



KEY

- Approximate site boundary
- Approximate Coffey borehole location (April/May 2012)
- Approximate Coffey groundwater monitoring well (April/May 2012)
- Approximate Coffey borehole location (July 2012)
- Approximate Coffey groundwater monitoring well (July 2012)
- Approximate Coffey borehole location (November/December 2012)
- Approximate Coffey groundwater monitoring well (November/December 2012)

0 50 100m

AECOM

SITE LAYOUT AND SAMPLING LOCATIONS

Acid Sulfate Soils Management Plan
Public Private Partnership Area, Sydney International Convention, Exhibition and Entertainment Precinct
Darling Harbour, New South Wales

FIGURE 3

Note: Borehole and Groundwater Monitoring well locations are based on Coffey Geotechnics Figure 1: Borehole location plan showing Coffey Investigations, Revision C, dated 11/01/2013

Appendix B

Field Sampling Methodology

1 ACID SULFATE SOIL FIELD pH TESTS

KM Watling, CR Ahern and KM Hey

1.1 INTRODUCTION

The field pH (pH_F) and field pH peroxide (pH_{FOX}) tests have been developed for a rapid assessment in the field of the likelihood of acid sulfate soils. These tests are easy to conduct, quick, and have a minimum set-up cost. The field tests have been developed to give reasonable prediction for many soils (provided the tests are performed properly) whilst at the same time being relatively easy to perform with a minimal amount of equipment. Soil field pH tests provide a useful indication of the existing and potential acidity levels in the soil. Although these field tests may provide an indication of ASS presence, they are purely qualitative and do not give any quantitative measure of the amount of acid that has been or could be produced through the oxidation process.

Field pH tests should be part of any ASS investigation. The field pH tests (both pH_F and pH_{FOX}) should be conducted at 0.25 m intervals on the soil profile, ensuring at least one test per horizon. It is recommended that field tests be conducted on-site, in the field. If the tests can't be performed in the field on-site, tests should be conducted within 24 hours of soil sample collection, ensuring appropriate sample handling procedures (see Section B). Samples suspected of containing monosulfides should undergo field pH testing immediately in the field.

1.2 FIELD pH TEST (pH_F)

The procedure for the field pH test (pH_F) is outlined below:

1. **Calibrate battery powered field pH meter** according to manufacturer's instructions.
2. **Prepare the test tubes in the test tube rack.** Make sure the rack is marked with the depths so there is no confusion about the top and bottom of the profile. Use of separate racks for the pH_F and pH_{FOX} tests is recommended as contamination may occur when the pH_{FOX} reactions are violent. As the soil:water paste is inclined to stick to the walls of tubes, it is best to use shallow, broad test tubes as this makes cleaning easier.
3. **Conduct tests at intervals on the soil profile of 0.25 m or at least one test per horizon** whichever is lesser.
4. **Remove approximately 1 teaspoon of soil from the profile. Place approximately ½ teaspoon of that soil into the pH_F test tube and place ½ teaspoon of the soil into the pH_{FOX} test tube** for the corresponding depth test. It is important that these two sub-samples come from the same depth and that they are similar in characteristics. For example, DO NOT take ½ teaspoon of soil from the 0–0.25m depth that is grey mud, while selecting ½ teaspoon from the same depth that is a yellow mottled sample. These will obviously give different results independent of the type of test conducted.
5. **Place enough deionised water** (or demineralised water if deionised water is not available; never use tap water) **in the pH_F test tube** to make a paste similar to 'grout mix' or 'white sauce', **stirring the soil:water paste** with a skewer, strong tooth pick or similar to ensure all soil 'lumps' are removed. Do not leave the soil samples in the test tubes without water for more than 10 minutes. This will reduce the risk of sulfide oxidation—the pH_F is designed to indicate the existing pH of a soil in the field; any oxidation subsequent to the soil's removal from the ground will not reflect the true field pH. In some instances, in less than 5 minutes, monosulfidic material may start to oxidise and substantially affect the pH_F results.

6. **Immediately place the spear point electrode (preferred method) into the test tube**, ensuring that the spear point is totally submerged in the soil:water paste. Never stir the paste with the electrode. This will damage the semi-permeable glass membrane.
7. **Measure the pH_F** using a pH meter with spear point electrode.
8. **Wait for the reading to stabilise and record the pH measurement.**
9. **All measurements should be recorded on a data sheet.**

1.3 FIELD pH PEROXIDE TEST (pH_{FOX})

It is recommended that 30% hydrogen peroxide (H_2O_2) be used in the pH_{FOX} test. 30% H_2O_2 is highly corrosive and care should be taken when handling and using the peroxide. Safety glasses and gloves should be worn when handling and using peroxide. All chemical bottles should be clearly labelled and Material Safety Data Sheets (MSDS) should be kept with the chemicals at all times. Appropriate health and safety precautions should be adhered to. Peroxide should be kept in the fridge when not in use.

The procedure for the field pH peroxide test (pH_{FOX}) is outlined below:

1. **Adjust the pH of the hydrogen peroxide to pH 4.5–5.5 before going into the field.** This can be done by adding a few drops of dilute NaOH stirring and checking the pH with the electrode regularly until the correct range is reached. NaOH is highly caustic so safety precautions must be exercised. NaOH can raise the pH quickly or slowly, so the pH needs to be monitored. Recheck the pH after allowing the peroxide to stand for 15 minutes. Do NOT buffer a large quantity of hydrogen peroxide at one time. Only buffer the amount to be used in the field for about a month. This must be kept in a fridge, well labelled with only small quantities to be taken into the field at one time. This will ensure the longevity of the peroxide. Further, over time, the pH of the peroxide that has already been buffered may change. It is important to check the pH of the peroxide in the morning before departing to the field. Having a small quantity of NaOH in the field kit is recommended so the peroxide can be buffered if required.
2. **Calibrate battery powered field pH meter** according to manufacturer's instructions.
3. **Prepare the test tubes in the test tube rack as for pH_F test.** Make sure the rack is marked with the depths so there is not confusion about the top and bottom of the profile. Use of separate racks for the pH_F and pH_{FOX} tests is recommended as contamination may occur when the pH_{FOX} reactions are violent. It is important to use **heat-resistant test tubes** for the pH_{FOX} test as the reaction can generate considerable heat (up to 90°C). It is recommended that a tall, wide tube be used for this test as considerable bubbling may occur, particularly on highly sulfidic or organic samples.
4. **Conduct pH_{FOX} tests at intervals on the soil profile of 0.25 m or at least one per horizon** whichever is lesser.
5. **From the teaspoon of soil previously collected for the pH_F test, place approximately $\frac{1}{2}$ teaspoon of the soil into the pH_{FOX} test tube** for the corresponding depth test. It is important that these two sub-samples come from the same depth and that they are similar in characteristics. For example, DO NOT take $\frac{1}{2}$ teaspoon of soil from the 0–0.25m depth that is grey mud, while selecting $\frac{1}{2}$ teaspoon from the same depth that is a yellow mottled sample. These will obviously give different results independent of the type of test conducted.
6. **Add a few millilitres of 30% H_2O_2 (adjusted to pH 4.5–5.5) to the soil** (sufficient to cover the soil with peroxide) **and stir the mixture.** Do NOT add the peroxide to the test tube in which the pH_F test was conducted, that is, the pH_{FOX} test tube should not have any deionised water in it. Beakers can be used, however glass is usually easily broken when conducting field work, and when multiple tests are being conducted it is difficult to handle large beaker sizes efficiently. Do NOT add more than a few millilitres at a time. This will prevent overflow and wastage of

peroxide. A day's supply of peroxide should be allowed to reach room temperature prior to use (cold peroxide from the fridge may be too slow to react).

7. **Rate the reaction of soil and peroxide using a XXXX scale** (see below and Table H1.1).
8. **Ideally, allow approximately 15 minutes for any reactions to occur.** If substantial sulfides occur, the reaction will be vigorous and may occur almost instantly. In this case, it may not be necessary to stir the mixture. Careful watch will be needed in the early stages to ensure that there is no cross contamination of samples in the test tube rack. If the reaction is violent and the soil:peroxide mix is escaping from the test tube, a small amount of deionised water (or demineralised water; not tap water) can be added (using a wash bottle) to cool and calm the reaction. Usually this controls overflow. Do NOT add too much deionised water as this may dilute the mixture and affect the pH value. It is important to only use a small amount of soil otherwise violent reactions will overflow and the sample will be lost.
9. **Steps 6 to 8 may be repeated** until the soil:peroxide mixture reaction has slowed. This will ensure that most of the sulfides have reacted. In the lab this procedure would be repeated until no further reaction occurs, however in the field, best judgement is recommended. Usually one or two extra additions of a few millilitres of peroxide are sufficient.
10. If there is no initial reaction, individual test tubes containing the soil:peroxide mixture can be placed into a container of hot water (especially in cooler weather) or in direct sunlight. This will encourage the initial reaction to occur. When the sample starts to 'bubble', remove the test tube immediately from the hot water and replace into test tube rack.
11. **Wait for the soil:peroxide mixture to cool** (may take up to 10 minutes). The reactions often exceed 90 °C. Placing an electrode into these high temperature situations may result in physical damage and inaccurate readings. Check the temperature range of the pH meter and probe to see what temperature is suitable. Note that a more exact pH is achieved if a temperature probe is also used, however this may be impractical in some field situations.
12. **Use an electronic pH meter (preferred method) to measure the pH_{FOX} .** Place a spear point electrode into the test tube, ensuring that the spear point is totally submerged in the soil:peroxide mixture. Never stir the mixture with the electrode. This will damage the semi-permeable glass membrane.
13. **Wait for the reading to stabilise and record the pH_{FOX} measurement.**
14. **All measurements should be recorded on a data sheet.**

a) Rating soil reactions of the pH_{FOX} test using the XXXX scale

The rate of the reaction generally indicates the level of sulfides present, but depends also on texture and other soil constituents. A soil containing very little sulfides may only rate an 'X' however a soil containing high levels of sulfides (remember the exact level of sulfides cannot be determined using the pH_{FOX} test) is more likely to rate a 'XXXX' although there are exceptions. This rating scale alone should not be used to identify ASS. It is not a very reliable feature in isolation as there are other factors including manganese and organic acids which may trigger reactions. Reactions with organic matter tend to be more 'frothing' and don't tend to generate as much heat as sulfidic reactions. Manganese reactions will be quite extreme, but don't tend to lower the pH_{FOX} . Table H1.1 indicates the reaction scale for pH_{FOX} tests.

Table H1.1 Soil reaction rating scale for the pH_{FOX} test.

Reaction scale	Rate of reaction
X	Slight reaction
XX	Moderate reaction
XXX	High reaction
XXXX	Very vigorous reaction, gas evolution and heat generation commonly >80 °C

1.4 INTERPRETATION OF FIELD pH TESTS

For details on how to interpret the field pH tests (pH_F and pH_{FOX}) please refer to the following references:

Ahern CR, Ahern MR and Powell B (1998). *Guidelines for Sampling and Analysis of Lowland Acid Sulfate Soils (ASS) in Queensland 1998*. Department of Natural Resources, Indooroopilly, Queensland, Australia. pp. 28–30.

Ahern CR, Stone Y and Blunden B (1998). *Acid Sulfate Soils Assessment Guidelines*. Acid Sulfate Soil Management Advisory Committee, Wollongbar, NSW, Australia. pp. 56–58.

Hey KM, Ahern CR and Watling KM (2000). Using Chemical Field Tests to Identify Acid Sulfate Soils Likelihood. In *Acid Sulfate Soils: Environmental Issues, Assessment and Management, Technical Papers*. Ahern CR, Hey KM, Watling KM and Eldershaw VJ (eds), Brisbane, 20–22 June, 2000. Department of Natural Resources, Indooroopilly, Queensland, Australia. pp. 16-9–16-12.

Hey KM (ed) (2002). *Field Testing, Sampling and Safety for Acid Sulfate Soils*. Department of Natural Resources and Mines, Indooroopilly, Queensland, Australia. pp. 12–16.

2 EFFERVESCENCE TEST ('FIZZ TEST') FOR CARBONATES

This test is used to determine the presence of carbonates in soil. It is a quick, easy, cheap test to conduct in the field. The test should be conducted on samples suspected of containing carbonates (eg. fine shell, crushed coral etc).

The procedure for the fizz test is outlined below:

1. **Place a small sample of soil (approximately one teaspoon) into a clear test tube.** Clear test tubes are preferred as this makes it easier to see any reactions. It is important that test tubes used in the fizz test are not used for the field pH tests as cross-contamination may occur, affecting pH readings.
2. **Place two or three drops of 1 M hydrochloric acid (HCl) onto the soil sample.** HCl is highly corrosive so safety precautions must be exercised.
3. **Rate the reaction** (see Table H2.1).
4. **All measurements should be recorded on a data sheet.**

Table H2.1 Soil reaction rating scale for the fizz test (as described in McDonald *et al.* 1990, pp. 147–148).

