Adani Carmichael Coal Mine Project

Groundwater Quality data

August 2021

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021
Client sample ID (1st):		C558P1	C012P1	C012P2	C011P3	C024P3	C975SP	C19027SP	C14020SP	C14033SP	C016P2	C9553P1R	C018P2	C018P3	C14004SP	C18004SP
Hydro-stratigraphic unit:		Tertiary	Joe-Joe	Joe-Joe	Colinlea SSt	Colinlea SSt	Colinlea SSt	Bandanna	Moolayember	Clematis Sst	Bandanna	Rewan	Bandanna	Colinlea SSt	Joe Joe	Alluvium
Analyte grouping/Analyte	**Unit**															
pH Value	pH Unit	**6.82**	**6.53**	**7.42**	**7.89**	**6.63**	**6.35**	**9.12**	**6.42**	**6.27**	**7.75**	**6.28**	**7.53**	**7.19**	**6.71**	**6.69**
Electrical Conductivity @ 25°C	µS/cm	**9870**	**2040**	**2600**	**926**	**1430**	**606**	**1700**	**1520**	**368**	**2760**	**381**	**1710**	**990**	**51300**	**39200**
Total Dissolved Solids @180°	mg/L	**6640**	**1150**	**1470**	**516**	**740**	**339**	**944**	**790**	**205**	**1650**	**239**	**950**	**468**	**42000**	**28600**
Total Alkalinity as CaCO3	mg/L	**238**	**79**	**273**	**221**	**110**	**39**	**217**	**38**	**15**	**186**	**50**	**266**	**176**	**92**	**190**
Sulfate as SO4 - Turbidimetric	mg/L	**256**	**52**	**41**	<1	**23**	**24**	**24**	**54**	**3**	**39**	**16**	**6**	**14**	**2050**	**746**
Chloride	mg/L	**3150**	**586**	**684**	**168**	**393**	**144**	**422**	**440**	**98**	**827**	**73**	**424**	**207**	**20800**	**15400**
Calcium	mg/L	**85**	**30**	**82**	**24**	**14**	**2**	**9**	**7**	**2**	**101**	<1	**51**	**25**	**2870**	**3120**
Magnesium	mg/L	**227**	**31**	**28**	**5**	**24**	**6**	**3**	**40**	**9**	**18**	**6**	**24**	**6**	**1260**	**1270**
Sodium	mg/L	**1660**	**311**	**393**	**159**	**219**	**104**	**327**	**201**	**45**	**447**	**63**	**253**	**164**	**9530**	**5250**
Potassium	mg/L	**28**	**11**	**14**	**8**	**9**	**6**	**6**	**23**	**10**	**9**	**3**	**16**	**9**	**42**	**20**
Aluminium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
Arsenic	mg/L	<0.001	<0.001	**0.002**	<0.001	**0.004**	<0.001	**0.005**	<0.001	<0.001	<0.001	**0.002**	<0.001	<0.001	<0.005	<0.005
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.0002**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005
Chromium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005
Cobalt	mg/L	<0.001	<0.001	<0.001	<0.001	**0.003**	<0.001	<0.001	**0.001**	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005
Copper	mg/L	**0.085**	**0.004**	**0.001**	<0.001	<0.001	<0.001	<0.001	**0.008**	**0.003**	<0.001	**0.001**	<0.001	<0.001	<0.005	<0.005
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	**0.001**	<0.001	**0.005**	**0.006**	**0.001**	**0.002**	<0.001	<0.001	<0.005	<0.005
Manganese	mg/L	**0.014**	**0.013**	**0.175**	**0.032**	**0.156**	**0.058**	**0.006**	<0.001	**0.004**	**0.075**	**0.098**	**0.082**	**0.047**	**7.84**	**0.092**
Molybdenum	mg/L	**0.001**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	**0.01**
Nickel	mg/L	**0.03**	<0.001	<0.001	<0.001	**0.024**	<0.001	<0.001	**0.006**	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.005	**0.031**
Selenium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
Silver	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.062**	**0.106**
Uranium	mg/L	**0.003**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	**0.036**
Vanadium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
Zinc	mg/L	**0.189**	**0.192**	**0.017**	**0.009**	**0.112**	**0.116**	**0.01**	**0.062**	**0.093**	**0.026**	**0.042**	**0.01**	**0.018**	<0.025	<0.025
Boron	mg/L	**0.77**	**0.45**	**0.49**	**0.45**	**0.38**	**0.2**	**0.46**	**0.44**	**0.07**	**0.42**	**0.12**	**0.5**	**0.4**	**0.58**	**1.52**
Iron	mg/L	<0.05	**0.06**	**0.43**	**0.46**	**11.1**	<0.05	<0.05	<0.05	<0.05	**0.15**	**1.41**	**0.48**	**0.81**	**1.6**	<0.05
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	**0.4**	**0.2**	**0.4**	**1.2**	**0.5**	**0.2**	**0.5**	**0.2**	<0.1	**0.2**	**0.2**	**0.4**	**1.2**	**0.1**	**0.2**
Ammonia as N	mg/L	<0.01	<0.01	<0.01	**0.19**	**0.24**	<0.01	**0.66**	<0.01	<0.01	**0.54**	**0.16**	**0.03**	**0.1**	**1.42**	<0.01
