Appendix 3

APPENDIX E

Technical Memorandum from Golder Associates Ltd.

TECHNICAL MEMORANDUM

DATE November 3, 2012 **PROJECT No.** 12-1134-0194-M01

TO Marc Brooks
CLAW Environmental Services

CC Nicole MacDonald, Sam Damm

FROM Derek Mulligan, John McNeil, Keith Lesarge **EMAIL** dmulligan@golder.com, jmcneil@golder.com, klesarge@golder.com

ASSESSMENT OF LEGACY OIL AND GAS WELLS WIKWEMIKONG UNCEDED INDIAN RESERVE #26 MANITOULIN ISLAND, ONTARIO

Scope of Work

Golder Associates Ltd. (Golder) was retained by CLAW Environmental Services (CLAW) on behalf of Public Works and Government Services Canada (PWGSC) to carry out an assessment of the work required and budget level costs associated with the decommissioning of seven legacy oil and gas wells located on the Wikwemikong Unceded Indian Reserve (WUIR), south of the community of Wikwemikong on Manitoulin Island, Ontario (hereinafter referred to as the "Site").

The scope of work for the assessment included a review of historical oil well records available through the Oil, Gas and Salt Resource Library for the area and a site reconnaissance to document the condition of each well site.

This technical memorandum summarizes the findings of our assessment.

Historical Oil Well Records Review

An on-line search of available historical oil well records was conducted through the Oil, Gas and Salt Resource Library for any records of producing, past-producing and/or plugged oil wells located on WUIR. A total of six records were obtained for registered oil wells located within the area of interest. Four of the wells were located approximately 3 kilometres (km) south of the reported locations for the seven identified wells. The total vertical depth that these four wells were drilled ranged between approximately 90 and 275 metres below ground surface (mbgs). The reported drilling dates of three of the wells ranged between 1883 and 1958. The remaining well record did not define a drilling date. One of the well records (N002182), drilled in 1958 to a depth of approximately 275 mbgs, was reportedly plugged shortly after completion. Available details regarding plugging activities for this well were as follows:

- 275 to 271.9 metres (m) depth: filled with stone with three sacks of cement on top;
- 159.5 m depth: set 152.4 millimetres (mm) (6-inch) lead plug with three sacks of cement on top;

- 122 m depth: set bridge with two sacks of cement on top;
- 19.9 m depth: set 203 mm (8-inch) lead plug with three sacks of cement on top; and
- Fill hole to within 2.5 m of ground surface (unknown material) and top with three sacks of cement.

Two of the remaining oil well records (N002160 and N002161) indicated well locations in the vicinity of the seven identified wells. The location of Well N002160 roughly corresponds to that of Well 4. Well N002161 was reportedly located in the general area between Well 4 and 7. According to the well records, the locations provided are accurate to +/- 50 m. A summary of these two well records is provided below.

Licence No: N002160	
Well Name/Operator:	Great Lakes Carbon No. 4 / Great Lakes Carbon
Total Vertical Depth:	222.5 m
Drilling Date:	July 30, 1950
Gas Record	
Interval/Flow (m^3/day):	none available
Oil Record	
Interval/Flow (m^3/day):	125.3-130.5 m / show
Water Record	
Interval/Type:	none available
Geological Formations: (top of formation)	Drift – 0.3 m Top of Bedrock – 1.2 m Georgian Bay/Blue Mountain – 1.2 m Collingwood – 110.6 m Trenton – 117.0 m Black River – 176.8 m Precambrian – 220.7 m
Plugging Record:	None available

Licence No: N002161	
Well Name/Operator:	Great Lakes Carbon No. 5 / Great Lakes Carbon
Total Vertical Depth:	89.9 m
Drilling Date:	August 17, 1950
Gas Record	
Interval/Flow (m^3/day):	82.6-83.5 m / show
Oil Record	
Interval/Flow (m^3/day):	82.6-83.5 m / show
Interval/Flow (m^3/day):	87.5- ? m / show
Water Record	
Interval/Type:	82.6-83.5 m / salt
Interval/Type:	87.5- ? m / salt
Geological Formations: (top of formation)	Drift – 0.3 m Top of Bedrock – 18.3 m Georgian Bay/Blue Mountain – 18.3 m Collingwood – 73.5 m Trenton – 79.3 m
Plugging Record:	None available

In addition to the oil well records described above, six abandonment programs for similar historical oil wells located within Manitoulin County were reviewed. These abandonment programs were developed by a licensed

oil well examiner as part of a previous historical oil well abandonment project. In general, the wells were drilled to total vertical depths ranging between 142 and 206 mbgs and the anticipated subsurface conditions were similar. The anticipated conditions are summarized below:

- 10 to 15 m below ground surface: expected depth to fresh water;
- 145 to 155 m below ground surface: expected depth to salt water;
- 85 to 95 m below ground surface: expected depth to gas producing formation;
- 130 to 140 m below ground surface: expected depth to gas producing formation; and
- 125 m below ground surface to depth of well: expected depth to oil producing formation.