Reaction scale	Rate of reaction
N – non-calcareous	No audible or visible effervescence
S – slightly calcareous	Slightly audible but no visible effervescence
M – moderately calcareous	Audible and slightly visible effervescence
H – highly calcareous	Moderate visible effervescence
V – very highly calcareous	Strong visible effervescence

References

McDonald RC, Isbell RF, Speight JG, Walker J and Hopkins MS (1990) 'Australian Soil and Land Survey Field Handbook, 2nd Ed'. (CSIRO Publishing: Canberra)

Appendix D

Soil and Groundwater Summary Tables

Table T1 - Soil Results - Soil Samples in Proposed Commercial Area
SICEEP - PPP Remedial Works Plan

Field_ID	BH106 (0.13-0.23m)	BH106 (0.13-0.23m) A	BH106 (1.0-1.1m)	BH106 (1.5-1.6m) A	BH106 (1.5-1.6m)	BH106 (2.5-2.6m)	BH106 (3.0-3.1m) A	BH106 (3.0-3.1m)	BH106 (3.6-3.8m)	BH107 (0.17-0.27m) A
LocCode	BH106	BH106	BH106	BH106	BH106	BH106	BH106	BH106	BH106	BH107
Sample_Depth	0.13-0.23	0.13-0.23	1-1.1	1.5-1.6	1.5-1.6	2.5-2.6	3-3.1	3-3.1	3.6-3.8	0.17-0.27
Sampled_Date	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	3/12/2012	6/12/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	99,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	27,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	81,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C15 - C36 (Sum of total)	mg/kg			450	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C34 - C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.05		5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.1	11,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PAHs (Sum of total)	mg/kg	0.8		100	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Metals														
Arsenic	mg/kg	2		500	<2	<2	4.1	<2	2.6	-	4.3	6.8	-	3
Cadmium	mg/kg	0.3		100	<0.4	0.4	<0.4	<0.4	<0.4	-	<0.4	0.4	-	<0.4
Chromium (III+VI)	mg/kg	0.3		600000	91	110	18	<5	8.1	-	16	13	-	<5
Copper	mg/kg	0.5		5000	44	69	<5	<5	<5	-	5.6	<5	-	67
Lead	mg/kg	1		1500	5.3	7.9	11	8.6	9.7	-	13	13	-	18
Mercury	mg/kg	0.05		75	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	0.07
Nickel	mg/kg	0.5		3000	120	140	<5	<5	<5	-	7.7	<5	-	66
Zinc	mg/kg	0.5		35000	69	88	7.7	<5	<5	-	13	8.3	-	78
SVOCs														
					-	-	-	-	-	-	-	-	-	-
VOCs														
					-	-	-	-	-	-	-	-	-	-
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			nd	-	nd	-	-	-	-	-	-	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	BH107 (0.17-0.27m)	BH107 (0.4-0.5m)	BH107 (0.9-1.0m)	BH107 (1.5-1.6m)	BH107 (2.5-2.6m)	BH111 (0.35-0.47m) A	BH111 (0.35-0.47m)	BH111 (1.0-1.1m)	BH111 (1.5-1.6m) A	BH111 (1.5-1.6m)
LocCode	BH107	BH107	BH107	BH107	BH107	BH111	BH111	BH111	BH111	BH111
Sample_Depth	0.17-0.27	0.4-0.5	0.9-1	1.5-1.6	2.5-2.6	0.35-0.47	0.35-0.47	1-1.1	1.5-1.6	1.5-1.6
Sampled_Date	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	99,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	27,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	81,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<6.5	<6.5	<7	<7	<7
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C15 - C36 (Sum of total)	mg/kg			450	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C34 - C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	0.7	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.05		5	<0.5	<0.5	0.9	0.7	<0.5	<0.5	0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	1.2	1.1	<1	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<0.5	<0.5	0.5	0.7	<0.5	0.5	0.8	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<0.5	<0.5	<0.5	1.1	<0.5	0.9	1.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.1	11,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<0.5	<0.5	<0.5	0.8	<0.5	1.2	1.9	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	1.1	<0.5	0.9	1.5	<0.5	<0.5	<0.5
PAHs (Sum of total)	mg/kg	0.8		100	<1	<1	3.4	6.2	<1	4.1	6.8	<1	<1	<1
Metals														
Arsenic	mg/kg	2		500	<2	9.6	-	2.3	-	9.4	10	<2	3.5	3.9
Cadmium	mg/kg	0.3		100	<0.4	<0.4	-	0.7	-	<0.4	0.6	<0.4	<0.4	<0.4
Chromium (III+VI)	mg/kg	0.3		600000	<5	21	-	17	-	<5	6	<5	7	5.9
Copper	mg/kg	0.5		5000	67	30	-	37	-	170	170	<5	5.5	7.1
Lead	mg/kg	1		1500	23	27	-	26	-	200	250	<5	8.6	7.5
Mercury	mg/kg	0.05		75	0.1	<0.05	-	0.83	-	0.35	0.45	<0.05	<0.05	<0.05
Nickel	mg/kg	0.5		3000	81	32	-	110	-	6.9	9.7	<5	<5	<5
Zinc	mg/kg	0.5		35000	92	200	-	110	-	140	170	63	6.6	<5
SVOCs														
					-	-	-	-	-	-	-	-	-	-
VOCs														
					-	-	-	-	-	nd	nd	-	-	-
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	nd	nd	-	-	-	nd	-	-	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	BH111 (2.5-2.6m)	BH111 (3.2-3.3m)	BH112 (0.34-0.40m)	BH112A (0.35-0.45m)	BH112A (0.35-0.45m)	BH112A (0.8-0.9m)	BH112A (1.8-1.9m) A	BH112A (1.8-1.9m)	BH112A (2.5-2.6m)	BH112A (2.9-3.0m)
LocCode	BH111	BH111	BH112	BH112A	BH112A	BH112A	BH112A	BH112A	BH112A	BH112A
Sample_Depth	2.5-2.6	3.2-3.3	0.34-0.4	0.35-0.45	0.35-0.45	0.8-0.9	1.8-1.9	1.8-1.9	2.5-2.6	2.9-3
Sampled_Date	30/11/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012	30/11/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	99,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	27,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	81,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<6.5	<7	<7	<6.5	<7	<7	<7	<6.5
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C15 - C36 (Sum of total)	mg/kg			450	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C34 - C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	1.3	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.05		5	<0.5	<0.5	1.1	1.1	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	1.9	2	1.5	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	0.8	0.8	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<0.5	<0.5	1.2	1	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<0.5	<0.5	3	2.1	1.5	<0.5	<0.5	<0.5	<0.5	0.6
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	0.6	0.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.1	11,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<0.5	<0.5	2.4	1.1	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.1			<0.5	<0.5	2.7	2	1.5	<0.5	<0.5	<0.5	<0.5	0.5
PAHs (Sum of total)	mg/kg	0.8		100	<1	<1	16	12	9.1	<1	<1	<1	<1	1.1
Metals														
Arsenic	mg/kg	2		500	7.8	-	5.6	6.6	4.6	4	2.6	4.2	-	-
Cadmium	mg/kg	0.3		100	<0.4	-	<0.4	<0.4	0.5	<0.4	<0.4	<0.4	-	-
Chromium (III+VI)	mg/kg	0.3		600000	<5	-	50	11	8.8	5.2	7.1	9.7	-	-
Copper	mg/kg	0.5		5000	<5	-	160	59	51	34	42	57	-	-
Lead	mg/kg	1		1500	8.1	-	99	67	78	17	15	22	-	-
Mercury	mg/kg	0.05		75	<0.05	-	0.15	0.14	0.23	<0.05	<0.05	<0.05	-	-
Nickel	mg/kg	0.5		3000	<5	-	34	11	9.2	<5	6.9	8.2	-	-
Zinc	mg/kg	0.5		35000	<5	-	240	120	130	21	27	33	-	-
SVOCs					nd	-	-	-	-	-	-	-	-	nd
VOCs					-	-	nd	-	-	nd	-	-	-	nd
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	-	nd	-	nd	nd	-	-	-	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	BH112A (3.4-3.5m)	BH113 (0.5-0.6m) A	BH113 (0.5-0.6m)	BH113 (0.7-0.8m)	BH113 (1.42-1.50m)	BH114 (0.3-0.4M)	BH114 (1.0-1.1M) A	BH114 (1.0-1.1M)	BH115 (0.33-0.43m)	BH115 (1.0-1.1m) A
LocCode	BH112A	BH113	BH113	BH113	BH113	BH114	BH114	BH114	BH115	BH115
Sample_Depth	3.4-3.5	0.5-0.6	0.5-0.6	0.7-0.8	1.42-1.5	0.3-0.4	1-1.1	1-1.1	0.33-0.43	1-1.1
Sampled_Date	30/11/2012	5/12/2012	5/12/2012	5/12/2012	5/12/2012	7/12/2012	7/12/2012	7/12/2012	7/12/2012	7/12/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	99,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	27,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	81,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	190
C29 - C36	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	370
C10 - C36 (Sum of total)	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	560
C15 - C36 (Sum of total)	mg/kg			450	<200	<200	<200	<200	<200	<200	<200	<200	<200	560
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	460
C34 - C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	240
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5
Benzo(a)pyrene	mg/kg	0.05		5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	4.3	<1
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.1	0.7
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5
Naphthalene	mg/kg	0.1	11,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	0.5
Pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.9	0.6
PAHs (Sum of total)	mg/kg	0.8		100	<1	<1	<1	<1	<1	<1	<1	<1	22	1.8
Metals														
Arsenic	mg/kg	2		500	-	3.8	3.6	-	4.7	<2	<2	<2	11	10
Cadmium	mg/kg	0.3		100	-	<0.4	<0.4	-	<0.4	<0.4	<0.4	<0.4	0.6	0.9
Chromium (III+VI)	mg/kg	0.3		600000	-	13	14	-	13	12	11	7.4	11	6.7
Copper	mg/kg	0.5		5000	-	20	30	-	15	48	19	28	120	57
Lead	mg/kg	1		1500	-	15	37	-	78	55	29	33	210	200
Mercury	mg/kg	0.05		75	-	<0.05	0.07	-	0.1	0.13	0.16	0.24	0.21	0.14
Nickel	mg/kg	0.5		3000	-	6	13	-	<5	8.4	<5	<5	19	9.6
Zinc	mg/kg	0.5		35000	-	15	29	-	10	58	6.2	<5	280	390
SVOCs														
					-	-	-	-	-	-	-	-	-	-
VOCs														
					-	-	-	-	-	-	-	-	-	-
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	-	nd	-	-	nd	-	nd	nd	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Table T1 - Soil Results - Soil Samples in Proposed Commercial Area
SICEEP - PPP Remedial Works Plan