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate as N	mg/L	**0.03**	**0.05**	<0.01	<0.01	<0.01	**0.06**	<0.01	**0.07**	**0.58**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.01**
Total Phosphorus as P	mg/L	**0.01**	**0.01**	<0.01	**0.01**	**0.15**	<0.01	**0.05**	<0.01	<0.01	**0.03**	**0.11**	**0.06**	**0.03**	<0.05	<0.05
Sulfide as S2-	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
C6 - C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
>C10 - C40 Fraction (sum)	µg/L	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	**100**	<100	<100	<100	<100
Sum of BTEX	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	17/08/2021	18/08/2021	18/08/2021	18/08/2021	44420	44419	44419	44419	44420	44420
Client sample ID (1st):		C823SP	C025P2	Duplicate F	Duplicate I	C027P1	C027P2	C14003SP	C19022SP	C18009SP	Duplicate A	HD03A	HD03B	C19017SP	C14017SP	C180123SP
Hydro-stratigraphic unit:		Bandanna	Tertiary			Alluvium	Dunda Beds	Joe Joe	Tertiary	Alluvium		Clematis SSt	Alluvium	Rewan	Joe-Joe	Joe-Joe
Analyte grouping/Analyte	**Unit**															
pH Value	pH Unit	7.89	6.98	7.48	9.13	7.17	6.25	6.25	6.74	7.54	6.41	7.42	7.46	12.1	7.45	8.35
Electrical Conductivity @ 25°C	µS/cm	4360	13500	2510	1650	5110	737	52700	46900	24400	7470	744	768	5840	5560	832
Total Dissolved Solids @180°	mg/L	2520	8560	1460	920	3460	485	42600	39100	18300	4140	342	474	1390	3080	460
Total Alkalinity as CaCO3	mg/L	407	380	274	215	146	31	63	234	50	19	108	124	824	259	242
Sulfate as SO4 - Turbidimetric	mg/L	<1	405	42	25	401	15	2420	2280	868	76	11	10	31	48	23
Chloride	mg/L	1220	4480	680	426	1440	210	20800	17600	8950	2400	148	160	209	1600	101
Calcium	mg/L	121	113	85	10	22	2	2290	2150	1560	105	3	2	71	100	6
Magnesium	mg/L	54	112	28	3	90	3	1550	1250	471	119	2	2	<1	49	3
Sodium	mg/L	711	2800	405	335	919	131	9410	8560	3660	1280	117	132	528	868	168
Potassium	mg/L	27	56	14	6	52	7	29	28	22	19	13	15	40	14	3
Aluminium	mg/L	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	2.41	<0.01	<0.01
Arsenic	mg/L	<0.001	<0.001	0.002	0.005	0.001	<0.001	0.008	0.018	<0.005	<0.001	<0.001	0.001	0.003	0.002	0.003
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	0.019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.038	<0.005	<0.005	0.003	<0.001	<0.001	<0.001	0.001	<0.001
Copper	mg/L	0.004	0.003	<0.001	<0.001	0.009	<0.001	0.007	0.522	0.053	0.001	<0.001	<0.001	0.006	<0.001	<0.001
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.008	0.006	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	0.038	1.5	0.18	0.006	1.99	0.057	2.52	2.7	0.026	0.251	0.336	0.241	0.002	0.686	0.03
Molybdenum	mg/L	0.002	<0.001	<0.001	0.002	0.005	<0.001	<0.005	<0.005	0.025	<0.001	<0.001	<0.001	0.077	0.004	0.003
Nickel	mg/L	<0.001	<0.001	<0.001	<0.001	0.021	<0.001	0.029	0.007	0.012	0.003	<0.001	<0.001	0.006	<0.001	<0.001
Selenium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.01	0.009	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	0.009	0.012	0.012	<0.005	0.05	0.057	0.154	0.394	0.127	0.096	0.041	<0.005	<0.005	0.038	<0.005
Boron	mg/L	0.48	1.34	0.49	0.48	0.59	0.24	2.46	3.09	1.41	0.48	0.1	0.11	<0.05	0.65	0.33
Iron	mg/L	0.94	6.19	0.44	<0.05	<0.05	0.83	19.7	19.3	0.05	1.09	0.55	0.2	0.15	0.54	<0.05
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	0.7	0.5	0.4	0.5	0.3	0.2	0.2	0.3	0.5	0.1	0.3	0.4	1.2	1.1	0.6
Ammonia as N	mg/L	0.78	0.37	<0.01	0.68	0.01	0.01	0.32	0.01	<0.01	0.08	0.13	0.11	7.08	0.12	0.02
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate as N	mg/L	<0.01	<0.01	<0.01	<0.01	0.36	0.04	<0.01	<0.01	0.23	<0.01	<0.01	0.01	0.02	<0.01	<0.01
Total Phosphorus as P	mg/L	<0.01	0.12	<0.01	0.04	0.01	0.06	<0.10	<0.10	<0.10	<0.01	0.09	0.08	0.2	0.01	0.02
Sulfide as S2-	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
C6 - C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	60	<20	<20
C6 - C10 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	60	<20	<20
>C10 - C40 Fraction (sum)	µg/L	110	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	1050	<100	110
