

Permit Number: EPR/VP3095FS

Operator: Neal Soils

Facility: Neal Soils

Form Number: Groundwater1 /08/03/12

Reporting of groundwater monitoring for the period from December 2014 to May 2015

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS6	pH	7.3 ñ 8.7	Bi-annually	7.8 pH Units	TM256	19/05/2015 08:00	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS6	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	<0.1 mg/l	TM184	19/05/2015 08:00	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%. Sampling: Immeasurable
WS6	Nitrite as N	>300 mg/l	Bi-annually	<0.0152 mg/l	TM184	19/05/2015 08:00	Lab: Precision 1.9%, Bias 0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS6	Nitrate as N	>25.35 mg/l	Bi-annually	<0.0677 mg/l	TM184	19/05/2015 08:00	Lab: As per TON and NO ₂ . Sampling: Immeasurable
WS6	Ammoniacal Nitrogen as N*	>0.0614 mg/l	Bi-annually	0.0465 mg/l	TM099	19/05/2015 08:00	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS6	Chloride	>595 mg/l	Bi-annually	375 mg/l	TM184	19/05/2015 08:00	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS6	Conductivity	>7500 µS/cm	Bi-annually	2.26 mS/cm	TM120	19/05/2015 08:00	Lab: Precision 1.2%, Bias 2.9%, Expanded Uncertainty 5.3%. Sampling: Immeasurable
WS6	TPH C6-C35	>100 µg/l	Bi-annually	<283 ug/l	TM174	19/05/2015 08:00	Lab: Variable Sampling: Immeasurable
WS6	Total PAH (16)	>20 µg/l	Bi-annually	14.8 ug/l	TM178	19/05/2015 08:00	Lab: Variable Sampling: Immeasurable
WS6	Total Sulphate	>1779 mg/l	Bi-annually	316 mg/l	TM184	19/05/2015 08:00	Lab: Precision 1.9%, Bias 0.8%, Expanded Uncertainty 4.7%. Sampling: Immeasurable
WS6	Total Cadmium	>3.45 µg/l	Bi-annually	<0.5 ug/l	TM191	19/05/2015 08:00	Lab: Precision 5.5%, Bias -1.1%, Expanded Uncertainty 12%. Sampling: Immeasurable
WS6	Total Calcium	>354 mg/l	Bi-annually	251 mg/l	TM228	19/05/2015 08:00	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS6	Dissolved Nickel	>30 mg/l	Bi-annually	5.27 ug/l	TM152	19/05/2015 08:00	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS6	Dissolved Lead	>17.5 µg/l	Bi-annually	0.03 ug/l	TM152	19/05/2015 08:00	Lab: Precision 2.9%, Bias -1.5%, Expanded Uncertainty 7.2%. Sampling: Immeasurable
WS6	Total Zinc	>2645 mg/l	Bi-annually	312 ug/l	TM191	20/05/2015 16:00	Lab: Precision 5.5%, Bias -2.3%, Expanded Uncertainty 13.3%. Sampling: Immeasurable
WS7	pH	7.3 ñ 8.7	Bi-annually	8.0 pH Units	TM256	20/05/2015 16:00	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS7	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	<0.1 mg/l	TM184	20/05/2015 16:00	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%. Sampling: Immeasurable
WS7	Nitrite as N	>300 mg/l	Bi-annually	<0.0152 mg/l	TM184	20/05/2015 16:00	Lab: Precision 1.9%, Bias 0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS7	Nitrate as N	>25.35 mg/l	Bi-annually	<0.0677 mg/l	TM184	20/05/2015 16:00	Lab: As per TON and