Field_ID	BH115 (1.0-1.1m)	BH116 (0.04-0.1m)	BH116 (0.7-0.8m)	BH116 (1.5-1.6m) A	BH116 (1.5-1.6m)	BH116 (2.5-2.6m)	BH116 (3.4-3.5m) A	BH116 (3.4-3.5m)	BH117 (0.25-0.35m) A	BH117 (0.25-0.35m)
LocCode	BH115	BH116	BH116	BH116	BH116	BH116	BH116	BH116	BH117	BH117
Sample_Depth	1-1.1	0.04-0.1	0.7-0.8	1.5-1.6	1.5-1.6	2.5-2.6	3.4-3.5	3.4-3.5	0.25-0.35	0.25-0.35
Sampled_Date	7/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	5/12/2012	5/12/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	99,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	27,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	81,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			300	360	170	<100	<100	<100	<100	<100	630	1000
C29 - C36	mg/kg	50			490	160	<100	<100	<100	<100	<100	<100	1100	1300
C10 - C36 (Sum of total)	mg/kg	100			790	520	170	<100	<100	<100	<100	<100	1700	2300
C15 - C36 (Sum of total)	mg/kg			450	790	520	220	<200	<200	<200	<200	<200	1730	2300
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			660	440	210	<100	<100	<100	<100	<100	1400	1900
C34 - C40	mg/kg	100			310	<100	<100	<100	<100	<100	<100	<100	430	470
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Benz(a)anthracene	mg/kg	0.1			0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Benzo(a)pyrene	mg/kg	0.05		5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			1.3	<1	<1	<1	<1	<1	<1	<1	<10	<10
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			0.6	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Fluoranthene	mg/kg	0.1			0.8	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Naphthalene	mg/kg	0.1	11,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			0.7	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
Pyrene	mg/kg	0.1			0.8	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5
PAHs (Sum of total)	mg/kg	0.8		100	5.4	<1	3.9	<1	<1	<1	<1	<1	<10	<10
Metals														
Arsenic	mg/kg	2		500	13	12	9.9	3.9	2.8	-	-	-	5.9	5.5
Cadmium	mg/kg	0.3		100	1.1	0.5	1	<0.4	<0.4	-	-	-	0.5	<0.4
Chromium (III+VI)	mg/kg	0.3		600000	<5	27	14	6.3	5.3	-	-	-	<5	5.9
Copper	mg/kg	0.5		5000	71	46	110	32	31	-	-	-	140	200
Lead	mg/kg	1		1500	220	240	260	55	47	-	-	-	91	95
Mercury	mg/kg	0.05		75	0.17	0.41	0.11	<0.05	<0.05	-	-	-	0.14	0.14
Nickel	mg/kg	0.5		3000	14	55	43	7.7	5.3	-	-	-	19	13
Zinc	mg/kg	0.5		35000	480	140	210	42	26	-	-	-	180	160
SVOCs														
					-	-	-	-	-	-	-	-	-	-
VOCs														
					-	-	-	-	-	-	-	-	-	-
Acid Sulphate Soils														
					-	-	-	-	-	-	-	-	-	-
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	nd	nd	-	-	-	-	-	-	nd
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	BH117 (0.9-1.0m)	BH117 (2.0-2.1m)	BH117 (3.0-3.1m)	CBH1 (0.5-0.6m)	CBH1 (1.0-1.1m)	CBH1 (2.0-2.1m)	CBH1_ASS2_3.0m	CBH1_ASS3_4.0m	CBH2B (1.0-1.1m)	CBH2B (2.0-2.1m)
LocCode	BH117	BH117	BH117	CBH1	CBH1	CBH1	CBH1	CBH1	CBH2B	CBH2B
Sample_Depth	0.9-1	2-2.1	3-3.1	0.5-0.6	1-1.1	2-2.1	3	4	1-1.1	2-2.1
Sampled_Date	5/12/2012	5/12/2012	5/12/2012	31/07/2012	31/07/2012	31/07/2012	31/07/2012	31/07/2012	31/07/2012	31/07/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5
Toluene	mg/kg	0.1	99,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	27,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	-	-	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5
Xylene Total	mg/kg	0.3	81,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	-	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	-	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	-	-	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	-	-	<7	<7
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	-	-	<50	<50
C15 - C28	mg/kg	50			260	<100	<100	160	<100	<100	-	-	<100	<100
C29 - C36	mg/kg	50			860	<100	<100	110	<100	<100	-	-	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			1100	<100	<100	270	<100	<100	-	-	<100	<100
C15 - C36 (Sum of total)	mg/kg			450	1120	<200	<200	270	<200	<200	-	-	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	-	-	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	-	-	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	-	-	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	-	-	<50	<50
C16 - C34	mg/kg	100			840	<100	<100	250	110	<100	-	-	130	<100
C34 - C40	mg/kg	100			490	<100	<100	<100	<100	<100	-	-	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<5	<0.5	<0.5	0.7	<0.5	<0.5	-	-	<0.5	<0.5
Anthracene	mg/kg	0.1			<5	<0.5	<0.5	1.8	<0.5	<0.5	-	-	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			<5	<0.5	<0.5	4.6	1.5	<0.5	-	-	1.1	<0.5
Benzo(a)pyrene	mg/kg	0.05		5	<5	<0.5	<0.5	4.8	1.8	<0.5	-	-	1.3	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<10	<1	<1	7.4	2.8	<1	-	-	1.8	<1
Benzo(g,h,i)perylene	mg/kg	0.1			<5	<0.5	<0.5	2.6	1	<0.5	-	-	0.6	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<5	<0.5	<0.5	4.3	1.4	<0.5	-	-	1	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<5	<0.5	<0.5	0.5	<0.5	<0.5	-	-	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<5	<0.5	<0.5	9.9	2.6	<0.5	-	-	1	<0.5
Fluorene	mg/kg	0.1			<5	<0.5	<0.5	0.5	<0.5	<0.5	-	-	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<5	<0.5	<0.5	2	0.8	<0.5	-	-	<0.5	<0.5
Naphthalene	mg/kg	0.1	11,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<5	<0.5	<0.5	7.7	1.7	<0.5	-	-	0.7	<0.5
Pyrene	mg/kg	0.1			<5	<0.5	<0.5	9.6	2.6	<0.5	-	-	1.2	<0.5
PAHs (Sum of total)	mg/kg	0.8		100	<10	<1	<1	56	16	<1	-	-	8.7	<1
Metals														
Arsenic	mg/kg	2		500	3.7	3.4	-	-	-	-	-	-	-	-
Cadmium	mg/kg	0.3		100	<0.4	<0.4	-	-	-	-	-	-	-	-
Chromium (III+VI)	mg/kg	0.3		600000	<5	<5	-	-	-	-	-	-	-	-
Copper	mg/kg	0.5		5000	83	55	-	-	-	-	-	-	-	-
Lead	mg/kg	1		1500	15	6.2	-	-	-	-	-	-	-	-
Mercury	mg/kg	0.05		75	<0.05	<0.05	-	-	-	-	-	-	-	-
Nickel	mg/kg	0.5		3000	5.9	5.3	-	-	-	-	-	-	-	-
Zinc	mg/kg	0.5		35000	41	8.9	-	-	-	-	-	-	-	-
SVOCs														
					-	-	-	-	-	-	-	-	-	-
VOCs														
					-	-	-	-	-	-	-	-	-	-
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	7.5	7	-	-
PHfox	pH Units	0			-	-	-	-	-	-	7.1	5.9	-	-
Reaction	-	0			-	-	-	-	-	-	0	0	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	-	-	-	nd	-	-	-	-	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Table T1 - Soil Results - Soil Samples in Proposed Commercial Area
SICEEP - PPP Remedial Works Plan

Field_ID	CBH2B (2.5-2.6m)	CBH2B (3.5-3.6m)	CBH2B (4.5-4.6m)	CBH3 (1.0-1.1m)	CBH3 (2.0-2.1m)	CBH3 (3.0-3.1m)	CBH3 ASS2 3.5m	CBH4 (0.5-0.6m)	CBH4 (1.5-1.6m)	CBH4 (2.0-2.1m)
LocCode	CBH2B	CBH2B	CBH2B	CBH3	CBH3	CBH3	CBH3	CBH4	CBH4	CBH4
Sample_Depth	2.5-2.6	3.5-3.6	4.5-4.6	1-1.1	2-2.1	3-3.1	3.5	0.5-0.6	1.5-1.6	2-2.1
Sampled_Date	31/07/2012	31/07/2012	31/07/2012	30/07/2012	30/07/2012	30/07/2012	30/07/2012	30/07/2012	30/07/2012	30/07/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	99,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	27,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	-	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	81,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	-	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<6.5	<6.5	<6.5	<7	<7	<7	-	<7	<7	<7
C10 - C14	mg/kg	20			<50	54	<50	<50	<50	<50	-	<50	<50	<50
C15 - C28	mg/kg	50			<100	2300	<100	<100	<100	<100	-	170	<100	<100
C29 - C36	mg/kg	50			<100	1600	<100	<100	<100	<100	-	130	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			<100	4000	<100	<100	<100	<100	-	300	<100	<100
C15 - C36 (Sum of total)	mg/kg			450	<200	3900	<200	<200	<200	<200	-	300	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	-	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	-	<20	<20	<20
C10 - C16	mg/kg	50			<50	130	<50	<50	<50	<50	-	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	130	<50	<50	<50	<50	-	<50	<50	<50
C16 - C34	mg/kg	100			-	-	-	<100	<100	<100	-	300	<100	<100
C34 - C40	mg/kg	100			<100	530	<100	<100	<100	<100	-	<100	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	0.6	<0.5	<0.5	<0.5	-	1.2	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			1.1	39	1.9	<0.5	<0.5	<0.5	-	3.6	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.05		5	1.7	<0.5	2.4	1.6	0.5	<0.5	-	3.7	<0.5	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			2.8	62	3.6	2.6	<1	<1	-	6	<1	<1
Benzo(g,h,i)perylene	mg/kg	0.1			1.1	<0.5	1.2	0.9	<0.5	<0.5	-	2.1	<0.5	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			1.2	<0.5	1.8	1.1	<0.5	<0.5	-	3.4	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			1.9	94	4.9	1.5	0.6	<0.5	-	7.5	<0.5	<0.5
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			0.8	<0.5	1	0.7	<0.5	<0.5	-	1.6	<0.5	<0.5
Naphthalene	mg/kg	0.1	11,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<0.5	51	1.5	<0.5	<0.5	<0.5	-	4.9	<0.5	<0.5
Pyrene	mg/kg	0.1			1.9	84	4.9	1.6	0.6	<0.5	-	7	<0.5	<0.5
PAHs (Sum of total)	mg/kg	0.8		100	13	330	24	11	1.7	<1	-	42	<1	<1
Metals														
Arsenic	mg/kg	2		500	-	-	-	-	-	-	-	-	-	-
Cadmium	mg/kg	0.3		100	-	-	-	-	-	-	-	-	-	-
Chromium (III+VI)	mg/kg	0.3		600000	-	-	-	-	-	-	-	-	-	-
Copper	mg/kg	0.5		5000	-	-	-	-	-	-	-	-	-	-
Lead	mg/kg	1		1500	-	-	-	-	-	-	-	-	-	-
Mercury	mg/kg	0.05		75	-	-	-	-	-	-	-	-	-	-
Nickel	mg/kg	0.5		3000	-	-	-	-	-	-	-	-	-	-
Zinc	mg/kg	0.5		35000	-	-	-	-	-	-	-	-	-	-
SVOCs					nd	nd	nd	-	-	-	-	-	-	-
VOCs					nd	nd	nd	-	-	-	-	-	-	-
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	7.7	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	4.3	-	-	-
Reaction	-	0			-	-	-	-	-	-	0	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	-	-	nd	-	-	-	-	nd	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	CBH4_ASS2_3.5m	BH1_0.5-0.6	BH1_1.5-1.9	BH2_1.5-1.7	BH2_Surface	BH4_0.5-0.6	BH4_3.0-3.4	BH4_Surface	BH5_0.5-0.6	BH5_1.5-1.9
LocCode	CBH4	NBH1	NBH1	NBH2	NBH2	NBH4	NBH4	NBH4	NBH5	NBH5
Sample_Depth	3.5	0.5-0.6	1.5-1.9	1.5-1.7	0	0.5-0.6	3-3.4	0	0.5-0.6	1.5-1.9
Sampled_Date	30/07/2012	14/04/2012	14/04/2012	1/05/2012	1/05/2012	30/04/2012	30/04/2012	30/04/2012	1/05/2012	1/05/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Toluene	mg/kg	0.1	99,000		-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	27,000		-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2
Xylene (o)	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Xylene Total	mg/kg	0.3	81,000		-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3
Total BTEX	mg/kg	0			-	0	0	0	0	<1.5	<1.5	-	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			-	<20	<20	<20	<20	<20	<20	-	<20	<20
C6 - C9 minus BTEX	mg/kg				-	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4	-	<19.4	<19.4
C10 - C14	mg/kg	20			-	<20	<20	<20	<20	<20	<20	-	<20	<20
C15 - C28	mg/kg	50			-	<50	<50	<50	160	<50	<50	-	<50	<50
C29 - C36	mg/kg	50			-	<50	<50	<50	230	<50	<50	-	<50	<50
C10 - C36 (Sum of total)	mg/kg	100			-	<120	<120	<120	400	<120	<120	-	<120	<120
C15 - C36 (Sum of total)	mg/kg			450	-	<100	<100	<100	390	<100	<100	-	<100	<100
TPH (New NEPM)														
C6 - C10	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C6 - C10 minus BTEX	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C10 - C16	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C10 - C16 minus Naphthalene	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C16 - C34	mg/kg	100			-	-	-	-	-	-	-	-	-	-
C34 - C40	mg/kg	100			-	-	-	-	-	-	-	-	-	-
PAHs														
Acenaphthene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Acenaphthylene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Anthracene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	-	<0.1	<0.1
Benz(a)anthracene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.6	<0.1	-	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.05		5	-	<0.1	<0.1	<0.1	<0.1	0.5	<0.1	-	<0.1	<0.1
Benzo(a)pyrene TEQ	mg/kg	0.5			-					-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.6	<0.1	-	<0.1	<0.1
Benzo(b)&(k)fluoranthene	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	-	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	-	<0.1	<0.1
Chrysene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.6	<0.1	-	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Fluoranthene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	1.4	<0.1	-	<0.1	<0.1
Fluorene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	-	<0.1	<0.1
Naphthalene	mg/kg	0.1	11,000		-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1
Phenanthrene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	-	<0.1	<0.1
Pyrene	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	1.3	<0.1	-	<0.1	<0.1
PAHs (Sum of total)	mg/kg	0.8		100	-	<0.8	<0.8	<0.8	<0.8	6.3	<0.8	-	<0.8	<0.8
Metals														
Arsenic	mg/kg	2		500	-	<3	<3	4	<3	8	11	-	5	<3
Cadmium	mg/kg	0.3		100	-	0.5	<0.3	<0.3	<0.3	0.4	0.5	-	0.5	<0.3
Chromium (III+VI)	mg/kg	0.3		600000	-	11	3.6	1.7	9.2	7.3	20	-	18	7.5
Copper	mg/kg	0.5		5000	-	58	2.5	<0.5	45	38	5.5	-	42	1.4
Lead	mg/kg	1		1500	-	24	7	<1	5	45	16	-	29	3
Mercury	mg/kg	0.05		75	-	0.13	<0.05	<0.05	<0.05	0.11	<0.05	-	<0.05	<0.05
Nickel	mg/kg	0.5		3000	-	92	1	0.7	7.6	5.8	1	-	39	0.6
Zinc	mg/kg	0.5		35000	-	79	19	2.2	29	140	9.3	-	48	2.8
SVOCs														
VOCs														
Acid Sulphate Soils														
pH (Field)	pH Units	0			7.2	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			7.2	-	-	-	-	-	-	-	-	-
Reaction	-	0			0	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	nd	-	-	nd	nd	-	nd	nd	-
Estimated Fibres	mg/kg	100			-	nd	-	-	nd	nd	-	nd	nd	-