Sum of BTEX	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	44420	44420	44420	44420	44420	44420	44420	44420	44420	44424	44424	44424	44424	44424	44424
Client sample ID (1st):		C9180121SPR	Mellaluka Spring	C14031SP	C14032SP	C914108PTR	C14015SP	C180122SP	C9180124SPR	C19003SP	C022P1	C014P2	C18012SP	C18013SP	C18002SP	C18003SP
Hydro-stratigraphic unit:		Tertiary	Spring	Composite bore	Joe-Joe	Joe-Joe	Joe-Joe	Composite Bore	Joe-Joe	Sub-E Seam	Dunda Beds	Bandanna	DSC Spearpoint	DSC Spearpoint	Clematis SSt	Moolayember
Analyte grouping/Analyte	**Unit**															
pH Value	pH Unit	**6.39**	**6.67**	**6.85**	**6.39**	**6.27**	**7.12**	**6.5**	**6.2**	**8.2**	**5.98**	**8.12**	**7.58**	**6.96**	**7.92**	**7.42**
Electrical Conductivity @ 25°C	µS/cm	**3680**	**1060**	**5810**	**2170**	**527**	**2300**	**7400**	**510**	**3030**	**282**	**1910**	**406**	**574**	**379**	**522**
Total Dissolved Solids @180°	mg/L	**2080**	**616**	**3300**	**1260**	**277**	**1300**	**4180**	**229**	**1740**	**159**	**1050**	**225**	**980**	**217**	**289**
Total Alkalinity as CaCO3	mg/L	**30**	**28**	**28**	**37**	**26**	**124**	**18**	**20**	**121**	**18**	**325**	**152**	**206**	**137**	**154**
Sulfate as SO4 - Turbidimetric	mg/L	**84**	**19**	**105**	**32**	**16**	**55**	**76**	**6**	<1	**6**	<1	<1	<1	<1	**10**
Chloride	mg/L	**1100**	**313**	**1800**	**673**	**133**	**655**	**2370**	**126**	**883**	**64**	**435**	**30**	**59**	**34**	**61**
Calcium	mg/L	**31**	**8**	**78**	**26**	**4**	**14**	**104**	**2**	**41**	**1**	**17**	**1**	**2**	**1**	**6**
Magnesium	mg/L	**44**	**11**	**93**	**30**	**3**	**12**	**116**	**3**	**11**	**3**	**4**	<1	<1	<1	**4**
Sodium	mg/L	**608**	**176**	**974**	**350**	**88**	**444**	**1260**	**85**	**578**	**46**	**440**	**86**	**114**	**82**	**103**
Potassium	mg/L	**9**	**9**	**14**	**12**	**5**	**9**	**19**	**4**	**12**	**3**	**8**	**13**	**17**	**12**	**15**
Aluminium	mg/L	<0.01	**0.04**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.002**	**0.001**	<0.001	<0.001	<0.001	**0.002**
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	<0.001	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.001**	<0.001	<0.001	<0.001	<0.001	**0.003**	<0.001	<0.001
Cobalt	mg/L	<0.001	**0.001**	<0.001	**0.003**	**0.001**	<0.001	**0.003**	**0.002**	<0.001	**0.026**	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.001**	**0.002**	<0.001	**0.003**	<0.001	<0.001	<0.001	<0.001	**0.002**
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.003**	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.007**	**0.188**	**0.032**	**0.14**	**0.042**	**0.118**	**0.246**	**0.004**	**0.079**	**0.006**	**0.01**	**0.01**	**0.144**	**0.132**	**0.872**
Molybdenum	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.004**	<0.001	**0.002**	**0.001**	**0.003**	<0.001	**0.001**
Nickel	mg/L	<0.001	**0.002**	**0.001**	**0.002**	**0.002**	<0.001	**0.003**	**0.003**	<0.001	**0.003**	<0.001	<0.001	**0.016**	<0.001	**0.006**
Selenium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	**0.726**	**0.02**	**0.076**	**0.118**	**0.017**	**0.151**	**0.094**	**0.55**	<0.005	**0.064**	<0.005	<0.005	**0.006**	**0.014**	**0.104**
Boron	mg/L	**0.26**	**0.14**	**0.39**	**0.12**	**0.09**	**0.36**	**0.45**	**0.08**	**0.36**	**0.11**	**0.34**	**0.07**	**0.06**	<0.05	**0.11**
Iron	mg/L	**0.19**	**0.51**	**0.27**	**1.96**	**0.14**	**0.39**	**1.06**	**0.16**	**0.16**	<0.05	**0.17**	<0.05	**0.09**	<0.05	**1.04**
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	**0.1**	**0.2**	**0.2**	**0.3**	**0.2**	**0.6**	**0.1**	**0.1**	**2.2**	**0.1**	**1.2**	**0.5**	**0.5**	**0.4**	**0.6**
Ammonia as N	mg/L	<0.01	**0.07**	<0.01	**0.02**	**0.05**	**0.02**	**0.07**	<0.01	**0.2**	<0.01	**0.97**	<0.01	**0.13**	**0.1**	**0.02**
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate as N	mg/L	**0.31**	<0.01	<0.01	<0.01	**0.08**	<0.01	<0.01	**0.14**	<0.01	**0.18**	<0.01	<0.01	<0.01	<0.01	**0.03**
Total Phosphorus as P	mg/L	<0.01	**0.24**	**0.01**	**0.02**	**0.01**	**0.04**	<0.01	<0.01	**0.02**	<0.01	**0.02**	**0.11**	**0.18**	**0.19**	**0.03**
Sulfide as S2-	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
