

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

Substance/ Parameter					
	Units	Test Method	Trigger Level	Jul-16	Aug-16
Dissolved Aluminium #	ug/l	TM30/PM14	TBC	20	20
Dissolved Antimony #	ug/l	TM30/PM14	TBC	2	2
Dissolved Arsenic #	ug/l	TM30/PM14	TBC	2.5	2.5
Dissolved Barium #	ug/l	TM30/PM14	TBC	90	74
Dissolved Beryllium	ug/l	TM30/PM14	TBC	0.5	0.5
Dissolved Boron	ug/l	TM30/PM14	TBC	46	43
Dissolved Cadmium #	ug/l	TM30/PM14	TBC	0.5	0.5
Dissolved Calcium #	mg/l	TM30/PM14	TBC	121.3	122.1
Total Dissolved Chromium #	ug/l	TM30/PM14	TBC	1.5	1.5
Dissolved Cobalt #	ug/l	TM30/PM14	TBC	2	2
Dissolved Copper #	ug/l	TM30/PM14	TBC	7	7
Total Dissolved Iron #	ug/l	TM30/PM14	TBC	20	20
Dissolved Lead #	ug/l	TM30/PM14	TBC	5	5
Dissolved Lithium	ug/l	TM30/PM14	TBC	14	14
Dissolved Magnesium #	mg/l	TM30/PM14	TBC	36.1	35.9
Dissolved Mercury #	ug/l	TM30/PM14	TBC	1	1
Dissolved Nickel #	ug/l	TM30/PM14	TBC	3	2
Dissolved Potassium #	mg/l	TM30/PM14	TBC	3	2.1
Dissolved Selenium #	ug/l	TM30/PM14	TBC	3	3
Dissolved Silver	ug/l	TM30/PM14	TBC	5	5
Dissolved Sodium #	mg/l	TM30/PM14	TBC	35.8	29.1
Dissolved Strontium	ug/l	TM30/PM14	TBC	525	532
Dissolved Vanadium #	ug/l	TM30/PM14	TBC	1.5	1.5
Dissolved Zinc #	ug/l	TM30/PM14	TBC	0	13
EPH (C8-C40) #	ug/l	TM5/PM30	TBC	10	10
GRO (>C4-C8) #	ug/l	TM36/PM12	TBC	10	10
GRO (>C8-C12) #	ug/l	TM36/PM12	TBC	10	10
GRO (>C4-C12) #	ug/l	TM36/PM12	TBC	10	10
MTBE #	ug/l	TM31/PM12	TBC	5	5
Benzene #	ug/l	TM31/PM12	TBC	5	5
Toluene #	ug/l	TM31/PM12	TBC	5	5
Ethylbenzene #	ug/l	TM31/PM12	TBC	5	5
m/p-Xylene #	ug/l	TM31/PM12	TBC	5	5
o-Xylene #	ug/l	TM31/PM12	TBC	5	5
Fluoride	mg/l	TM27/PM0	TBC	0.3	0.3
Bromide	mg/l	TM27/PM0	TBC	0.1	0.07
Chloride #	mg/l	TM38/PM0	TBC	46.4	45.3
Nitrate as NO3 #	mg/l	TM38/PM0	TBC	0.2	0.6
Nitrite as NO2 #	mg/l	TM38/PM0	TBC	0.02	0.02
Ammoniacal Nitrogen as NH4 #	mg/l	TM38/PM0	TBC	0.16	0.06

Dissolved Ethene <sup>#</sup>	ug/l	TM25/PM0	TBC	1	1
Dissolved Ethane <sup>#</sup>	ug/l	TM25/PM0	TBC	1	1
Dissolved Butane	ug/l	TM25/PM0	TBC	2	2
Dissolved Propane	ug/l	TM25/PM0	TBC	2	2
Dissolved Methane	mg/l	GC-IRMS	TBC	0.01	0.01
Dissolved Carbon Dioxide	mg/l	GC-IRMS	TBC	25.5	23.8
δ13C - CH4	ppm ‰. VPDB	GC-IRMS	TBC	0	0
δ13C - CO2	ppm ‰. VPDB	GC-IRMS	TBC	-23.48	-23
Total Alkalinity as CaCO3 <sup>#</sup>	mg/l	TM75/PM0	TBC	460	376
Acrylamide	ug/l	TM103/PM59	TBC	50	50
Laurylamine	ug/l	TM103/PM59	TBC	50	50
Hydroxyethyl ethylene diamine	ug/l	TM103/PM59	TBC	50	50
Myristyl dimethylamine	ug/l	TM103/PM59	TBC	50	50
Octyldimethylamine	ug/l	TM103/PM59	TBC	50	50
para phenylene diamine	ug/l	TM103/PM59	TBC	50	50
BOD (Settled) <sup>#</sup>	mg/l	TM58/PM0	TBC	1	1
COD (Settled) <sup>#</sup>	mg/l	TM57/PM0	TBC	23	7
pH <sup>#</sup>	pH units	TM73/PM0	TBC	7.58	7.72
Salinity	%	TM64/PM0	TBC	10.2	0.1
Total Dissolved Solids <sup>#</sup>	mg/l	TM20/PM0	TBC	616	573
Total Suspended Solids <sup>#</sup>	mg/l	TM37/PM0	TBC	3014	1200



1								
1								
2								
2								
0.01								
28.4								
0								
-26.97								
336								
50								
50								
50								
50								
50								
50								
3								
7								
7.6								
0.1								
524								
53								



		0.00
		0.00
		0.00
		0.00
		0.00
		2.63
		0.00
		2.45
		71.62
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		1.31
		10.45
		0.09
		6.60
		52.09
		1689.42