NOTES:

LOR

mg/kg

nd

-

##

##

limit of reporting

milligrams per kilogram

non-detect

not analysed

exceeds NEPC (1999) HIL F

exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	BH5 4.5-4.9	NBH10 0.4-0.5	NBH10 1.4-1.6	NBH10 2.8-3	BH11 0.5-0.6	BH11 1.5-1.9	BH16 0.5-0.6	BH16 1.5-1.9	BH16 3.0-3.4	BH16 4.5-4.9
LocCode	NBH5	NBH10	NBH10	NBH10	NBH11	NBH11	NBH16	NBH16	NBH16	NBH16
Sample_Depth	4.5-4.9	0.4-0.5	1.4-1.6	2.8-3	0.5-0.6	1.5-1.9	0.5-0.6	1.5-1.9	3-3.4	4.5-4.9
Sampled_Date	1/05/2012	30/04/2012	30/04/2012	30/04/2012	23/04/2012	23/04/2012	23/04/2012	23/04/2012	23/04/2012	23/04/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F										
BTEX														
Benzene	mg/kg	0.1	430		-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	99,000		-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	27,000		-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylene (o)	mg/kg	0.1			-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylene Total	mg/kg	0.3	81,000		-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0			-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			-	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C9 minus BTEX	mg/kg				-	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4
C10 - C14	mg/kg	20			-	<20	<20	<20	<20	<20	<20	<20	<20	<20
C15 - C28	mg/kg	50			-	570	68	90	<50	<50	<50	<50	<50	<50
C29 - C36	mg/kg	50			-	320	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C36 (Sum of total)	mg/kg	100			-	900	103	125	<120	<120	<120	<120	<120	<120
C15 - C36 (Sum of total)	mg/kg			450	-	890	93	115	<100	<100	<100	<100	<100	<100
TPH (New NEPM)														
C6 - C10	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C6 - C10 minus BTEX	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C10 - C16	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C10 - C16 minus Naphthalene	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C16 - C34	mg/kg	100			-	-	-	-	-	-	-	-	-	-
C34 - C40	mg/kg	100			-	-	-	-	-	-	-	-	-	-
PAHs														
Acenaphthene	mg/kg	0.1			-	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1			-	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1			-	3.4	0.4	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	mg/kg	0.1			-	9.2	1	0.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.05		5	-	6.5	0.8	0.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	9.3	1.2	1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)&(k)fluoranthene	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.1			-	3.9	0.5	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1			-	3.1	0.4	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1			-	6	0.7	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1			-	1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1			-	17	1.5	1.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1			-	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			-	3.5	0.4	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	11,000		-	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1			-	13	1	0.9	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1			-	16	1.5	1.3	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
PAHs (Sum of total)	mg/kg	0.8		100	-	93	9.5	7.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Metals														
Arsenic	mg/kg	2		500	-	20	7	6	10	13	4	<3	11	4
Cadmium	mg/kg	0.3		100	-	3.9	0.3	0.3	0.4	<0.3	0.3	<0.3	<0.3	<0.3
Chromium (III+VI)	mg/kg	0.3		600000	-	17	18	64	21	20	5.4	11	4.8	12
Copper	mg/kg	0.5		5000	-	320	27	31	16	13	63	3.6	0.9	5.4
Lead	mg/kg	1		1500	-	550	63	82	27	40	67	12	2	4
Mercury	mg/kg	0.05		75	-	0.83	0.21	0.22	0.12	0.18	0.1	<0.05	<0.05	<0.05
Nickel	mg/kg	0.5		3000	-	29	5.9	6.7	8.1	4.7	5.1	1.1	1.9	1.9
Zinc	mg/kg	0.5		35000	-	890	70	81	27	30	130	8	3.4	2.9
SVOCs														
VOCs														
Acid Sulphate Soils														
pH (Field)	pH Units	0			8.2	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			3.1	-	-	-	-	-	-	-	-	-
Reaction	-	0			0	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			5.2	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	-	-			-	nd	-	-	nd	-	nd	-	-	-
Estimated Fibres	mg/kg	100			-	nd	-	-	nd	-	nd	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	BH19_0.5-0.6	BH19_1.3-1.4
LocCode	NBH19	NBH19
Sample_Depth	0.5-0.6	1.3-1.4
Sampled_Date	24/04/2012	24/04/2012

ChemName	Units	LOR	CRC Care (HSL D)	NEPC 1999 HIL F		
BTEX						
Benzene	mg/kg	0.1	430		<0.1	<0.1
Toluene	mg/kg	0.1	99,000		<0.1	<0.1
Ethylbenzene	mg/kg	0.1	27,000		<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			<0.2	<0.2
Xylene (o)	mg/kg	0.1			<0.1	<0.1
Xylene Total	mg/kg	0.3	81,000		<0.3	<0.3
Total BTEX	mg/kg	0			<1.5	<1.5
TPH						
C6 - C9	mg/kg	10			<20	<20
C6 - C9 minus BTEX	mg/kg				<19.4	<19.4
C10 - C14	mg/kg	20			<20	<20
C15 - C28	mg/kg	50			<50	160
C29 - C36	mg/kg	50			<50	54
C10 - C36 (Sum of total)	mg/kg	100			<120	224
C15 - C36 (Sum of total)	mg/kg			450	<100	214
TPH (New NEPM)						
C6 - C10	mg/kg	20			-	-
C6 - C10 minus BTEX	mg/kg	20			-	-
C10 - C16	mg/kg	50			-	-
C10 - C16 minus Naphthalene	mg/kg	50			-	-
C16 - C34	mg/kg	100			-	-
C34 - C40	mg/kg	100			-	-
PAHs						
Acenaphthene	mg/kg	0.1			<0.1	0.2
Acenaphthylene	mg/kg	0.1			<0.1	0.2
Anthracene	mg/kg	0.1			0.1	1
Benz(a)anthracene	mg/kg	0.1			0.3	2.5
Benzo(a)pyrene	mg/kg	0.05		5	0.3	2.3
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-
Benzo(b)fluoranthene	mg/kg	0.1			0.4	2.8
Benzo(b)&(k)fluoranthene	mg/kg	0.2			-	-
Benzo(g,h,i)perylene	mg/kg	0.1			0.2	1.4
Benzo(k)fluoranthene	mg/kg	0.1			0.2	1.2
Chrysene	mg/kg	0.1			0.3	2
Dibenz(a,h)anthracene	mg/kg	0.1			<0.1	0.3
Fluoranthene	mg/kg	0.1			0.5	5.9
Fluorene	mg/kg	0.1			<0.1	0.3
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			0.2	1.1
Naphthalene	mg/kg	0.1	11,000		<0.1	0.3
Phenanthrene	mg/kg	0.1			0.3	1.7
Pyrene	mg/kg	0.1			0.6	5.4
PAHs (Sum of total)	mg/kg	0.8		100	3.2	28
Metals						
Arsenic	mg/kg	2		500	4	5
Cadmium	mg/kg	0.3		100	0.3	0.4
Chromium (III+VI)	mg/kg	0.3		600000	12	21
Copper	mg/kg	0.5		5000	36	35
Lead	mg/kg	1		1500	60	71
Mercury	mg/kg	0.05		75	0.14	0.28
Nickel	mg/kg	0.5		3000	8.2	7.9
Zinc	mg/kg	0.5		35000	120	130
SVOCs						
VOCs						
Acid Sulphate Soils						
pH (Field)	pH Units	0			-	-
PHfox	pH Units	0			-	-
Reaction	-	0			-	-
pH Difference	pH Units	-10			-	-
Asbestos						
Asbestos fibres	-	-			nd	-
Estimated Fibres	mg/kg	100			nd	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
-	not analysed
##	exceeds NEPC (1999) HIL F
##	exceeds CRC CARE (Direct Contact: HSL D)

Field_ID	BH104 (0.12-0.22m)	BH104 (0.69-0.79m)	BH104 (1.5-1.6m) A	BH104 (1.5-1.6m)	BH104 (2.0-2.1m)	BH104 (3.0-3.1m)	BH104 (3.3-3.4m)	BH105 (0.12-0.22m) A	BH105 (0.12-0.22m)	BH105 (1.0-1.1m)	BH105 (2.0-2.1m)
LocCode	BH104	BH104	BH104	BH104	BH104	BH104	BH104	BH105	BH105	BH105	BH105
Sample_Depth	0.12-0.22	0.69-0.79	1.5-1.6	1.5-1.6	2-2.1	3-3.1	3.3-3.4	0.12-0.22	0.12-0.22	1-1.1	2-2.1
Sampled_Date	19/12/2012	19/12/2012	19/12/2012	19/12/2012	19/12/2012	19/12/2012	19/12/2012	19/12/2012	19/12/2012	19/12/2012	19/12/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E										
BTEX														
Benzene	mg/kg	0.1	120		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	18,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	5300		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	15,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
C10 - C14	mg/kg	20			410	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			2500	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			2900	<100	<100	<100	<100	<100	<100	<100	<100	<100
C15 - C36 (Sum of total)	mg/kg			180	2550	<200	<200	<200	<200	<200	<200	<200	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			1300	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			1300	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			1400	<100	<100	<100	<100	<100	<100	<100	<100	<100
C34 - C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	mg/kg	0.05		2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.1	1900		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	mg/kg	0.1			<0.5	0.8	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
PAHs (Sum of total)	mg/kg	0.8		40	2.1	1.7	<1	<1	1.2	<1	<1	<1	<1	<1
Metals														
Arsenic	mg/kg	2		200	-	11	-	13	-	-	-	2.3	3.1	2.3
Cadmium	mg/kg	0.3		40	-	1.9	-	1.3	-	-	-	0.4	0.5	<0.4
Chromium (III+VI)	mg/kg	0.3		240000	-	27	-	5.1	-	-	-	6.2	8.7	6.4
Copper	mg/kg	0.5		2000	-	130	-	100	-	-	-	55	62	6.5
Lead	mg/kg	1		600	-	230	-	500	-	-	-	<5	<5	12
Mercury	mg/kg	0.05		30	-	0.16	-	0.12	-	-	-	<0.05	<0.05	0.2
Nickel	mg/kg	0.5		600	-	34	-	13	-	-	-	82	91	<5
Zinc	mg/kg	0.5		14000	-	630	-	410	-	-	-	39	43	28
SVOCs														
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	No unit	-			-	nd	-	-	-	-	-	nd	-	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
##	exceeds NEPC (1999) HIL E
##	exceeds CRC CARE (Direct Contact: HSL C)