C6 - C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
>C10 - C40 Fraction (sum)	µg/L	<100	<100	<100	<100	<100	<100	<100	<100	**250**	<100	<100	<100	<100	<100	<100
Sum of BTEX	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	44424	44424	44424	44424	44424	44424	44424	44424	44424	44424	44424	44424	44424	44424	44424
Client sample ID (1st):		Joshua Spring	C18011SP	C18010SP	Moses Spring	C18014SP	Little Moses Sprin	HD02	C19014SP	C19015SP	C919016SPR	C19018SP	C14012SP	C14013SP	C14011SP	C19007SP
Hydro-stratigraphic unit:		Spring	DSC Spearpoint	DSC Spearpoint	Spring	DSC Spearpoint	Spring	Clematis Sst	Clematis SSt	Dunda Beds	Rewan	Bandanna	Clematis Sst	Clematis Sst	Clematis Sst	Dunda Beds
Analyte grouping/Analyte	**Unit**															
pH Value	pH Unit	**7.46**	**7.49**	**6.82**	**7.56**	**7**	**6.79**	**7.56**	**8.3**	**8.14**	**8.58**	**11.7**	**7.53**	**5.76**	**5.87**	**8.56**
Electrical Conductivity @ 25°C	µS/cm	**526**	**626**	**594**	**552**	**574**	**566**	**523**	**656**	**708**	**755**	**3100**	**499**	**415**	**257**	**1420**
Total Dissolved Solids @180°	mg/L	**298**	**372**	**352**	**334**	**325**	**323**	**294**	**364**	**392**	**420**	**1500**	**288**	**213**	**149**	**820**
Total Alkalinity as CaCO3	mg/L	**119**	**121**	**173**	**153**	**68**	**40**	**106**	**148**	**146**	**210**	**978**	**136**	**10**	**10**	**127**
Sulfate as SO4 - Turbidimetric	mg/L	**7**	**4**	**3**	<1	**5**	**4**	**2**	<1	<1	<1	**27**	**5**	**10**	**5**	**30**
Chloride	mg/L	**78**	**116**	**78**	**84**	**136**	**151**	**96**	**116**	**137**	**121**	**118**	**69**	**109**	**62**	**374**
Calcium	mg/L	**11**	**2**	**7**	**4**	**3**	**3**	**2**	**2**	**3**	**4**	**11**	**3**	**1**	**2**	**9**
Magnesium	mg/L	**3**	<1	**1**	**2**	**15**	**12**	**1**	<1	<1	<1	<1	**2**	**9**	**5**	**1**
Sodium	mg/L	**87**	**125**	**119**	**119**	**78**	**82**	**104**	**136**	**149**	**168**	**487**	**100**	**57**	**37**	**287**
Potassium	mg/L	**20**	**11**	**11**	**9**	**11**	**12**	**12**	**8**	**5**	**3**	**90**	**8**	**7**	**3**	**7**
Aluminium	mg/L	<0.01	<0.01	<0.01	**0.19**	<0.01	<0.01	**0.02**	<0.01	<0.01	**0.02**	**0.84**	<0.01	<0.01	<0.01	**0.04**
Arsenic	mg/L	<0.001	**0.002**	**0.005**	**0.001**	<0.001	<0.001	**0.006**	<0.001	<0.001	**0.001**	**0.024**	**0.001**	<0.001	<0.001	**0.004**
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**0.0001**	<0.0001	<0.0001
Chromium	mg/L	<0.001	**0.001**	<0.001	<0.001	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	<0.001	<0.001	**0.005**	<0.001	**0.003**	**0.006**	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.004**	**0.002**	<0.001
Copper	mg/L	<0.001	<0.001	**0.001**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.01**	**0.009**	<0.001
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.007**	**0.004**	<0.001
Manganese	mg/L	**0.073**	**0.004**	**0.191**	**0.001**	**0.095**	**0.151**	**0.453**	**0.013**	**0.048**	**0.011**	<0.001	<0.001	**0.018**	**0.012**	**0.03**
Molybdenum	mg/L	**0.001**	**0.001**	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.006**	**0.13**	**0.002**	**0.001**	<0.001	**0.043**
Nickel	mg/L	<0.001	**0.005**	**0.036**	<0.001	**0.007**	**0.006**	<0.001	<0.001	<0.001	<0.001	**0.005**	<0.001	**0.01**	**0.003**	<0.001
Selenium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	<0.005	<0.005	**0.107**	**0.005**	<0.005	**0.006**	**0.006**	<0.005	**0.007**	**0.006**	**0.105**	**0.022**	**0.168**	**0.026**	<0.005
Boron	mg/L	**0.07**	**0.09**	**0.08**	**0.08**	**0.1**	**0.1**	**0.07**	**0.08**	**0.08**	<0.05	**0.18**	**0.09**	**0.1**	**0.08**	<0.05
Iron	mg/L	<0.05	**0.41**	**22.4**	**0.13**	**2.2**	**0.63**	**1.18**	<0.05	**0.05**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	**0.5**	**0.2**	**0.3**	**0.4**	**0.2**	**0.2**	**0.2**	**0.4**	**0.5**	**0.3**	**2.2**	**0.5**	<0.1	<0.1	**0.6**
Ammonia as N	mg/L	**0.02**	**0.05**	<0.01	**0.01**	**1.78**	<0.01	**0.16**	**0.16**	**0.19**	**0.32**	**3.42**	<0.01	**0.02**	<0.01	**0.37**