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							NO ₂ . Sampling: Immeasurable
WS7	Ammoniacal Nitrogen as N*	>0.0614 mg/l	Bi-annually	0.252 mg/l	TM099	20/05/2015 16:00	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable
WS7	Chloride	>595 mg/l	Bi-annually	591 mg/l	TM184	20/05/2015 16:00	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS7	Conductivity	>7500 µS/cm	Bi-annually	3.41 mS/cm	TM120	20/05/2015 16:00	Lab: Precision 1.2%, Bias 2.9%, Expanded Uncertainty 5.3%. Sampling: Immeasurable
WS7	TPH C6-C35	>100 µg/l	Bi-annually	<66.7 ug/l	TM174	20/05/2015 16:00	Lab: Variable Sampling: Immeasurable
WS7	Total PAH (16)	>20 µg/l	Bi-annually	<0.344 ug/l	TM178	20/05/2015 16:00	Lab: Variable Sampling: Immeasurable
WS7	Total Sulphate	>269 mg/l	Bi-annually	282 mg/l	TM184	20/05/2015 16:00	Lab: Precision 1.9%, Bias 0.8%, Expanded Uncertainty 4.7%. Sampling: Immeasurable
WS7	Total Cadmium	>3.45 µg/l	Bi-annually	1.16 ug/l	TM191	20/05/2015 16:00	Lab: Precision 5.5%, Bias -1.1%, Expanded

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Uncertainty 12%. Sampling: Immeasurable
WS7	Total Calcium	>354 mg/l	Bi-annually	1,700 mg/l	TM228	20/05/2015 16:00	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable
WS7	Dissolved Nickel	>30 mg/l	Bi-annually	4.25 ug/l	TM152	20/05/2015 16:00	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS7	Dissolved Lead	>17.5 µg/l	Bi-annually	<0.02 ug/l	TM152	20/05/2015 16:00	Lab: Precision 2.9%, Bias -1.5%, Expanded Uncertainty 7.2%. Sampling: Immeasurable
WS7	Total Zinc	>2645 mg/l	Bi-annually	979 ug/l	TM191	20/05/2015 16:00	Lab: Precision 5.5%, Bias -2.3%, Expanded Uncertainty 13.3%. Sampling: Immeasurable
WS10	pH	7.3 ñ 8.7	Bi-annually	7.91 pH Units	TM256	19/05/2015 08:30	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS10	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	0.35 mg/l	TM184	19/05/2015 08:30	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%.