Field_ID	BH105 (2.8-2.9m)	BH105 (4.0-4.1m)	BH105 (5.0-5.1m)	BH108A (0.5-0.6M) A	BH108A (0.5-0.6M)	BH108A (1.5-1.6M)	BH108A (2.5-2.6M)	BH108A (3.5-3.6M) A	BH108A (3.5-3.6M)	BH108A (4.5-4.6M)	BH109 (0.0-0.2m)
LocCode	BH105	BH105	BH105	BH108A	BH108A	BH108A	BH108A	BH108A	BH108A	BH108A	BH109
Sample_Depth	2.8-2.9	4-4.1	5-5.1	0.5-0.6	0.5-0.6	1.5-1.6	2.5-2.6	3.5-3.6	3.5-3.6	4.5-4.6	0-0.2
Sampled_Date	19/12/2012	19/12/2012	19/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	4/12/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E										
BTEX														
Benzene	mg/kg	0.1	120		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	18,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	5300		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	15,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36	mg/kg	50			<100	<100	<100	120	190	<100	<100	<100	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			<100	<100	<100	120	190	<100	<100	<100	<100	<100
C15 - C36 (Sum of total)	mg/kg			180	<200	<200	<200	170	240	<200	<200	<200	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C34 - C40	mg/kg	100			<100	<100	<100	<100	140	110	<100	<100	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	0.7	1	<0.5
Benzo(a)pyrene	mg/kg	0.05		2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	0.7	1	<0.5
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	<1	<1	<1	<1	1.2	1.3	1.8	<1
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	0.7	<0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	0.7	1	<0.5
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	1.3	1.9	<0.5
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
Naphthalene	mg/kg	0.1	1900		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	0.8	1.1	<0.5
Pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	1.3	1.8	<0.5
PAHs (Sum of total)	mg/kg	0.8		40	<1	<1	<1	<1	<1	<1	6.4	6.8	11	<1
Metals														
Arsenic	mg/kg	2		200	-	-	-	5.1	3.8	6.5	-	-	-	2.5
Cadmium	mg/kg	0.3		40	-	-	-	<0.4	<0.4	<0.4	-	-	-	<0.4
Chromium (III+VI)	mg/kg	0.3		240000	-	-	-	12	11	14	-	-	-	12
Copper	mg/kg	0.5		2000	-	-	-	15	12	24	-	-	-	8.8
Lead	mg/kg	1		600	-	-	-	28	24	28	-	-	-	9.7
Mercury	mg/kg	0.05		30	-	-	-	0.07	<0.05	0.06	-	-	-	<0.05
Nickel	mg/kg	0.5		600	-	-	-	13	11	16	-	-	-	12
Zinc	mg/kg	0.5		14000	-	-	-	53	45	100	-	-	-	63
SVOCs														
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	No unit	-			-	-	-	-	nd	-	-	-	-	nd
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR

mg/kg

nd

##

##

limit of reporting

milligrams per kilogram

non-detect

exceeds NEPC (1999) HIL E

exceeds CRC CARE (Direct Contact: HSL C)

Field_ID	BH109_(0.4-0.5m)_A	BH109_(0.4-0.5m)	BH109_(1.5-1.6m)	BH109_(1.9-2.0m)_A	BH109_(1.9-2.0m)	BH109_(3.0-3.1m)	BH109_(3.4-3.5m)_A	BH109_(3.4-3.5m)	BH110_(0.15-0.25m)_A	BH110_(0.15-0.25m)	BH110_(1.0-1.1m)
LocCode	BH109	BH109	BH109	BH109	BH109	BH109	BH109	BH109	BH110	BH110	BH110
Sample_Depth	0.4-0.5	0.4-0.5	1.5-1.6	1.9-2	1.9-2	3-3.1	3.4-3.5	3.4-3.5	0.15-0.25	0.15-0.25	1-1.1
Sampled_Date	4/12/2012	4/12/2012	4/12/2012	4/12/2012	4/12/2012	4/12/2012	4/12/2012	4/12/2012	4/12/2012	4/12/2012	4/12/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E										
BTEX														
Benzene	mg/kg	0.1	120		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	0.1	18,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	0.1	5300		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylene Total	mg/kg	0.3	15,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C15 - C28	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C29 - C36	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C10 - C36 (Sum of total)	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C15 - C36 (Sum of total)	mg/kg			180	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
C16 - C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
C34 - C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	1.4	<0.5	<0.5	<0.5	1	<0.5	<0.5	0.7
Benzo(a)pyrene	mg/kg	0.05		2	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	1	<0.5	<0.5	0.8
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	2.3	<1	<1	<1	1.6	<1	<1	1.2
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	0.8	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.5
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	-	-
Chrysene	mg/kg	0.1			<0.5	<0.5	1.3	<0.5	<0.5	<0.5	1	<0.5	<0.5	0.7
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	mg/kg	0.1			<0.5	<0.5	2.4	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	1.3
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	mg/kg	0.1	1900		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	mg/kg	0.1			<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Pyrene	mg/kg	0.1			<0.5	<0.5	2.4	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	1.3
PAHs (Sum of total)	mg/kg	0.8		40	<1	<1	13	<1	1.2	<1	<1	<1	<1	7
Metals														
Arsenic	mg/kg	2		200	<2	<2	13	-	-	3.2	-	-	<2	-
Cadmium	mg/kg	0.3		40	<0.4	<0.4	0.5	-	-	<0.4	-	-	<0.4	-
Chromium (III+VI)	mg/kg	0.3		240000	5.1	5.7	5.5	-	-	9.5	-	-	<5	-
Copper	mg/kg	0.5		2000	8.6	9.2	120	-	-	55	-	-	90	-
Lead	mg/kg	1		600	5.8	6.5	160	-	-	92	-	-	<5	-
Mercury	mg/kg	0.05		30	<0.05	<0.05	0.29	-	-	0.41	-	-	<0.05	-
Nickel	mg/kg	0.5		600	5.7	5.8	15	-	-	9	-	-	150	-
Zinc	mg/kg	0.5		14000	14	16	230	-	-	140	-	-	72	81
SVOCs														
- - - - -														
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	No unit	-			-	nd	-	-	-	-	-	-	nd	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
##	exceeds NEPC (1999) HIL E
##	exceeds CRC CARE (Direct Contact: HSL C)

Table T2 - Soil Results - Soil Samples in Proposed Recreational Area
SICEEP - PPP Remedial Works Plan

Field_ID	BH110A (0.5-0.6M)	BH110A (1.0-1.1m) _A	BH110A (1.0-1.1m)	BH110A (2-2.1M)	BH110A (3.0-3.1m)	BH110A (3.9-4.0m) _A	BH110A (3.9-4.0m)	BH110A (5.0-5.1m)	BH110A (5.9-6.0m)	BH12 0.4-0.5	BH12 1.5-1.95
LocCode	BH110A	BH110A	BH110A	BH110A	BH110A	BH110A	BH110A	BH110A	BH110A	NBH12	NBH12
Sample_Depth	0.5-0.6	1-1.1	1-1.1	2-2.1	3-3.1	3.9-4	3.9-4	5-5.1	5.9-6	0.4-0.5	1.5-1.95
Sampled_Date	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	23/04/2012	23/04/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E										
BTEX														
Benzene	mg/kg	0.1	120		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1
Toluene	mg/kg	0.1	18,000		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	5300		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			<1	<1	<1	<1	<1	<1	<1	<1	<0.2	<0.2
Xylene (o)	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1
Xylene Total	mg/kg	0.3	15,000		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.3	<0.3
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<20	<20
C6 - C9 minus BTEX	mg/kg				<7	<7	<7	<7	<7	<7	<7	<7	<19.4	<19.4
C10 - C14	mg/kg	20			<50	<50	<50	<50	<50	<50	<50	<50	<20	<20
C15 - C28	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<50	<50
C29 - C36	mg/kg	50			<100	<100	<100	<100	<100	<100	<100	<100	<50	<50
C10 - C36 (Sum of total)	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	<120	<120
C15 - C36 (Sum of total)	mg/kg			180	<200	<200	<200	<200	<200	<200	<200	<200	<100	<100
TPH (New NEPM)														
C6 - C10	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	-	-
C6 - C10 minus BTEX	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	-	-
C10 - C16	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	-	-
C10 - C16 minus Naphthalene	mg/kg	50			<50	<50	<50	<50	<50	<50	<50	<50	-	-
C16 - C34	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	-	-
C34 - C40	mg/kg	100			<100	<100	<100	<100	<100	<100	<100	<100	-	-
PAHs														
Acenaphthene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1
Acenaphthylene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1
Anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.1	<0.1
Benz(a)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	2.2	<0.5	1.3	0.8	<0.5	1	<0.1
Benzo(a)pyrene	mg/kg	0.05	2		<0.5	<0.5	<0.5	2.2	<0.5	1.5	1.2	<0.5	0.6	<0.1
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	<0.1
Benzo(b)&(k)fluoranthene	mg/kg	0.2			<1	<1	<1	3.8	<1	2.5	1.8	<1	1.3	-
Benzo(g,h,i)perylene	mg/kg	0.1			<0.5	<0.5	<0.5	1.6	<0.5	1.2	0.9	<0.5	<0.5	<0.1
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	<0.1
Chrysene	mg/kg	0.1			<0.5	<0.5	<0.5	1.8	<0.5	0.9	0.5	<0.5	0.8	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1
Fluoranthene	mg/kg	0.1			<0.5	<0.5	<0.5	3.6	<0.5	1.5	0.9	<0.5	1.8	<0.1
Fluorene	mg/kg	0.1			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	1.4	<0.5	0.9	0.6	<0.5	<0.5	<0.1
Naphthalene	mg/kg	0.1	1900		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.6	<0.1
Phenanthrene	mg/kg	0.1			<0.5	<0.5	<0.5	1.4	<0.5	0.6	<0.5	<0.5	3	<0.1
Pyrene	mg/kg	0.1			<0.5	<0.5	<0.5	3.9	<0.5	2.1	1.9	<0.5	1.7	<0.1
PAHs (Sum of total)	mg/kg	0.8		40	<1	<1	<1	22	<1	13	8.6	<1	16	<0.8
Metals														
Arsenic	mg/kg	2		200	2.6	<2	<2	5.9	-	-	-	-	-	<3
Cadmium	mg/kg	0.3		40	<0.4	<0.4	<0.4	<0.4	-	-	-	-	-	<0.3
Chromium (III+VI)	mg/kg	0.3		240000	9.2	<5	7.5	<5	-	-	-	-	-	8.5
Copper	mg/kg	0.5		2000	12	11	14	27	-	-	-	-	-	13
Lead	mg/kg	1		600	7.9	7.3	19	340	-	-	-	-	-	9
Mercury	mg/kg	0.05		30	<0.05	<0.05	<0.05	0.17	-	-	-	-	-	<0.05
Nickel	mg/kg	0.5		600	16	12	15	15	-	-	-	-	-	30
Zinc	mg/kg	0.5		14000	23	23	31	110	-	-	-	-	-	33
SVOCs														
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	No unit	-			nd	-	nd	nd	-	-	-	-	-	nd
Estimated Fibres	mg/kg	100			-	-	-	-	-	-	-	-	-	nd

NOTES:

LOR

mg/kg

nd

##

##

limit of reporting

milligrams per kilogram

non-detect

exceeds NEPC (1999) HIL E

exceeds CRC CARE (Direct Contact: HSL C)