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate as N	mg/L	<0.01	**0.04**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.03**	**0.64**	**0.41**	<0.01
Total Phosphorus as P	mg/L	**0.06**	**2.91**	**0.1**	**0.08**	**0.53**	**0.13**	**0.12**	**0.22**	**0.04**	**0.03**	**0.04**	**0.07**	**0.01**	**0.01**	**0.04**
Sulfide as S2-	mg/L	<0.1	<0.1	<0.1	<0.1	**0.4**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.6**	<0.1	<0.1	<0.1	**2.1**
C6 - C9 Fraction	µg/L	<20	<20	**30**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 Fraction	µg/L	<20	<20	**30**	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
>C10 - C40 Fraction (sum)	µg/L	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	**550**	<100	<100	<100	<100
Sum of BTEX	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	44424	44424	44424	44424	44424	44424	44424	14/08/2021	15/08/2021	15/08/2021	15/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021
Client sample ID (1st):		C19008SP	C19009SP	Duplicate D	Duplicate H	C18001SP	C19002SP	C918014SPR	Duplicate B	Duplicate C	C18005SP	C18006SP	C180120SP	C9180125SPR	Duplicate E	C180119SP
Hydro-stratigraphic unit:		Rewan	Rewan			Clematis SSt	Clematis SSt				Alluvium	Alluvium	Composite Bore	Joe-Joe		Joe-Joe
Analyte grouping/Analyte	**Unit**															
pH Value	pH Unit	10.2	12	7.45	5.75	7.31	6.25	6.51	7.71	8.21	6.92	6.98	8.38	5.82	7.03	6.58
Electrical Conductivity @ 25°C	µS/cm	1340	6000	524	256	664	331	626	5420	769	51500	58900	908	7410	8560	727
Total Dissolved Solids @180°	mg/L	740	3740	314	154	377	186	350	3000	390	45800	51000	511	4360	5160	411
Total Alkalinity as CaCO3	mg/L	276	1520	118	11	102	24	27	294	136	189	220	283	10	118	38
Sulfate as SO4 - Turbidimetric	mg/L	5	24	7	5	9	6	6	200	2	2270	2760	<1	133	194	7
Chloride	mg/L	253	444	82	58	141	77	177	1490	155	20500	23200	125	2160	2500	191
Calcium	mg/L	3	33	11	2	4	7	3	22	4	2580	2320	11	97	186	4
Magnesium	mg/L	<1	9	3	5	1	5	12	46	1	1270	1480	4	131	81	4
Sodium	mg/L	278	895	84	36	122	45	90	1050	145	9570	12200	201	1250	1380	123
Potassium	mg/L	39	59	20	3	16	4	11	12	8	18	30	4	27	21	3
Aluminium	mg/L	0.19	60	0.06	0.02	<0.01	0.02	<0.01	<0.01	<0.01	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01
Arsenic	mg/L	0.005	0.019	<0.001	<0.001	0.002	<0.001	<0.001	0.007	<0.001	<0.005	<0.005	<0.001	<0.001	0.002	0.001
Cadmium	mg/L	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	<0.001	0.069	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	0.002	<0.001	<0.001
Cobalt	mg/L	<0.001	0.015	<0.001	0.002	<0.001	<0.001	0.002	<0.001	<0.001	0.015	0.011	<0.001	0.002	<0.001	<0.001
Copper	mg/L	<0.001	0.019	<0.001	0.008	<0.001	<0.001	0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001
Lead	mg/L	<0.001	0.012	<0.001	0.004	<0.001	0.002	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	0.002	0.95	0.073	0.012	0.015	0.011	0.019	0.222	0.054	1.55	1.01	0.048	0.007	0.417	0.01
Molybdenum	mg/L	0.023	0.201	0.006	0.002	0.001	<0.001	0.001	0.001	<0.001	0.008	0.009	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	<0.001	0.042	<0.001	0.003	0.002	0.002	0.009	<0.001	<0.001	0.014	0.022	<0.001	0.005	<0.001	0.001
Selenium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001
Uranium	mg/L	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.093	0.044	<0.001	<0.001	<0.001	<0.001
Vanadium	mg/L	<0.01	0.12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	<0.005	0.104	<0.005	0.028	0.104	0.067	0.014	0.016	<0.005	<0.025	<0.025	0.021	0.354	0.398	0.525
Boron	mg/L	<0.05	0.07	0.06	0.07	0.1	0.06	0.16	0.88	0.07	4.48	5.02	0.23	0.31	0.32	0.1
Iron	mg/L	<0.05	48.6	<0.05	<0.05	1.62	<0.05	0.08	0.51	<0.05	0.1	0.73	<0.05	0.23	7.94	0.73
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	0.3	2.6	0.5	<0.1	0.2	<0.1	0.2	1.1	0.4	<0.1	0.2	0.6	0.1	0.8	0.1
Ammonia as N	mg/L	0.42	8.56	<0.01	0.03	0.18	<0.01	0.12	0.02	0.13	0.03	0.05	0.08	0.01	0.47	0.06
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Nitrate as N	mg/L	<0.01	0.05	0.01	0.41	<0.01	0.22	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.23	<0.01	<0.01
Total Phosphorus as P	mg/L	0.06	0.47	0.01	0.01	0.03	<0.01	0.02	0.1	<0.01	0.12	<0.10	<0.01	<0.01	<0.05	0.01
