Dissolved Strontium	ug/l	TM30/PM14	TBC	219	226	220	4.28
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	4	0.65
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.06	0.06	0.14	0.05
Chloride #	mg/l	TM38/PM0	TBC	80.5	79.3	80.3	0.73
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	28.5	26.1	29.1	1.80
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.03	0.03	0.03	0.00
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	45	38.4	34.7	5.90
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-28.1	0	0	18.36
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	358	364	366	4.71
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	11	7	2.61
pH #	pH units	TM73/PM0	TBC	7.95	7.71	7.45	0.28
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	587	614	607	15.86
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	10	0.00

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	**BH04 (B)**						
	Units	**Test Method**	**Trigger Level**	***Jan-17***	***Feb-17***	***Mar-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	45	16.33
Dissolved Antimony #	ug/l	TM30/PM14	TBC	4	2	2	1.31
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	14.7	10.6	7.3	4.20
Dissolved Barium #	ug/l	TM30/PM14	TBC	70	66	69	2.36
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	38	41	42	2.36
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	116.3	114.6	118.8	2.39
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	978	876	918	58.01
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	14	17	15	1.73
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	38	34.7	35	2.06
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	1.8	1.7	1.9	0.11
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	28.4	26	25.8	1.64
Dissolved Strontium	ug/l	TM30/PM14	TBC	538	565	537	17.98
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Benzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
o-Xylene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.05	0.05	0.09	0.03
Chloride #	mg/l	TM38/PM0	TBC	44.6	43.8	44.3	0.46
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.2	0.2	0.2	0.00
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.05	0.06	0.06	0.01
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.07	0.01	0.04
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	35.6	36.2	39.6	2.44
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-26.5	0	0	17.31
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	336	356	362	15.41
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	8	7	0.65
pH #	pH units	TM73/PM0	TBC	7.73	7.59	7.54	0.11
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	546	546	543	1.96
Total Suspended Solids #	mg/l	TM37/PM0	TBC	13	19	18	3.64

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited				
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1				

Substance/ Parameter	BH02 (B)						
	Units	**Test Method**	**Trigger Level**	***Apr-17***	***May-17***	***Jun-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	3	2	0.65
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	16.3	16.2	12.5	2.45
Dissolved Barium #	ug/l	TM30/PM14	TBC	66	70	67	2.36
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	50	44	45	3.64
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	123.1	112.4	119.8	6.20
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	714	661	705	32.09
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	13	14	13	0.65
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	37.5	35	34.4	1.86
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2	1.8	1.8	0.13
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	29.9	27.9	30.4	1.50
Dissolved Strontium	ug/l	TM30/PM14	TBC	566	604	584	21.51
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.11	0.13	0.08	0.03
Chloride #	mg/l	TM38/PM0	TBC	48.7	47.8	51.4	2.12
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.2	0.4	0.7	0.28
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.05	0.04	0.03	0.01
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	36.2	35.7	30.6	3.51
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-28.7	-28.5	-28.8	0.17
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	370	362	340	17.58
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	7	0.00
pH #	pH units	TM73/PM0	TBC	7.52	7.53	7.14	0.25
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	563	546	578	18.12
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	10	0.00

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited				
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1				

Substance/ Parameter	BH03 (CMT 1)						
	Units	Test Method	Trigger Level	*Apr-17*	*May-17*	*Jun-17*	Uncertainty
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	4.3	7.5	2.5	2.87
Dissolved Barium #	ug/l	TM30/PM14	TBC	45	46	46	0.65
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	56	48	52	4.53
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	124.3	112.8	116.2	6.69
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	8	7	7	0.65
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	170	162	118	31.68
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	13	14	14	0.65
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	36.6	34.1	33.7	1.78
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2	1.9	1.8	0.11
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	32.4	30.1	32.3	1.47
Dissolved Strontium	ug/l	TM30/PM14	TBC	560	579	552	15.69
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	5	5	1.31
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.18	0.08	0.12	0.06
Chloride #	mg/l	TM38/PM0	TBC	54.8	54.1	54.3	0.41
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.3	0.2	0.7	0.30
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.04	0.04	0.03	0.01
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.09	0.09	0.05	0.03
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	34.3	25.6	26.9	5.31
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-30.5	-27.5	-27.8	1.87
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	360	316	342	25.03
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	7	0.00
pH #	pH units	TM73/PM0	TBC	7.59	7.34	7.16	0.24
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	560	574	579	11.14
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	10	0.00