Field_ID	BH12_2.9-3.0	BH12_4.5-4.95	BH12_Surface	BH13_0.5-0.6	BH13_1.4-1.5	BH15_0.5-0.6	BH15_1.5-1.6	BH15_Surface	BH20_0.3-0.4	BH20_1.5-1.8	BH20_3.0-3.4
LocCode	NBH12	NBH12	NBH12	NBH13	NBH13	NBH15	NBH15	NBH15	NBH20	NBH20	NBH20
Sample_Depth	2.9-3	4.5-4.95	0	0.5-0.6	1.4-1.5	0.5-0.6	1.5-1.6	0	0.3-0.4	1.5-1.8	3-3.4
Sampled_Date	23/04/2012	23/04/2012	23/04/2012	1/05/2012	1/05/2012	27/04/2012	27/04/2012	27/04/2012	24/04/2012	24/04/2012	24/04/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E										
BTEX														
Benzene	mg/kg	0.1	120		<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	18,000		<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	5300		<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylene (o)	mg/kg	0.1			<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylene Total	mg/kg	0.3	15,000		<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0			<1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<20	<20	-	<20	<20	<20	<20	<20	<20	<20
C6 - C9 minus BTEX	mg/kg				<19.4	<19.4	-	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4	<19.4
C10 - C14	mg/kg	20			<20	<20	-	<20	<20	<20	<20	<20	<20	<20
C15 - C28	mg/kg	50			<50	<50	-	<50	170	<50	61	<50	<50	<50
C29 - C36	mg/kg	50			<50	<50	-	<50	140	51	54	<50	<50	<50
C10 - C36 (Sum of total)	mg/kg	100			<120	<120	-	<120	320	86	125	<120	<120	<120
C15 - C36 (Sum of total)	mg/kg			180	<100	<100	-	<100	310	76	115	<100	<100	<100
TPH (New NEPM)														
C6 - C10	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C6 - C10 minus BTEX	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C10 - C16	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C10 - C16 minus Naphthalene	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C16 - C34	mg/kg	100			-	-	-	-	-	-	-	-	-	-
C34 - C40	mg/kg	100			-	-	-	-	-	-	-	-	-	-
PAHs														
Acenaphthene	mg/kg	0.1			<0.1	<0.1	-	<0.1	0.6	0.2	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1			<0.1	<0.1	-	<0.1	1.3	<0.1	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1			0.2	<0.1	-	<0.1	3	0.5	0.2	<0.1	<0.1	<0.1
Benz(a)anthracene	mg/kg	0.1			0.4	0.2	-	<0.1	5.6	1.4	0.9	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.05	2		0.4	<0.1	-	<0.1	4.2	1.2	0.9	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			0.5	0.2	-	<0.1	4.8	1.3	1	<0.1	<0.1	<0.1
Benzo(b)&(k)fluoranthene	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.1			0.3	0.1	-	<0.1	2	0.8	0.6	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1			0.2	<0.1	-	<0.1	1.8	0.7	0.5	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1			0.4	0.2	-	<0.1	3.8	1	0.7	<0.1	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1			<0.1	<0.1	-	<0.1	0.5	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1			0.8	0.1	-	0.1	11	3.6	1.4	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1			<0.1	<0.1	-	<0.1	1.8	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			0.2	<0.1	-	<0.1	1.8	0.7	0.5	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	1900		<0.1	<0.1	-	<0.1	1.4	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1			0.4	0.5	-	<0.1	10	2	0.7	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1			0.8	0.2	-	0.1	9.5	3.2	1.4	<0.1	<0.1	<0.1
PAHs (Sum of total)	mg/kg	0.8		40	4.4	1.6	-	<0.8	63	17	8.9	<0.8	<0.8	<0.8
Metals														
Arsenic	mg/kg	2		200	7	<15	-	<3	8	<3	3	<3	<3	5
Cadmium	mg/kg	0.3		40	0.4	<1.5	-	<0.3	1.3	0.8	0.3	<0.3	0.4	<0.3
Chromium (III+VI)	mg/kg	0.3		240000	11	4.6	-	7.4	9.2	25	21	3.8	11	3.4
Copper	mg/kg	0.5		2000	78	11	-	26	38	50	13	2.8	55	25
Lead	mg/kg	1		600	150	19	-	14	52	17	40	3	3	220
Mercury	mg/kg	0.05		30	0.5	0.2	-	<0.05	0.1	<0.05	0.15	<0.05	<0.05	0.32
Nickel	mg/kg	0.5		600	4.6	<2.5	-	46	11	9.4	4	2.4	95	2
Zinc	mg/kg	0.5		14000	86	40	-	52	120	36	34	16	51	42
SVOCs														
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	No unit	-			-	-	nd	nd	-	nd	-	nd	nd	-
Estimated Fibres	mg/kg	100			-	-	nd	nd	-	nd	-	nd	nd	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
##	exceeds NEPC (1999) HIL E
##	exceeds CRC CARE (Direct Contact: HSL C)

Field_ID	BH20 4.5-4.9	BH28 0.5-0.6	BH28 1.5-1.9	BH28 3.0-3.4	BH28 7.3-7.8	BH28 Surface	BH6 0.5-0.6	BH6 3.0-3.4	BH7 0.4-0.5	BH7 1.5-1.95	BH7 2.9-3.0
LocCode	NBH20	NBH28	NBH28	NBH28	NBH28	NBH28	NBH6	NBH6	NBH7	NBH7	NBH7
Sample_Depth	4.5-4.9	0.5-0.6	1.5-1.9	3-3.4	7.3-7.8	0	0.5-0.6	3-3.4	0.4-0.5	1.5-1.95	2.9-3
Sampled_Date	24/04/2012	20/04/2012	20/04/2012	20/04/2012	20/04/2012	20/04/2012	30/04/2012	30/04/2012	23/04/2012	23/04/2012	23/04/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E										
BTEX														
Benzene	mg/kg	0.1	120		<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	18,000		<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	5300		<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2
Xylene (o)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1
Xylene Total	mg/kg	0.3	15,000		<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<20	<20	<20	<20	<20	-	<20	<20	<20	<20
C6 - C9 minus BTEX	mg/kg				<19.4	<19.4	<19.4	<19.4	<19.4	-	<19.4	<19.4	<19.4	<19.4
C10 - C14	mg/kg	20			<20	<20	<20	<20	<20	-	<20	<20	<20	<20
C15 - C28	mg/kg	50			<50	<50	<50	<50	<50	-	<50	57	<50	87
C29 - C36	mg/kg	50			<50	<50	<50	<50	<50	-	<50	<50	<50	98
C10 - C36 (Sum of total)	mg/kg	100			<120	<120	<120	<120	<120	-	<120	92	<120	122
C15 - C36 (Sum of total)	mg/kg		180		<100	<100	<100	<100	<100	-	<100	82	<100	112
TPH (New NEPM)														
C6 - C10	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C6 - C10 minus BTEX	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C10 - C16	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C10 - C16 minus Naphthalene	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C16 - C34	mg/kg	100			-	-	-	-	-	-	-	-	-	-
C34 - C40	mg/kg	100			-	-	-	-	-	-	-	-	-	-
PAHs														
Acenaphthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.4
Acenaphthylene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.1	<0.1	<0.1	0.5
Anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	<0.1	0.4
Benz(a)anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.2	0.6	<0.1	0.8
Benzo(a)pyrene	mg/kg	0.05	2		<0.1	<0.1	<0.1	<0.1	<0.1	-	0.2	0.6	<0.1	0.7
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.3	0.8	<0.1	0.8
Benzo(b)&(k)fluoranthene	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.1	0.4	<0.1	0.5
Benzo(k)fluoranthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.1	0.3	<0.1	0.3
Chrysene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.2	0.5	<0.1	0.6
Dibenz(a,h)anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.1
Fluoranthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	1.1	<0.1	1.5
Fluorene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.1	0.4	<0.1	0.3
Naphthalene	mg/kg	0.1	1900		<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.1
Phenanthrene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.1	0.5	<0.1	1
Pyrene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	-	0.4	1.1	<0.1	1.5
PAHs (Sum of total)	mg/kg	0.8	40		<0.8	<0.8	<0.8	<0.8	<0.8	-	2.2	6.6	<0.8	8.8
Metals														
Arsenic	mg/kg	2	200		12	<3	<3	8	<3	-	3	8	<3	6
Cadmium	mg/kg	0.3	40		<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3
Chromium (III+VI)	mg/kg	0.3	240000		11	5.7	2.7	6.6	6	-	6.9	7.4	9.2	10
Copper	mg/kg	0.5	2000		15	21	2	8.9	2.8	-	27	7.8	15	37
Lead	mg/kg	1	600		36	18	3	20	7	-	44	11	14	67
Mercury	mg/kg	0.05	30		0.17	0.08	<0.05	0.1	<0.05	-	0.08	0.06	<0.05	0.24
Nickel	mg/kg	0.5	600		3.4	32	3.4	2.2	0.8	-	18	5.1	32	9.5
Zinc	mg/kg	0.5	14000		12	29	5.3	7.4	2.2	-	80	23	28	66
SVOCs														
Acid Sulphate Soils														
pH (Field)	pH Units	0			-	-	-	-	-	-	-	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	-	-	-	-
Reaction	-	0			-	-	-	-	-	-	-	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-
Asbestos														
Asbestos fibres	No unit	-			-	-	-	-	-	nd	nd	-	nd	-
Estimated Fibres	mg/kg	100			-	-	-	-	-	nd	nd	-	nd	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
##	exceeds NEPC (1999) HIL E
##	exceeds CRC CARE (Direct Contact: HSL C)

Table T2 - Soil Results - Soil Samples in Proposed Recreational Area
SICEEP - PPP Remedial Works Plan

Field_ID	BH7-Surface	CBH6 (0.5-0.6m)	CBH6 (1.0-1.1m)	CBH6 (1.5-1.6m)	CBH6 (2.0-2.1m)	CBH6 (2.5-2.6m)	CBH6 ASS1 2.5m	CBH6 ASS3 3.5m	NBH3 0.3-0.5	NBH3 1.5-1.95	NBH3 4.5-4.95
LocCode	NBH7	CBH6	CBH6	CBH6	CBH6	CBH6	CBH6	CBH6	NBH3	NBH3	NBH3
Sample_Depth	0	0.5-0.6	1-1.1	1.5-1.6	2-2.1	2.5-2.6	2.5	3.5	0.3-0.5	1.5-1.95	4.5-4.95
Sampled_Date	23/04/2012	25/07/2012	25/07/2012	25/07/2012	25/07/2012	25/07/2012	25/07/2012	25/07/2012	4/05/2012	4/05/2012	4/05/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E											
BTEX															
Benzene	mg/kg	0.1	120		-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	18,000		-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	5300		-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			-	<1	-	<1	<1	<1	-	-	<0.2	<0.2	<0.2
Xylene (o)	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Xylene Total	mg/kg	0.3	15,000		-	<1.5	-	<1.5	<1.5	<1.5	-	-	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0			-	<1.5	-	<1.5	<1.5	<1.5	-	-	<1.5	<1.5	<1.5
TPH															
C6 - C9	mg/kg	10			-	<10	-	<10	<10	<10	-	-	<20	<20	<20
C6 - C9 minus BTEX	mg/kg				-	<7	-	<7	<7	<7	-	-	<19.4	<19.4	<19.4
C10 - C14	mg/kg	20			-	<50	-	<50	<50	<50	-	-	<20	<20	<20
C15 - C28	mg/kg	50			-	<100	-	<100	<100	<100	-	-	<50	<50	<50
C29 - C36	mg/kg	50			-	<100	-	<100	<100	<100	-	-	<50	<50	<50
C10 - C36 (Sum of total)	mg/kg	100			-	<100	-	<100	<100	<100	-	-	<120	<120	<120
C15 - C36 (Sum of total)	mg/kg			180	-	<200	-	<200	<200	<200	-	-	<100	<100	<100
TPH (New NEPM)															
C6 - C10	mg/kg	20			-	<20	-	<20	<20	<20	-	-	-	-	-
C6 - C10 minus BTEX	mg/kg	20			-	<20	-	<20	<20	<20	-	-	-	-	-
C10 - C16	mg/kg	50			-	<50	-	<50	<50	<50	-	-	-	-	-
C10 - C16 minus Naphthalene	mg/kg	50			-	<50	-	<50	<50	<50	-	-	-	-	-
C16 - C34	mg/kg	100			-	<100	-	<100	<100	<100	-	-	-	-	-
C34 - C40	mg/kg	100			-	<100	-	<100	<100	<100	-	-	-	-	-
PAHs															
Acenaphthene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Benz(a)anthracene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.05		2	-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1
Benzo(b)&(k)fluoranthene	mg/kg	0.2			-	<1	-	<1	<1	<1	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1			-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	0.1	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	0.2	<0.1	0.1
Fluorene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	1900		-	<0.5	-	<0.5	<0.5	<0.5	-	-	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	0.1	<0.1	0.1
Pyrene	mg/kg	0.1			-	<0.5	-	<0.5	<0.5	<0.5	-	-	0.3	<0.1	0.1
PAHs (Sum of total)	mg/kg	0.8		40	-	<1	-	<1	<1	<1	-	-	0.8	<0.8	<0.8
Metals															
Arsenic	mg/kg	2		200	-	-	-	-	-	-	-	-	<3	<3	3
Cadmium	mg/kg	0.3		40	-	-	-	-	-	-	-	-	<0.3	<0.3	<0.3
Chromium (III+VI)	mg/kg	0.3		240000	-	-	-	-	-	-	-	-	10	8	7.9
Copper	mg/kg	0.5		2000	-	-	-	-	-	-	-	-	27	2.9	9.9
Lead	mg/kg	1		600	-	-	-	-	-	-	-	-	11	7	6
Mercury	mg/kg	0.05		30	-	-	-	-	-	-	-	-	<0.05	0.12	0.15
Nickel	mg/kg	0.5		600	-	-	-	-	-	-	-	-	35	0.8	4.6
Zinc	mg/kg	0.5		14000	-	-	-	-	-	-	-	-	35	13	15
SVOCs															
Acid Sulphate Soils															
pH (Field)	pH Units	0			-	-	-	-	-	-	5.6	7	-	-	-
PHfox	pH Units	0			-	-	-	-	-	-	4.5	1.8	-	-	-
Reaction	-	0			-	-	-	-	-	-	0	0	-	-	-
pH Difference	pH Units	-10			-	-	-	-	-	-	-	-	-	-	-
Asbestos															
Asbestos fibres	No unit	-			nd	-	nd	nd	-	-	-	-	nd	nd	-
Estimated Fibres	mg/kg	100			nd	-	-	-	-	-	-	-	nd	nd	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
##	exceeds NEPC (1999) HIL E
##	exceeds CRC CARE (Direct Contact: HSL C)