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Sampling: Immeasurable
WS10	Nitrite as N	>300 mg/l	Bi-annually	<0.0152 mg/l	TM184	19/05/2015 08:30	Lab: Precision 1.9%, Bias 0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS10	Nitrate as N	>25.35 mg/l	Bi-annually	0.342 mg/l	TM184	19/05/2015 08:30	Lab: As per TON and NO ₂ . Sampling: Immeasurable
WS10	Ammoniacal Nitrogen as N*	>0.0148 mg/l	Bi-annually	0.0256 mg/l	TM099	19/05/2015 08:30	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable
WS10	Chloride	>595 mg/l	Bi-annually	38.3 mg/l	TM184	19/05/2015 08:30	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS10	Conductivity	>7500 µS/cm	Bi-annually	0.68 mS/cm	TM120	19/05/2015 08:30	Lab: Precision 1.2%, Bias 2.9%, Expanded Uncertainty 5.3%. Sampling: Immeasurable
WS10	TPH C6-C35	>100 µg/l	Bi-annually	<149 ug/l	TM174	19/05/2015 08:30	Lab: Variable Sampling: Immeasurable
WS10	Total PAH (16)	>20 µg/l	Bi-annually	1.18 ug/l	TM178	19/05/2015 08:30	Lab: Variable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Sampling: Immeasurable
WS10	Total Sulphate	>269 mg/l	Bi-annually	73.1 mg/l	TM184	19/05/2015 08:30	Lab: Precision 1.9%, Bias 0.8%, Expanded Uncertainty 4.7%. Sampling: Immeasurable
WS10	Total Cadmium	>3.45 µg/l	Bi-annually	<0.5 ug/l	TM191	19/05/2015 08:30	Lab: Precision 5.5%, Bias -1.1%, Expanded Uncertainty 12%. Sampling: Immeasurable
WS10	Total Calcium	>354 mg/l	Bi-annually	198 mg/l	TM228	19/05/2015 08:30	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable
WS10	Dissolved Nickel	>30 mg/l	Bi-annually	4.13 ug/l	TM152	19/05/2015 08:30	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS10	Dissolved Lead	>17.5 µg/l	Bi-annually	0.058 ug/l	TM152	19/05/2015 08:30	Lab: Precision 2.9%, Bias -1.5%, Expanded Uncertainty 7.2%. Sampling: Immeasurable
WS10	Total Zinc	>2645 mg/l	Bi-annually	294 ug/l	TM191	19/05/2015 08:30	Lab: Precision 5.5%, Bias -2.3%, Expanded Uncertainty 13.3%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS11	pH	7.3 ñ 8.7	Bi-annually	7.83 pH Units	TM256	20/05/2015 16:30	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS11	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	<0.1 mg/l	TM184	20/05/2015 16:30	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%. Sampling: Immeasurable
WS11	Nitrite as N	>300 mg/l	Bi-annually	<0.0152 mg/l	TM184	20/05/2015 16:30	Lab: Precision 1.9%, Bias 0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS11	Nitrate as N	>25.35 mg/l	Bi-annually	<0.0677 mg/l	TM184	20/05/2015 16:30	Lab: As per TON and NO ₂ . Sampling: Immeasurable
WS11	Ammoniacal Nitrogen as N*	>0.0148 mg/l	Bi-annually	0.0536 mg/l	TM099	20/05/2015 16:30	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable
WS11	Chloride	>595 mg/l	Bi-annually	125 mg/l	TM184	20/05/2015 16:30	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS11	Conductivity	>7500 µS/cm	Bi-annually	1.53 mS/cm	TM120	20/05/2015 16:30	Lab: Precision 1.2%, Bias 2.9%, Expanded

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Uncertainty 5.3%. Sampling: Immeasurable
WS11	TPH C6-C35	>100 µg/l	Bi-annually	<56 ug/l	TM174	20/05/2015 16:30	Lab: Variable Sampling: Immeasurable
WS11	Total PAH (16)	>20 µg/l	Bi-annually	<0.344 ug/l	TM178	20/05/2015 16:30	Lab: Variable Sampling: Immeasurable
WS11	Total Sulphate	>269 mg/l	Bi-annually	148 mg/l	TM184	20/05/2015 16:30	Lab: Precision 1.9%, Bias 0.8%, Expanded Uncertainty 4.7%. Sampling: Immeasurable
WS11	Total Cadmium	>3.45 µg/l	Bi-annually	<0.5 ug/l	TM191	20/05/2015 16:30	Lab: Precision 5.5%, Bias -1.1%, Expanded Uncertainty 12%. Sampling: Immeasurable
WS11	Total Calcium	>354 mg/l	Bi-annually	322 mg/l	TM228	20/05/2015 16:30	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable
WS11	Dissolved Nickel	>30 mg/l	Bi-annually	2.26 ug/l	TM152	20/05/2015 16:30	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS11	Dissolved Lead	>17.5 µg/l	Bi-annually	<0.02 ug/l	TM152	20/05/2015 16:30	Lab: Precision 2.9%, Bias -1.5%, Expanded