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	**BH03 (CMT 5)**						
	Units	**Test Method**	**Trigger Level**	***Apr-17***	***May-17***	***Jun-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	2.5	4.7	2.5	1.44
Dissolved Barium #	ug/l	TM30/PM14	TBC	58	59	58	0.65
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	49	43	46	3.39
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	119	108.6	111.8	6.03
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	538	512	203	210.88
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	14	15	14	0.65
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	34.8	33.1	32.6	1.31
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2.1	1.9	1.9	0.13
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	27.4	25.9	27.3	0.95
Dissolved Strontium	ug/l	TM30/PM14	TBC	504	514	474	23.56
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.10	0.09	0.08	0.01
Chloride #	mg/l	TM38/PM0	TBC	48	47.3	46.7	0.74
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.2	0.2	0.3	0.07
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.03	0.03	0.03	0.00
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.02	0.02	0.02	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	29.5	15.1	14.8	9.51
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-29.6	27.1	-28.3	36.63
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	340	300	310	23.56
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	7	0.00
pH #	pH units	TM73/PM0	TBC	7.67	7.62	7.4	0.16
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	465	522	566	57.30
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	11	0.65

Permit Number	EPR/AB3101MW	Operator	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	Form Number	Groundwater 1

Substance/ Parameter	BH04 (A)						
	Units	Test Method	Trigger Level	*Apr-17*	*May-17*	*Jun-17*	Uncertainty
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	2.5	2.5	2.5	0.00
Dissolved Barium #	ug/l	TM30/PM14	TBC	134	134	133	0.65
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	31	26	30	2.99
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	118.2	114	116.6	2.40
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	10	10	9	0.65
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	38.3	35.9	34.8	2.03
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	1.8	1.6	1.5	0.17
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	40.9	39.3	40.5	0.94
Dissolved Strontium	ug/l	TM30/PM14	TBC	226	230	217	7.53
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.17	0.09	0.13	0.05
Chloride #	mg/l	TM38/PM0	TBC	79.3	77.5	84.4	4.05
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	26.9	30	28	1.78
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.03	0.03	0.03	0.00
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	46.3	36.8	39.4	5.56
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-28.9	-29.2	-29.2	0.20
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	378	342	352	21.03
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	7	0.00
pH #	pH units	TM73/PM0	TBC	7.51	7.24	7.13	0.22
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	612	614	701	57.50
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	10	0.00

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	BH04 (B)						
	Units	Test Method	Trigger Level	*Apr-17*	*May-17*	*Jun-17*	Uncertainty
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	13.6	14.4	11.2	1.88
Dissolved Barium #	ug/l	TM30/PM14	TBC	64	65	64	0.65
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	45	39	44	3.64
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	122.5	120.5	124.5	2.26
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	786	815	750	36.85
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	15	13	14	1.13
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	36.9	36.4	36.3	0.36
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	1.9	1.7	1.9	0.13
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	26.8	26.6	29.5	1.83
Dissolved Strontium	ug/l	TM30/PM14	TBC	549	556	544	6.82
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.15	0.07	0.1	0.05
Chloride #	mg/l	TM38/PM0	TBC	43.9	43.2	43.7	0.41
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.2	0.2	0.2	0.00
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.05	0.06	0.05	0.01
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.07	0.04	0.02	0.03
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	40.2	34.3	34.3	3.85
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-27.4	-27.9	-28.2	0.46
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	352	332	336	11.98
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	7	0.00
pH #	pH units	TM73/PM0	TBC	7.56	7.31	7.21	0.20
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	680	548	597	75.51
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	10	10	0.00

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	BH02 (A)						
	Units	Test Method	Trigger Level	*Apr-17*	*May-17*	*Jun-17*	Uncertainty
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	3	2	0.65
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	2.5	3.3	2.5	0.52
Dissolved Barium #	ug/l	TM30/PM14	TBC	93	92	93	0.65
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	41	33	39	4.71
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	119	116.5	121.5	2.83
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	12	15	12	1.96
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	39	36.4	36.4	1.70
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	3	2.6	2.9	0.24
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	27.6	25.9	28.5	1.49
Dissolved Strontium	ug/l	TM30/PM14	TBC	324	352	318	20.54
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.03	0.3	0.3	0.18
Bromide	mg/l	TM27/PM0	TBC	0.10	0.08	0.08	0.01
Chloride #	mg/l	TM38/PM0	TBC	51.6	50.9	51.3	0.40
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	37.9	42.8	42.5	3.11
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.03	0.03	0.03	0.00
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	45.2	29.4	35.6	9.01
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-28.2	-27.4	-28.8	0.79
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	354	322	328	19.25
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	7	7	7	0.00
pH #	pH units	TM73/PM0	TBC	7.48	7.28	7.11	0.21
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	580	598	623	24.44
Total Suspended Solids #	mg/l	TM37/PM0	TBC	10	17	16	4.28