Sulfide as S2-	mg/L	0.2	0.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5
C6 - C9 Fraction	µg/L	<20	50	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 Fraction	µg/L	<20	50	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
>C10 - C40 Fraction (sum)	µg/L	<100	2130	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sum of BTEX	µg/L	<1	9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	14/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	14/08/2021	14/08/2021	15/08/2021	15/08/2021	14/08/2021	14/08/2021	14/08/2021	15/08/2021	15/08/2021
Client sample ID (1st):		C14016SP	C14002SP	C914001SPR	C14028SP	C14027SP	C19001SP	C029P1	C029P2	C14021SP	C14023SP	C14024SP	C180117SP	C556P1	C9838SPR	C19029SP
Hydro-stratigraphic unit:		Joe-Joe	Joe-Joe	Joe-Joe	Alluvium	Alluvium	Alluvium	Alluvium	Tertiary	Clematis SSt	Dunda Beds	Composite bore	Dunda Beds	Rewan	Rewan	Colinlea SSt
Analyte grouping/Analyte	**Unit**															
pH Value	pH Unit	**7.93**	**7.19**	**6.68**	**7.14**	**6.96**	**7.59**	**7.81**	**7.23**	**6.67**	**8.16**	**6.95**	**6.64**	**6.52**	**6.21**	**7.96**
Electrical Conductivity @ 25°C	µS/cm	**2720**	**11500**	**21400**	**44500**	**50400**	**27700**	**31400**	**12600**	**678**	**752**	**493**	**230**	**245**	**409**	**1000**
Total Dissolved Solids @180°	mg/L	**1550**	**6420**	**13700**	**33100**	**39800**	**17200**	**19600**	**7380**	**351**	**401**	**272**	**153**	**176**	**253**	**566**
Total Alkalinity as CaCO3	mg/L	**188**	**133**	**192**	**358**	**200**	**866**	**2190**	**256**	**39**	**134**	**66**	**35**	**25**	**16**	**341**
Sulfate as SO4 - Turbidimetric	mg/L	**58**	**371**	**1330**	**1750**	**2190**	**892**	**961**	**280**	**21**	**2**	**10**	**10**	**10**	**8**	<1
Chloride	mg/L	**751**	**3490**	**6890**	**16900**	**19400**	**9150**	**9910**	**3700**	**152**	**155**	**99**	**36**	**46**	**107**	**114**
Calcium	mg/L	**46**	**281**	**840**	**771**	**860**	**262**	**45**	**90**	**5**	**4**	**2**	**1**	<1	**2**	**6**
Magnesium	mg/L	**12**	**111**	**425**	**1050**	**1250**	**360**	**312**	**119**	**11**	**1**	**6**	**2**	**2**	**6**	**4**
Sodium	mg/L	**486**	**2080**	**3460**	**8690**	**10200**	**5760**	**7270**	**2400**	**88**	**150**	**82**	**41**	**44**	**63**	**218**
Potassium	mg/L	**8**	**30**	**68**	**127**	**121**	**100**	**217**	**63**	**16**	**8**	**8**	**2**	**2**	**3**	**7**
Aluminium	mg/L	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	**0.02**	<0.01	<0.01	<0.01
Arsenic	mg/L	**0.006**	**0.002**	**0.002**	<0.005	**0.006**	**0.006**	<0.005	**0.004**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	<0.001	<0.001	<0.001	**0.01**	**0.028**	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	**0.005**	<0.001	<0.001
Copper	mg/L	<0.001	**0.002**	**0.048**	**0.095**	**0.02**	<0.005	<0.005	**0.003**	**0.009**	<0.001	<0.001	**0.017**	**0.005**	**0.005**	<0.001
Lead	mg/L	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	**0.002**	**0.005**	**0.003**	**0.004**	<0.001
Manganese	mg/L	**0.17**	**0.99**	**0.924**	**2.8**	**2.15**	**0.48**	**0.104**	**0.189**	**0.002**	**0.056**	**0.017**	**0.009**	**0.03**	**0.002**	**0.019**
Molybdenum	mg/L	**0.002**	**0.001**	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	<0.001	**0.001**	**0.002**	<0.005	**0.021**	**0.006**	<0.005	<0.001	<0.001	<0.001	**0.001**	**0.003**	**0.001**	**0.002**	<0.001
Selenium	mg/L	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium	mg/L	<0.001	<0.001	**0.003**	**0.055**	**0.006**	**0.088**	**0.082**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	mg/L	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	**0.029**	**0.018**	**0.094**	**0.085**	**0.244**	<0.025	<0.025	**0.023**	**0.045**	<0.005	**0.025**	**0.014**	**0.012**	**0.033**	**0.021**
Boron	mg/L	**0.32**	**0.79**	**1.52**	**2.41**	**2.45**	**2.16**	**4.48**	**1.02**	**0.15**	**0.08**	**0.14**	**0.07**	**0.11**	**0.13**	**0.33**
Iron	mg/L	**0.13**	**3**	**7.3**	**1.05**	**4.19**	<0.05	**0.25**	**0.69**	<0.05	<0.05	<0.05	**1.95**	<0.05	<0.05	**0.43**