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Uncertainty 7.2%. Sampling: Immeasurable
WS11	Total Zinc	>2645 mg/l	Bi-annually	441 ug/l	TM191	20/05/2015 16:30	Lab: Precision 5.5%, Bias -2.3%, Expanded Uncertainty 13.3%. Sampling: Immeasurable
WS12	pH	8.6 ñ 9.2	Bi-annually	7.97 pH Units	TM256	19/05/2015 08:50	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS12	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	1.47 mg/l	TM184	19/05/2015 08:50	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%. Sampling: Immeasurable
WS12	Nitrite as N	>300 mg/l	Bi-annually	0.0201 mg/l	TM184	19/05/2015 08:50	Lab: Precision 1.9%, Bias 0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS12	Nitrate as N	>25.35 mg/l	Bi-annually	1.45 mg/l	TM184	19/05/2015 08:50	Lab: As per TON and NO ₂ . Sampling: Immeasurable
WS12	Ammoniacal Nitrogen as N*	>0.0614 mg/l	Bi-annually	0.0282 mg/l	TM099	19/05/2015 08:50	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS12	Chloride	>595 mg/l	Bi-annually	24.7 mg/l	TM184	19/05/2015 08:50	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS12	Conductivity	>7500 µS/cm	Bi-annually	0.942 mS/cm	TM120	19/05/2015 08:50	Lab: Precision 1.2%, Bias 2.9%, Expanded Uncertainty 5.3%. Sampling: Immeasurable
WS12	TPH C6-C35	>100 µg/l	Bi-annually	<56 ug/l	TM174	19/05/2015 08:50	Lab: Variable Sampling: Immeasurable
WS12	Total PAH (16)	>20 µg/l	Bi-annually	<0.344 ug/l	TM178	19/05/2015 08:50	Lab: Variable Sampling: Immeasurable
WS12	Total Sulphate	>269 mg/l	Bi-annually	94.3 mg/l	TM184	19/05/2015 08:50	Lab: Precision 1.9%, Bias 0.8%, Expanded Uncertainty 4.7%. Sampling: Immeasurable
WS12	Total Cadmium	>3.45 µg/l	Bi-annually	<0.5 ug/l	TM191	19/05/2015 08:50	Lab: Precision 5.5%, Bias -1.1%, Expanded Uncertainty 12%. Sampling: Immeasurable
WS12	Total Calcium	>354 mg/l	Bi-annually	178 mg/l	TM228	19/05/2015 08:50	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS12	Dissolved Nickel	>30 mg/l	Bi-annually	5.31 ug/l	TM152	19/05/2015 08:50	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS12	Dissolved Lead	>17.5 µg/l	Bi-annually	0.021 ug/l	TM152	19/05/2015 08:50	Lab: Precision 2.9%, Bias -1.5%, Expanded Uncertainty 7.2%. Sampling: Immeasurable
WS12	Total Zinc	>2645 mg/l	Bi-annually	43.7 ug/l	TM191	19/05/2015 08:50	Lab: Precision 5.5%, Bias -2.3%, Expanded Uncertainty 13.3%. Sampling: Immeasurable
WS13	pH	7.3 ñ 8.7	Bi-annually	8.3 pH Units	TM256	19/05/2015 09:20	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS13	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	<0.1 mg/l	TM184	19/05/2015 09:20	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%. Sampling: Immeasurable
WS13	Nitrite as N	>300 mg/l	Bi-annually	<0.0152 mg/l	TM184	19/05/2015 09:20	Lab: Precision 1.9%, Bias 0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS13	Nitrate as N	>25.35 mg/l	Bi-annually	<0.0677 mg/l	TM184	19/05/2015 09:20	Lab: As per TON and

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							NO ₂ . Sampling: Immeasurable
WS13	Ammoniacal Nitrogen as N*	>0.0148 mg/l	Bi-annually	0.00236 mg/l	TM099	19/05/2015 09:20	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable
WS13	Chloride	>595 mg/l	Bi-annually	49.8 mg/l	TM184	19/05/2015 09:20	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS13	Conductivity	>7500 µS/cm	Bi-annually	0.857 mS/cm	TM120	19/05/2015 09:20	Lab: Precision 1.2%, Bias 2.9%, Expanded Uncertainty 5.3%. Sampling: Immeasurable
WS13	TPH C6-C35	>100 µg/l	Bi-annually	<367 ug/l	TM174	19/05/2015 09:20	Lab: Variable Sampling: Immeasurable
WS13	Total PAH (16)	>20 µg/l	Bi-annually	5.38 ug/l	TM178	19/05/2015 09:20	Lab: Variable Sampling: Immeasurable
WS13	Total Sulphate	>269 mg/l	Bi-annually	218 mg/l	TM184	19/05/2015 09:20	Lab: Precision 1.9%, Bias 0.8%, Expanded Uncertainty 4.7%. Sampling: Immeasurable
WS13	Total Calcium	>354 mg/l	Bi-annually	106 mg/l	TM228	19/05/2015 09:20	Lab: Precision 5.5%, Bias -1.1%, Expanded