Field_ID	NBH17 0.4-0.5	NBH17 2.0-2.1	NBH17 3.0-3.45	NBH17 4.5-4.95	NBH18 0.5-0.6	NBH18 1.5-1.95	NBH18 3-3.45	NBH18 4.3-4.5	NBH21 0.4-0.5	NBH21 1.5-1.95	NBH21 3.0-3.4
LocCode	NBH17	NBH17	NBH17	NBH17	NBH18	NBH18	NBH18	NBH18	NBH21	NBH21	NBH21
Sample_Depth	0.4-0.5	2-2.1	3-3.45	4.5-4.95	0.5-0.6	1.5-1.95	3-3.45	4.3-4.5	0.4-0.5	1.5-1.95	3-3.4
Sampled_Date	27/04/2012	27/04/2012	27/04/2012	27/04/2012	24/04/2012	24/04/2012	24/04/2012	24/04/2012	27/04/2012	27/04/2012	27/04/2012

ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E										
BTEX														
Benzene	mg/kg	0.1	120		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	18,000		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	5300		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylene (m & p)	mg/kg	0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Xylene (o)	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylene Total	mg/kg	0.3	15,000		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0			<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
TPH														
C6 - C9	mg/kg	10			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C6 - C9 minus BTEX	mg/kg				<19.4	<19.4	<19.3	<19.4	<19.3	<19.4	<19.3	<19.4	<19.4	<19.4
C10 - C14	mg/kg	20			<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
C15 - C28	mg/kg	50			<50	<50	100	76	<50	<50	<50	<50	<50	<50
C29 - C36	mg/kg	50			<50	<50	110	<50	<50	<50	<50	<50	<50	<50
C10 - C36 (Sum of total)	mg/kg	100			<120	<120	220	111	<120	<120	<120	<120	<120	<120
C15 - C36 (Sum of total)	mg/kg			180	<100	<100	210	101	<100	<100	<100	<100	<100	<100
TPH (New NEPM)														
C6 - C10	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C6 - C10 minus BTEX	mg/kg	20			-	-	-	-	-	-	-	-	-	-
C10 - C16	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C10 - C16 minus Naphthalene	mg/kg	50			-	-	-	-	-	-	-	-	-	-
C16 - C34	mg/kg	100			-	-	-	-	-	-	-	-	-	-
C34 - C40	mg/kg	100			-	-	-	-	-	-	-	-	-	-
PAHs														
Acenaphthene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1
Benz(a)anthracene	mg/kg	0.1			0.2	0.2	<0.1	<0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.05	2		0.2	0.2	<0.1	<0.1	<0.1	0.1	<0.1	0.2	<0.1	<0.1
Benzo(a)pyrene TEQ	mg/kg	0.5			-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1			0.2	0.2	0.1	<0.1	<0.1	0.1	<0.1	0.2	<0.1	<0.1
Benzo(b)&(k)fluoranthene	mg/kg	0.2			-	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	mg/kg	0.1			0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1			0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1			0.2	0.2	0.1	<0.1	<0.1	0.1	<0.1	0.2	<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1			0.3	0.3	0.2	0.2	0.1	0.3	0.1	0.6	<0.1	<0.1
Fluorene	mg/kg	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1			0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	1900		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1			0.2	0.2	0.1	0.1	0.2	0.3	0.1	0.9	<0.1	<0.1
Pyrene	mg/kg	0.1			0.3	0.3	0.2	0.1	0.2	0.3	<0.1	0.6	<0.1	<0.1
PAHs (Sum of total)	mg/kg	0.8		40	1.9	1.7	<0.8	<0.8	<0.8	1.4	<0.8	3.8	<0.8	<0.8
Metals														
Arsenic	mg/kg	2		200	3	<3	7	8	<3	9	14	5	3	4
Cadmium	mg/kg	0.3		40	0.3	<0.3	0.4	0.3	0.4	<0.3	<0.3	<0.3	<0.3	0.6
Chromium (III+VI)	mg/kg	0.3		240000	11	12	29	27	11	14	23	19	8.2	18
Copper	mg/kg	0.5		2000	21	16	55	35	46	10	3.1	12	4.6	13
Lead	mg/kg	1		600	14	28	260	150	8	46	9	53	15	9
Mercury	mg/kg	0.05		30	<0.05	0.07	1.3	1	<0.05	0.08	<0.05	0.31	<0.05	<0.05
Nickel	mg/kg	0.5		600	57	10	26	10	69	2.6	0.9	6.1	4	0.7
Zinc	mg/kg	0.5		14000	49	33	200	68	49	31	3.1	25	23	17
SVOCs														
Acid Sulphate Soils					-	-	-	-	-	nd	-	nd	-	-
pH (Field)	pH Units	0			-	-	8.3	-	-	-	6.5	-	-	6.6
PHfox	pH Units	0			-	-	4	-	-	-	5.1	-	-	2.2
Reaction	-	0			-	-	0	-	-	-	0	-	-	0
pH Difference	pH Units	-10			-	-	4.3	-	-	-	1.4	-	-	4.3
Asbestos														
Asbestos fibres	No unit	-			nd	-	-	-	nd	-	-	-	nd	-
Estimated Fibres	mg/kg	100			nd	-	-	-	nd	-	-	-	nd	-

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
##	exceeds NEPC (1999) HIL E
##	exceeds CRC CARE (Direct Contact: HSL C)

Table T2 - Soil Results - Soil Samples in Proposed Recreational Area
SICEEP - PPP Remedial Works Plan

		Field_ID		NBH22_0.5-0.6	NBH22_1.5-1.95
		LocCode		NBH22	NBH22
		Sample_Depth		0.5-0.6	1.5-1.95
		Sampled_Date		24/04/2012	24/04/2012
ChemName	Units	LOR	CRC Care (HSL C)	NEPC 1999 HIL E	
BTEX					
Benzene	mg/kg	0.1	120		<0.1
Toluene	mg/kg	0.1	18,000		<0.1
Ethylbenzene	mg/kg	0.1	5300		<0.1
Xylene (m & p)	mg/kg	0.2			<0.2
Xylene (o)	mg/kg	0.1			<0.1
Xylene Total	mg/kg	0.3	15,000		<0.3
Total BTEX	mg/kg	0			<1.5
TPH					
C6 - C9	mg/kg	10			<20
C6 - C9 minus BTEX	mg/kg				<19.4
C10 - C14	mg/kg	20			<20
C15 - C28	mg/kg	50			<50
C29 - C36	mg/kg	50			<50
C10 - C36 (Sum of total)	mg/kg	100			<120
C15 - C36 (Sum of total)	mg/kg		180	<100	<100
TPH (New NEPM)					
C6 - C10	mg/kg	20			-
C6 - C10 minus BTEX	mg/kg	20			-
C10 - C16	mg/kg	50			-
C10 - C16 minus Naphthalene	mg/kg	50			-
C16 - C34	mg/kg	100			-
C34 - C40	mg/kg	100			-
PAHs					
Acenaphthene	mg/kg	0.1			<0.1
Acenaphthylene	mg/kg	0.1			<0.1
Anthracene	mg/kg	0.1			<0.1
Benz(a)anthracene	mg/kg	0.1			<0.1
Benzo(a)pyrene	mg/kg	0.05	2	<0.1	<0.1
Benzo(a)pyrene TEQ	mg/kg	0.5		-	-
Benzo(b)fluoranthene	mg/kg	0.1		<0.1	<0.1
Benzo(b)&(k)fluoranthene	mg/kg	0.2		-	-
Benzo(g,h,i)perylene	mg/kg	0.1		<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1		<0.1	<0.1
Chrysene	mg/kg	0.1		<0.1	<0.1
Dibenz(a,h)anthracene	mg/kg	0.1		<0.1	<0.1
Fluoranthene	mg/kg	0.1		<0.1	<0.1
Fluorene	mg/kg	0.1		<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1		<0.1	<0.1
Naphthalene	mg/kg	0.1	1900	<0.1	<0.1
Phenanthrene	mg/kg	0.1		0.1	<0.1
Pyrene	mg/kg	0.1		<0.1	<0.1
PAHs (Sum of total)	mg/kg	0.8	40	<0.8	<0.8
Metals					
Arsenic	mg/kg	2		200	3
Cadmium	mg/kg	0.3		40	<0.3
Chromium (III+VI)	mg/kg	0.3		240000	9.7
Copper	mg/kg	0.5		2000	14
Lead	mg/kg	1		600	13
Mercury	mg/kg	0.05		30	<0.05
Nickel	mg/kg	0.5		600	8
Zinc	mg/kg	0.5		14000	25
SVOCs					
Acid Sulphate Soils					
pH (Field)	pH Units	0			-
PHfox	pH Units	0			-
Reaction	-	0			-
pH Difference	pH Units	-10			-
Asbestos					
Asbestos fibres	No unit	-			nd
Estimated Fibres	mg/kg	100			nd

NOTES:

LOR	limit of reporting
mg/kg	milligrams per kilogram
nd	non-detect
##	exceeds NEPC (1999) HIL E
##	exceeds CRC CARE (Direct Contact: HSL C)

Field_ID	MW05	MW06	MW104	MW105FILT	MW105	MW106FILT	MW106	MW107FILT	MW107	MW109FILT	MW109	MW110AFILT	MW110A	MW117	MW13FILT	MW13
LocCode	MW05	MW06	MW104	MW105	MW105	MW106	MW106	MW107	MW107	MW109	MW109	MW110A	MW110A	MW117	MW13	MW13
WellCode	MW05	MW06	MW104	MW105	MW105	MW106	MW106	MW107	MW107	MW109	MW109	MW110A	MW110A	MW117	MW13	MW13
Sampled_Date-Time	2/08/2012	2/08/2012	9/01/2013	9/01/2013	9/01/2013	9/01/2013	9/01/2013	9/01/2013	9/01/2013	10/01/2013	10/01/2013	9/01/2013	9/01/2013	9/01/2013	9/01/2013	2/08/2012
Area	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP