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	**0.7**	**0.2**	**0.3**	**0.3**	**0.2**	**0.4**	**1.4**	**0.5**	**0.1**	**0.4**	**0.2**	**0.3**	**0.2**	<0.1	**6**
Ammonia as N	mg/L	**0.34**	**0.27**	**0.27**	**0.09**	**0.37**	<0.01	<0.01	**0.06**	<0.01	**0.13**	**0.01**	**0.03**	<0.01	<0.01	**0.17**
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate as N	mg/L	<0.01	<0.01	<0.01	<0.01	**0.04**	<0.01	<0.01	<0.01	**0.16**	<0.01	**0.06**	<0.01	**0.07**	**0.21**	<0.01
Total Phosphorus as P	mg/L	**0.04**	<0.01	<0.05	<0.05	**0.1**	<0.05	**0.32**	<0.05	<0.01	<0.01	<0.01	**0.01**	**0.03**	<0.01	**0.08**
Sulfide as S2-	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.2**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
C6 - C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
>C10 - C40 Fraction (sum)	µg/L	<100	<100	<100	<100	**140**	<100	<100	<100	<100	<100	<100	**120**	<100	<100	<100
Sum of BTEX	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021	14/08/2021
Client sample ID (1st):		C14006SP	C14008SP	C14029SP	C914030SPR	Duplicate G	C034P3	C035P1	C035P2	C032P2	C9845SPR	C19028SP	C19004SP	C847SP	C848SP	C9849SPR
Hydro-stratigraphic unit:		Joe-Joe	Joe-Joe	Composite bore	Joe Joe		Colinlea SSt	Rewan	Bandanna	Bandanna	Tertiary	Rewan	Sub-E Seam	Bandanna	Colinlea SSt	Colinlea SSt
Analyte grouping/Analyte	**Unit**															
pH Value	pH Unit	**7.09**	**6.64**	**6.7**	**6.71**	**6.64**	**7.16**	**7.47**	**7.34**	**8.49**	**6.89**	**7.68**	**8.49**	**6.51**	**7.18**	**7.44**
Electrical Conductivity @ 25°C	µS/cm	**8450**	**703**	**9220**	**603**	**666**	**1790**	**3710**	**1530**	**1280**	**1970**	**5380**	**2920**	**366**	**2910**	**3060**
Total Dissolved Solids @180°	mg/L	**5390**	**389**	**6050**	**343**	**382**	**988**	**2040**	**764**	**720**	**1080**	**2980**	**1650**	**227**	**1640**	**1640**
Total Alkalinity as CaCO3	mg/L	**116**	**33**	**51**	**31**	**32**	**97**	**154**	**112**	**343**	**59**	**293**	**240**	**24**	**207**	**274**
Sulfate as SO4 - Turbidimetric	mg/L	**192**	**14**	**442**	**12**	**14**	**24**	**50**	**20**	<1	**56**	**199**	<1	**8**	**19**	<1
Chloride	mg/L	**2480**	**178**	**2780**	**151**	**179**	**519**	**1060**	**423**	**218**	**576**	**1480**	**814**	**82**	**831**	**853**
Calcium	mg/L	**181**	**7**	**202**	**6**	**7**	**23**	**15**	**11**	**10**	**5**	**21**	**43**	<1	**26**	**38**
Magnesium	mg/L	**83**	**6**	**153**	**5**	**6**	**10**	**14**	**7**	**3**	**15**	**44**	**5**	**2**	**23**	**17**
Sodium	mg/L	**1470**	**109**	**1760**	**96**	**108**	**312**	**723**	**281**	**271**	**356**	**1060**	**545**	**63**	**525**	**559**
Potassium	mg/L	**22**	**5**	**11**	**5**	**5**	**11**	**4**	**5**	**4**	**7**	**11**	**7**	**2**	**15**	**19**
Aluminium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic	mg/L	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001	**0.002**	<0.001	**0.007**	<0.001	**0.007**	<0.001	<0.001	<0.001	<0.001
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.002**	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	<0.001	**0.01**	**0.004**	**0.008**	**0.01**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.01**	<0.001	<0.001	**0.015**	<0.001	<0.001
Lead	mg/L	<0.001	<0.001	**0.001**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese	mg/L	**0.411**	**0.1**	**0.071**	**0.219**	**0.1**	**0.222**	**0.115**	**0.106**	**0.047**	**0.002**	**0.221**	**0.056**	**0.002**	**0.294**	**0.351**
Molybdenum	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.008**	<0.001	**0.001**	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	<0.001	**0.012**	**0.01**	**0.012**	**0.012**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.002**	<0.001	<0.001	<0.001	<0.001
Vanadium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	**0.402**	**0.231**	**0.149**	**0.136**	**0.225**	**0.364**	**0.04**	**0.018**	**0.022**	**0.039**	**0.015**	<0.005	**0.035**	**0.052**	**0.033**
Boron	mg/L	**0.42**	**0.12**	**1.53**	**0.13**	**0.12**	**0.24**	**0.66**	**0.28**	**0.37**	**0.24**	**0.92**	**0.42**	**0.11**	**0.18**	**0.18**