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Uncertainty 12%. Sampling: Immeasurable
WS13	Dissolved Nickel	>30 mg/l	Bi-annually	4.85 ug/l	TM152	19/05/2015 09:20	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable
WS13	Dissolved Lead	>17.5 µg/l	Bi-annually	0.206 ug/l	TM152	19/05/2015 09:20	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS14	pH	7.3 ñ 8.7	Bi-annually	7.91 pH Units	TM256	20/05/2015 16:45	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS14	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	<0.1 mg/l	TM184	20/05/2015 16:45	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%. Sampling: Immeasurable
WS14	Nitrite as N	>300 mg/l	Bi-annually	<0.0152 mg/l	TM184	20/05/2015 16:45	Lab: Precision 1.9%, Bias 0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS14	Nitrate as N	>25.35 mg/l	Bi-annually	<0.0677 mg/l	TM184	20/05/2015 16:45	Lab: As per TON and NO ₂ . Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS14	Ammoniacal Nitrogen as N*	>0.0148 mg/l	Bi-annually	0.00869 mg/l	TM099	20/05/2015 16:45	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable
WS14	Chloride	>595 mg/l	Bi-annually	23.2 mg/l	TM184	20/05/2015 16:45	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS14	Conductivity	>7500 µS/cm	Bi-annually	1.1 mS/cm	TM120	20/05/2015 16:45	Lab: Precision 1.2%, Bias 2.9%, Expanded Uncertainty 5.3%. Sampling: Immeasurable
WS14	TPH C6-C35	>100 µg/l	Bi-annually	<417 ug/l	TM174	20/05/2015 16:45	Lab: Variable Sampling: Immeasurable
WS14	Total PAH (16)	>20 µg/l	Bi-annually	<0.344 ug/l	TM178	20/05/2015 16:45	Lab: Variable Sampling: Immeasurable
WS14	Total Sulphate	>269 mg/l	Bi-annually	166 mg/l	TM184	20/05/2015 16:45	Lab: Precision 1.9%, Bias 0.8%, Expanded Uncertainty 4.7%. Sampling: Immeasurable
WS14	Total Cadmium	>3.45 µg/l	Bi-annually	3.18 ug/l	TM191	20/05/2015 16:45	Lab: Precision 5.5%, Bias -1.1%, Expanded Uncertainty 12%. Sampling: Immeasurable

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
WS14	Total Calcium	>354 mg/l	Bi-annually	269 mg/l	TM228	20/05/2015 16:45	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable
WS14	Dissolved Nickel	>30 mg/l	Bi-annually	6.02 ug/l	TM152	20/05/2015 16:45	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS14	Dissolved Lead	>17.5 µg/l	Bi-annually	1.35 ug/l	TM152	20/05/2015 16:45	Lab: Precision 2.9%, Bias -1.5%, Expanded Uncertainty 7.2%. Sampling: Immeasurable
WS14	Total Zinc	>2645 mg/l	Bi-annually	1,150 ug/l	TM191	20/05/2015 16:45	Lab: Precision 5.5%, Bias -2.3%, Expanded Uncertainty 13.3%. Sampling: Immeasurable
WS15	pH	7.3 ñ 8.7	Bi-annually	7.97 pH Units	TM256	20/05/2015 17:00	Lab: Precision 0.4%, Bias 1.2%, Expanded Uncertainty 2.1%. Sampling: Immeasurable
WS15	Total Oxidised Nitrogen as N	>3.2 mg/l	Bi-annually	<0.1 mg/l	TM184	20/05/2015 17:00	Lab: Precision 2.9%, Bias 0.2%, Expanded Uncertainty 6.0%. Sampling: Immeasurable
WS15	Nitrite as N	>300 mg/l	Bi-annually	<0.0152 mg/l	TM184	20/05/2015 17:00	Lab: Precision 1.9%, Bias