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	BH01 (A)						
	Units	**Test Method**	**Trigger Level**	***Apr-17***	***May-17***	***Jun-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	3	2	2	0.65
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	4.3	2.9	2.5	1.07
Dissolved Barium #	ug/l	TM30/PM14	TBC	421	239	220	125.57
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	34	25	29	5.10
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	116.6	118.4	124.1	4.43
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	14	9	9	3.27
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	35.4	37.2	36.4	1.02
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2.7	2.5	2.5	0.13
Dissolved Selenium #	ug/l	TM30/PM14	TBC	10	3	3	4.57
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	31.6	32.6	33.9	1.31
Dissolved Strontium	ug/l	TM30/PM14	TBC	254	250	235	11.33
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	3	3	3	0.00
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.13	0.07	0.1	0.03
Chloride #	mg/l	TM38/PM0	TBC	64.1	63.8	63.4	0.40
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	36.3	39.9	42.4	3.47
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02	0.02	0.00
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.09	0.03	0.03	0.04
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	1	2	2	0.65
Dissolved Propane	ug/l	TM25/PM0	TBC	1	2	2	0.65
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01	0.01	0.00
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	46.3	36.8	39.4	5.56
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0	0	0.00
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-28.9	-29.2	-29.2	0.20
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	588	406	382	127.47
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	1	1	1	0.00
COD (Settled) #	mg/l	TM57/PM0	TBC	11	7	10	2.36
pH #	pH units	TM73/PM0	TBC	7.47	7.74	7.42	0.19
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	617	583	577	24.41
Total Suspended Solids #	mg/l	TM37/PM0	TBC	7286	1090	1164	4024.02

Permit Number	EPR/AB3101MW	**Operator**	Cuadrilla Bowland Limited
Facility	Preston New Road Exploration Site	**Form Number**	Groundwater 1

Substance/ Parameter	BH01 (B)						
	Units	**Test Method**	**Trigger Level**	***Apr-17***	***May-17***	***Jun-17***	**Uncertainty**
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	2.5	2.8	2.5	0.20
Dissolved Barium #	ug/l	TM30/PM14	TBC	265	253	220	26.37
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Boron	ug/l	TM30/PM14	TBC	37	28	35	5.35
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5	0.5	0.00
Dissolved Calcium #	mg/l	TM30/PM14	TBC	109.6	106.7	108.4	1.65
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7	7	0.00
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	20	20	20	0.00
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Lithium	ug/l	TM30/PM14	TBC	9	10	9	0.65
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	39.1	36.7	36.3	1.71
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1	1	0.00
Dissolved Nickel #	ug/l	TM30/PM14	TBC	2	2	2	0.00
Dissolved Potassium #	mg/l	TM30/PM14	TBC	2.3	2.2	2.1	0.11
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3	3	0.00
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5	5	0.00
Dissolved Sodium #	mg/l	TM30/PM14	TBC	37.4	35.8	40.7	2.83
Dissolved Strontium	ug/l	TM30/PM14	TBC	224	247	227	14.15
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5	1.5	0.00
Dissolved Zinc #	ug/l	TM30/PM14	TBC	6	6	7	0.65
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10	10	0.00
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10	10	0.00
MTBE #	ug/l	TM31/PM12	TBC	5	0.1	5	3.20
Benzene #	ug/l	TM31/PM12	TBC	5	0.5	5	2.94
Toluene #	ug/l	TM31/PM12	TBC	5	5	5	0.00
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	2	5	1.96
o-Xylene #	ug/l	TM31/PM12	TBC	5	1	5	2.61
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3	0.3	0.00
Bromide	mg/l	TM27/PM0	TBC	0.13	0.08	0.07	0.04
Chloride #	mg/l	TM38/PM0	TBC	55.6	55.1	51.6	2.47
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	8.5	8.6	7.6	0.62
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.24	0.2	0.15	0.05
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.04	0.03	0.03	0.01
Dissolved Ethene #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Ethane #	ug/l	TM25/PM0	TBC	1	1	1	0.00
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2	2	0.00
Dissolved Methane	mg/l	GC-IRMS	TBC	2.32	1.99	3.08	0.63
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	34.1	31.3	32.1	1.63
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	-71.6	-68.5	-66	3.17
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-33.1	-29.4	-29.8	2.30
Total Alkalinity as CaCO3 #	mg/l	TM75/PM0	TBC	378	370	356	12.60
Acrylamide	ug/l	TM103/PM59	TBC	50	50	50	0.00
Laurylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Myristyl dimethlyamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50	50	0.00
BOD (Settled) #	mg/l	TM58/PM0	TBC	2	2	4	1.31
COD (Settled) #	mg/l	TM57/PM0	TBC	7	24	16	9.62
pH #	pH units	TM73/PM0	TBC	7.59	7.52	7.34	0.15
Salinity	%	TM64/PM0	TBC	0.1	0.1	0.1	0.00
Total Dissolved Solids #	mg/l	TM20/PM0	TBC	533	537	561	17.14
Total Suspended Solids #	mg/l	TM37/PM0	TBC	259	176	45	122.09