Iron	mg/L	**8.12**	**2.03**	**0.83**	**0.84**	**2.02**	**2.71**	**0.22**	**0.38**	**0.14**	<0.05	**0.49**	**0.42**	<0.05	**1.65**	**4.74**
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	**0.7**	**0.2**	**0.1**	**0.2**	**0.2**	**0.2**	**0.6**	**0.2**	**1**	**0.2**	**1.1**	**3**	**0.2**	**0.3**	**0.4**
Ammonia as N	mg/L	**0.47**	**0.02**	**0.04**	<0.01	<0.01	**0.09**	**0.02**	**0.03**	**0.33**	**0.14**	**0.02**	**0.39**	<0.01	**0.06**	**0.06**
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.13**	<0.01	<0.01	**0.12**	<0.01	<0.01
Total Phosphorus as P	mg/L	**0.02**	**0.02**	**0.23**	<0.01	<0.01	**0.01**	<0.01	**0.02**	**0.06**	**0.06**	**0.1**	<0.01	**0.02**	**0.02**	**0.03**
Sulfide as S2-	mg/L	<0.1	<0.1	**0.1**	**0.2**	<0.1	<0.1	<0.1	<0.1	**0.4**	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
C6 - C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
>C10 - C40 Fraction (sum)	µg/L	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Sum of BTEX	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

	Sample Type:	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
	Sample Date:	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021	15/08/2021
Client sample ID (1st):		C833SP	C007P2	C19026SP	C555P1	C008P1	C008P2	C19010SP	C19011SP	C19012SP	C919013SPR	Duplicate J
Hydro-stratigraphic unit:		Colinlea SSt	Bandanna	Colinlea SSt	Rewan	Rewan	Bandanna	Clematis SSt	Dunda Beds	Rewan	Rewan	
Analyte grouping/Analyte	**Unit**											
pH Value	pH Unit	10.1	7.73	8.57	7.7	7.77	8.19	8.43	8.45	12.4	12	7.74
Electrical Conductivity @ 25°C	µS/cm	1210	14300	1010	806	22000	2780	648	794	9960	5560	816
Total Dissolved Solids @180°	mg/L	640	8720	560	476	14700	1530	361	442	4300	1680	502
Total Alkalinity as CaCO3	mg/L	274	259	421	146	299	409	171	143	2490	1210	131
Sulfate as SO4 - Turbidimetric	mg/L	1	344	<1	<1	201	82	<1	1	234	77	<1
Chloride	mg/L	203	4570	74	178	7670	596	96	165	744	593	176
Calcium	mg/L	1	300	13	6	466	30	2	4	66	2	6
Magnesium	mg/L	<1	272	2	7	385	14	<1	<1	1	<1	7
Sodium	mg/L	214	2440	236	144	3910	543	132	162	1450	660	150
Potassium	mg/L	48	39	4	7	88	8	6	4	342	67	8
Aluminium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	3.91	2.36	<0.01
Arsenic	mg/L	<0.001	<0.001	0.002	0.003	0.002	<0.001	<0.001	<0.001	0.011	0.006	0.003
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001
Chromium	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.114	<0.001	<0.001
Cobalt	mg/L	<0.001	<0.001	<0.001	<0.001	0.006	<0.001	<0.001	<0.001	0.002	<0.001	<0.001
Copper	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.083	0.006	<0.001
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.016	<0.001	<0.001
Manganese	mg/L	<0.001	0.245	0.021	0.216	1.89	0.043	0.015	0.035	0.202	<0.001	0.213
Molybdenum	mg/L	0.013	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.003	0.271	0.22	<0.001
Nickel	mg/L	<0.001	<0.001	<0.001	<0.001	0.008	<0.001	<0.001	<0.001	0.043	0.012	<0.001
Selenium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Silver	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium	mg/L	<0.001	<0.001	<0.001	<0.001	0.013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Zinc	mg/L	<0.005	0.008	<0.005	0.012	0.054	<0.005	0.01	<0.005	0.29	<0.005	0.011
Boron	mg/L	0.16	0.59	0.13	0.26	1.27	0.23	0.08	<0.05	0.09	0.07	0.26
Iron	mg/L	<0.05	1.64	0.09	1.85	2.16	<0.05	<0.05	<0.05	3.52	0.09	1.92
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	mg/L	1.3	0.6	2.1	0.6	0.5	0.8	0.4	0.4	1.4	1.5	0.6
Ammonia as N	mg/L	0.56	0.67	0.3	0.04	0.22	1.35	0.15	0.2	3.18	2.72	0.06
Nitrite as N	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Nitrate as N	mg/L	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.03	<0.01	<0.01
Total Phosphorus as P	mg/L	0.02	0.02	0.09	0.07	<0.05	0.02	0.19	0.03	0.06	5.22	0.08
Sulfide as S2-	mg/L	2.4	<0.1	0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	<0.1	<0.1
C6 - C9 Fraction	µg/L	20	<20	<20	<20	<20	<20	<20	<20	20	100	<20
C6 - C10 Fraction	µg/L	20	<20	<20	<20	<20	<20	<20	<20	20	90	<20
>C10 - C40 Fraction (sum)	µg/L	<100	<100	120	<100	<100	<100	<100	<100	570	1690	<100
Sum of BTEX	µg/L	4	<1	<1	<1	<1	<1	<1	<1	2	2	<1