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							0.7%, Expanded Uncertainty 4.6%. Sampling: Immeasurable
WS15	Nitrate as N	>25.35 mg/l	Bi-annually	<0.0677 mg/l	TM184	20/05/2015 17:00	Lab: As per TON and NO ₂ . Sampling: Immeasurable
WS15	Ammoniacal Nitrogen as N*	>0.0148 mg/l	Bi-annually	0.0242 mg/l	TM099	20/05/2015 17:00	Lab: Precision 2.6%, Bias 1.9%, Expanded Uncertainty 7.1%. Sampling: Immeasurable
WS15	Chloride	>595 mg/l	Bi-annually	40.6 mg/l	TM184	20/05/2015 17:00	Lab: Precision 2.4%, Bias 0.2%, Expanded Uncertainty 4.9%. Sampling: Immeasurable
WS15	Conductivity	>7500 µS/cm	Bi-annually	0.979 mS/cm	TM120	20/05/2015 17:00	Lab: Precision 1.2%, Bias 2.9%, Expanded Uncertainty 5.3%. Sampling: Immeasurable
WS15	TPH C6-C35	>100 µg/l	Bi-annually	<56 ug/l	TM174	20/05/2015 17:00	Lab: Variable Sampling: Immeasurable
WS15	Total PAH (16)	>20 µg/l	Bi-annually	5.38 ug/l	TM178	20/05/2015 17:00	Lab: Variable Sampling: Immeasurable
WS15	Total Sulphate	>269 mg/l	Bi-annually	136 mg/l	TM184	20/05/2015 17:00	Lab: Precision 1.9%, Bias 0.8%, Expanded

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Uncertainty ⁽⁴⁾
							Uncertainty 4.7%. Sampling: Immeasurable
WS15	Total Cadmium	>3.45 µg/l	Bi-annually	<0.5 ug/l	TM191	20/05/2015 17:00	Lab: Precision 5.5%, Bias -1.1%, Expanded Uncertainty 12%. Sampling: Immeasurable
WS15	Total Calcium	>354 mg/l	Bi-annually	114 mg/l	TM228	20/05/2015 17:00	Lab: Precision 4.7%, Bias 0.3%, Expanded Uncertainty 9.7%. Sampling: Immeasurable
WS15	Dissolved Nickel	>30 mg/l	Bi-annually	4.46 ug/l	TM152	20/05/2015 17:00	Lab: Precision 3.5%, Bias -1.1%, Expanded Uncertainty 8.2%. Sampling: Immeasurable
WS15	Dissolved Lead	>17.5 µg/l	Bi-annually	0.02 ug/l	TM152	20/05/2015 17:00	Lab: Precision 2.9%, Bias -1.5%, Expanded Uncertainty 7.2%. Sampling: Immeasurable
WS15	Total Zinc	>2645 mg/l	Bi-annually	248 ug/l	TM191	20/05/2015 17:00	Lab: Precision 5.5%, Bias -2.3%, Expanded Uncertainty 13.3%. Sampling: Immeasurable

*Total ammoniacal nitrogen converted to unionised ammonia using water temperature and pH.

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values.

- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.



Signed.....
(Authorised to sign as representative of Operator)

Date..... June 2015.....

Permit Number EPR/VP3095FS