ChemName	Units	LOR	Ecological and Human Health Guidelines															
Inorganics																		
pH (Lab)	pH_Units	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TDS	mg/L	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX																		
Benzene	µg/L	0.5	1 ⁴	<1	<1	<1	-	<1	-	<1	-	<1	-	<1	-	<1	<1	<1
Toluene	µg/L	0.5	180 ¹	<1	<1	<1	-	<1	-	<1	-	<1	-	<1	-	<1	<1	<1
Ethylbenzene	µg/L	0.5	5 ¹	<1	<1	<1	-	<1	-	<1	-	<1	-	<1	-	<1	<1	<1
Xylene (m & p)	µg/L	1	75 ¹	<2	<2	<2	-	<2	-	<2	-	<2	-	<2	-	<2	<2	<2
Xylene (o)	µg/L	0.5	350 ¹	<1	<1	<1	-	<1	-	<1	-	<1	-	<1	-	<1	<1	<1
Xylene Total	µg/L	1.5		<3	<3	<3	-	<3	-	<3	-	<3	-	<3	-	<3	<3	<3
Total BTEX	mg/L	0.003		<0.01	<0.01	<0.01	-	<0.01	-	<0.01	-	<0.01	-	<0.01	-	<0.01	<0.01	<0.01
TPH																		
C6 - C9	µg/L	10	300 ⁵	<20	<20	<20	-	<20	-	<20	-	<20	-	<20	-	<20	<20	<20
C6 - C9 minus BTEX	µg/L			<14	<14	<14	-	<14	-	<14	-	<14	-	<14	-	<14	<14	<14
C10 - C14	µg/L	50	90 ⁵	<50	<50	<50	-	<50	-	<50	-	<50	-	<50	-	<50	<50	<50
C15 - C28	µg/L	100		<100	<100	<100	-	<100	-	<100	-	100	-	<100	-	<100	-	<100
C29 - C36	µg/L	100		<100	<100	<100	-	<100	-	<100	-	<100	-	<100	-	<100	-	<100
C10 - C36 (Sum of total)	µg/L	100	600 ²	<100	<100	<100	-	<100	-	<100	-	100	-	<100	-	<100	-	<100
C15 - C36 (Sum of total)	µg/L			<200	<200	<200	-	<200	-	<200	-	150	-	<200	-	<200	-	<200
TPH (New NEPM)																		
C6 - C10	mg/L	0.01	0.3 ⁵	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.02	-	<0.02	-	<0.02	-	<0.02
C6 - C10 minus BTEX	mg/L	0.01		<0.02	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.02	-	<0.02	-	<0.02	-	<0.02
C10 - C16	mg/L	0.05	0.09 ⁵	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05
C10 - C16 minus Naphthalene	mg/L	0.05		<0.05	<0.05	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05	-	<0.05
C16 - C34	mg/L	0.1	0.09 ⁵	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	0.1	-	<0.1	-	<0.1	-	<0.1
C34 - C40	mg/L	0.1	0.09 ⁵	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1	-	<0.1
PAHs																		
Acenaphthene	µg/L	0.01	5.8 ³	<1	<1	<1	<0.01	0.12	<0.01	0.01	<0.01	<0.01	<0.01	0.04	<0.01	0.04	-	<0.01
Acenaphthylene	µg/L	0.01	5.8 ³	<1	<1	<1	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.03	-	<0.01
Anthracene	µg/L	0.01	0.4 ¹	<1	<1	<1	<0.01	0.05	<0.01	0.01	<0.01	0.02	<0.01	0.06	<0.01	0.02	-	0.01
Benz(a)anthracene	µg/L	0.01	1 ¹	<1	<1	1	<0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.07	<0.01	0.02	-	<0.01
Benzo(a)pyrene	µg/L	0.01	0.2 ¹	<1	<1	<1	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	0.02	-	<0.01
Benzo(a)pyrene TEQ	mg/L	0.00005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)&(k)fluoranthene	µg/L	0.02	0.36 ²	<2	<2	<2	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	<0.02	0.04	-	<0.02
Benzo(g,h,i)perylene	µg/L	0.01	0.18 ²	<1	<1	<1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	-	<0.01
Benzo(k)fluoranthene	µg/L	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	µg/L	0.01	1.2 ²	<1	<1	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	-	<0.05
Dibenz(a,h)anthracene	µg/L	0.01		<1	<1	<1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Fluoranthene	µg/L	0.01	1.4 ¹	<1	<1	2	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	0.85	<0.05	0.05	-	<0.05
Fluorene	µg/L	0.01	3 ³	<1	<1	<1	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	-	<0.05
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	0.036 ²	<1	<1	<1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Naphthalene	µg/L	0.01	1.4 ⁶	<1	<1	<1	<0.05	0.27	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.06	-	<0.05
Phenanthrene	µg/L	0.01	2 ¹	<1	<1	<1	<0.05	0.28	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	0.07	-	<0.05
Pyrene	µg/L	0.01	0.025 ³	<1	<1	2	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	0.73	<0.05	0.05	-	<0.05
PAHs (Sum of total)	µg/L	0.05		<2	<2	6	<0.05	1.1	<0.05	<0.05	<0.05	0.09	<0.05	2	<0.05	0.46	-	<0.05
Metals																		
Arsenic (Filtered)	mg/L	0.001	0.89 ²	-	-	0.003	-	<0.001	-	0.001	-	<0.001	-	0.001	-	0.008	0.003	-
Cadmium (Filtered)	mg/L	0.0001	0.0055 ¹	-	-	0.0003	-	0.0003	-	0.0002	-	0.0004	-	0.0002	-	0.0002	0.0002	-
Chromium (III+VI) (Filtered)	mg/L	0.001	0.0044 ¹	-	-	<0.001	-	<0.001	-	<0.001	-	<0.001	-	<0.001	-	<0.001	<0.001	-
Copper (Filtered)	mg/L	0.001	0.0013 ¹	-	-	0.004	-	0.003	-	<0.001	-	0.001	-	<0.001	-	<0.001	0.001	-
Lead (Filtered)	mg/L	0.001	0.0044 ¹	-	-	<0.001	-	0.001	-	<0.001	-	<0.001	-	<0.001	-	<0.001	<0.001	-
Mercury	mg/L	0.0001	0.0004 ¹	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury (Filtered)	mg/L	0.00005	0.0004 ¹	-	-	<0.0001	-	<0.0001	-	<0.0001	-	<0.0001	-	<0.0001	-	<0.0001	<0.0001	-
Nickel (Filtered)	mg/L	0.001	0.07 ¹	-	-	0.003	-	0.005	-	<0.001	-	0.013	-	0.002	-	<0.001	0.006	-
Zinc (Filtered)	mg/L	0.001	0.015 ¹	-	-	0.042	-	0.028	-	<0.005	-	0.007	-	<0.005	-	0.007	0.006	-

NOTES:

LOR	limit of reporting
##	Exceeds: ¹ ANZECC (2000) Marine Criteria for 95% species ² RIVM (2001) Ecotoxicological Serious Risk Concentrations ³ CCME (2007) Aquatic Life ⁴ NHMRC (2011) Drinking Water Guidelines ⁵ WHO (2008) Petroleum Products in Drinking Water ⁶ USEPA November 2012 Tap Water Quality
µg/L	micrograms per Litre
mg/L	milligrams per Litre
FILT	filtered sample

Field ID	MW13	MW16FILT	MW16	MW16	MW16	MW20FILT	MW20	MW20	MW5FILT	MW5	MW5	MW6FILT	MW6
LocCode	MW13	MW16	MW16	MW16	MW16	MW20	MW20	MW20	MW05	MW05	MW05	MW06	MW06
WellCode	MW13	MW16	MW16	MW16	MW16	MW20	MW20	MW20	MW05	MW05	MW05	MW06	MW06
Sampled Date-Time	9/01/2013	8/01/2013	9/05/2012	2/08/2012	8/01/2013	8/01/2013	2/08/2012	8/01/2013	9/01/2013	9/05/2012	9/01/2013	10/01/2013	10/01/2013
Area	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP	PPP

ChemName	Units	LOR	Ecological and Human Health Guidelines													
Inorganics																
pH (Lab)	pH Units	0		-	-	6.8	-	-	-	-	-	-	7.1	-	-	-
TDS	mg/L	10		-	-	30,400	-	-	-	-	-	-	18,400	-	-	-
BTEX																
Benzene	µg/L	0.5	1 ⁴	<1	-	<0.5	<1	<1	-	<1	<1	-	<5	<1	-	<1
Toluene	µg/L	0.5	180 ¹	<1	-	<0.5	<1	<1	-	<1	<1	-	<5	<1	-	<1
Ethylbenzene	µg/L	0.5	5 ¹	<1	-	<0.5	<1	<1	-	<1	<1	-	<5	<1	-	<1
Xylene (m & p)	µg/L	1	75 ¹	<2	-	<1	<2	<2	-	<2	<2	-	<10	<2	-	<2
Xylene (o)	µg/L	0.5	350 ¹	<1	-	<0.5	<1	<1	-	<1	<1	-	<5	<1	-	<1
Xylene Total	µg/L	1.5		<3	-	<1.5	<3	<3	-	<3	<3	-	<15	<3	-	<3
Total BTEX	mg/L	0.003		<0.01	-	<0.003	<0.01	<0.01	-	<0.01	<0.01	-	<0.03	<0.01	-	<0.01
TPH																
C6 - C9	µg/L	10	300 ⁵	<20	-	<40	<20	<20	-	<20	<20	-	<400	<20	-	<20
C6 - C9 minus BTEX	µg/L			<14	-	<37	<14	<14	-	<14	<14	-	<370	<14	-	<14
C10 - C14	µg/L	50	90 ⁵	<50	-	<100	<50	<50	-	<50	<50	-	<100	<50	-	<50
C15 - C28	µg/L	100		<100	-	<200	<100	<100	-	<100	<100	-	<200	<100	-	<100
C29 - C36	µg/L	100		<100	-	<200	<100	<100	-	<100	<100	-	<200	<100	-	<100
C10 - C36 (Sum of total)	µg/L	100	600 ²	<100	-	<500	<100	<100	-	<100	<100	-	<500	<100	-	<100
C15 - C36 (Sum of total)	µg/L			<200	-	<400	<200	<200	-	<200	<200	-	<400	<200	-	<200
TPH (New NEPM)																
C6 - C10	mg/L	0.01	0.3 ⁵	<0.02	-	-	<0.02	<0.02	-	<0.02	<0.02	-	-	<0.02	-	0.02
C6 - C10 minus BTEX	mg/L	0.01		<0.02	-	-	<0.02	<0.02	-	<0.02	<0.02	-	-	<0.02	-	0.02
C10 - C16	mg/L	0.05	0.09 ⁵	<0.05	-	-	<0.05	<0.05	-	<0.05	<0.05	-	-	<0.05	-	<0.05
C10 - C16 minus Naphthalene	mg/L	0.05		<0.05	-	-	<0.05	<0.05	-	<0.05	<0.05	-	-	<0.05	-	<0.05
C16 - C34	mg/L	0.1	0.09 ⁵	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	<0.1	-	<0.1
C34 - C40	mg/L	0.1	0.09 ⁵	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	-	-	<0.1	-	<0.1
PAHs																
Acenaphthene	µg/L	0.01	5.8 ³	0.02	<0.01	<0.1	<1	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	5.8 ³	0.01	<0.01	<0.1	<1	<0.01	<0.01	<1	<0.01	0.01	<0.1	<0.01	<0.01	<0.01
Anthracene	µg/L	0.01	0.4 ¹	0.02	<0.01	<0.1	<1	<0.01	<0.01	<1	<0.01	0.01	<0.1	<0.01	<0.01	<0.01
Benz(a)anthracene	µg/L	0.01	1 ¹	0.03	<0.01	<0.1	<1	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
Benzo(a)pyrene	µg/L	0.01	0.2 ¹	0.02	<0.01	<0.1	<1	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
Benzo(a)pyrene TEQ	mg/L	0.00005		-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	0.1		-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-
Benzo(b)&(k)fluoranthene	µg/L	0.02	0.36 ²	0.04	<0.02	-	<2	<0.02	<0.02	<2	<0.02	<0.02	-	<0.02	<0.02	<0.02
Benzo(g,h,i)perylene	µg/L	0.01	0.18 ²	0.01	<0.01	<0.1	<1	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	µg/L	0.1		-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-
Chrysene	µg/L	0.01	1.2 ²	<0.05	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/L	0.01		<0.05	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Fluoranthene	µg/L	0.01	1.4 ¹	0.08	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Fluorene	µg/L	0.01	3 ³	<0.05	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	µg/L	0.01	0.036 ²	<0.05	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Naphthalene	µg/L	0.01	1.4 ⁶	<0.05	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Phenanthrene	µg/L	0.01	2 ¹	<0.05	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Pyrene	µg/L	0.01	0.025 ³	0.16	<0.05	<0.1	<1	<0.05	<0.05	<1	<0.05	0.26	<0.1	<0.05	<0.05	<0.05
PAHs (Sum of total)	µg/L	0.05		0.39	<0.05	<1	<2	<0.05	<0.05	<2	<0.05	0.28	<1	<0.05	<0.05	<0.05
Metals																
Arsenic (Filtered)	mg/L	0.001	0.89 ²	0.004	-	<0.002	-	0.001	-	-	<0.001	-	<0.002	0.005	-	<0.001
Cadmium (Filtered)	mg/L	0.0001	0.0055 ¹	0.0002	-	<0.001	-	<0.0001	-	-	<0.0001	-	<0.001	<0.0001	-	0.0002
Chromium (III+VI) (Filtered)	mg/L	0.001	0.0044 ¹	<0.001	-	<0.01	-	<0.001	-	-	<0.001	-	<0.01	<0.001	-	<0.001
Copper (Filtered)	mg/L	0.001	0.0013 ¹	<0.001	-	0.003	-	0.001	-	-	<0.001	-	0.002	0.001	-	0.001
Lead (Filtered)	mg/L	0.001	0.0044 ¹	<0.001	-	<0.001	-	0.001	-	-	<0.001	-	<0.001	<0.001	-	<0.001
Mercury	mg/L	0.0001	0.0004 ¹	-	-	<0.0001	-	-	-	-	-	-	<0.0001	-	-	-
Mercury (Filtered)	mg/L	0.00005	0.0004 ¹	<0.0001	-	-	-	<0.0001	-	-	<0.0001	-	-	<0.0001	-	<0.0001
Nickel (Filtered)	mg/L	0.001	0.07 ¹	0.002	-	<0.01	-	0.001	-	-	<0.001	-	<0.01	0.001	-	<0.001
Zinc (Filtered)	mg/L	0.001	0.015 ¹	0.008	-	0.019	-	0.006	-	-	<0.005	-	0.043	0.03	-	<0.005

NOTES:

LOR	limit of reporting
##	Exceeds: ¹ ANZECC (2000) Marine Criteria ² RIVM (2001) Ecotoxicological Se ³ CCME (2007) Aquatic Life ⁴ NHMRC (2011) Drinking Water C ⁵ WHO (2008) Petroleum Products ⁶ USEPA November 2012 Tap Wa
µg/L	micrograms per Litre
mg/L	milligrams per Litre
FILT	filtered sample