The seven oil wells identified as part of the current investigation are anticipated to have encountered similar subsurface conditions during drilling to those described above in the abandonment programs.

Field Observations

The following paragraphs summarize the conditions of the existing casings and surrounding areas associated with the individual historical oil wells, as observed during the site visit carried out by Golder and CLAW on September 12, 2012. Detailed descriptions for each well site are provided in Table 1. The approximate locations of the seven wells are shown on the attached Location Plan, Figure 1. Photographs of the wells and surrounding lands are provided in Appendix A.

As shown on Figure 1, all seven wells were located within an area of approximately one square kilometre (km^2). The wells at each location were typically constructed with a nominal 127 mm (5-inch) in diameter steel casing, which was observed to be in good condition, with only surficial corrosion noted at surface. Minor casing damage was observed at specific locations and is described in further detail below and in Table 1. With the exception of Well 1B, individual well casings at each site had a nominal wall thickness of approximately 3 mm. Well 1B had a nominal wall thickness of approximately 5 mm. The wells casings generally extended between 0.45 and 0.55 m above ground surface, with the exception of Well 1A and Well 3, described below.

Well 1A

Well 1A was located along the northern edge of a small stand of trees and brush surrounded by an open field. The well was located approximately 185 m northwest of Kaboni Road. The well casing extended approximately 0.16 m above ground surface and was observed to be in good condition. Approximately 0.06 m below the top of casing a cement plug was observed, obstructing access to the well. Gas was noted to be venting through small perforations in the cement plug. The cement plug, steel casing and surrounding ground surface were stained black. The extent of staining on ground surface did not appear to extend beyond an approximate 0.3 m radius from the steel casing. A shallow (0.3 m deep) test pit was manually dug approximately 0.3 m north of the casing. The excavation encountered native sand beneath a thin layer of topsoil. No visual or olfactory evidence of petroleum hydrocarbon impacts were noted in the excavated or exposed soils.

The well was readily accessible using a four wheel drive truck. Access was obtained through a relatively flat to slightly undulating field entered from the west side of Kaboni Road. With the exception of clearing and grubbing of the trees and brush immediately adjacent the well casing, no significant issues regarding drill rig access were observed.

Well 1B

Well 1B was located within a wooded area approximately 500 m northwest of Kaboni Road. The well was located approximately 5 to 10 metres northeast of the northwest-southeast oriented tree line running along the adjacent field. The well casing extended approximately 0.5 m above ground surface and was observed to be in good condition. Oil was observed to be level with the top of the well casing and gas was noted to be bubbling through the accumulated oil. An obstruction within the well casing was noted approximately 0.7 m below the top of the casing. The steel casing and surrounding ground surface were stained black. The staining appeared to be limited to the depression immediately surrounding the well casing extending approximately 1 m outward from the casing. Three shallow test pits were manually dug to investigate the extent of petroleum hydrocarbon impact to subsurface soils. One of the test pits was located within approximately 0.1 m of the well casing and encountered oily organic material to a depth of approximately 0.4 m, corresponding to the terminus of the excavation. The two remaining test pits were advanced north and east of the well casing immediately outside of the visual area of impact. Both test pits averaged 0.4 m in depth and encountered native sand beneath a thin layer of topsoil. No visual or olfactory evidence of petroleum hydrocarbon impacts were noted in the excavated or exposed soils of the latter two test pits. Two soil samples were submitted for chemical analysis of petroleum hydrocarbon parameters. The analytical results are described below.

The well was readily accessible using a four wheel drive truck. Access was obtained via an existing trail through grassy fields entered from the west side of Kaboni Road; however, the trail is cross-cut by a drainage swale (dry at the time of the site visit), which may require site grading and/or preparation to facilitate drill rig access through the area. No other significant issues regarding drill rig access were noted. The wooded area leading from the trail up to the well casing will require clearing and grubbing prior to drill rig mobilization. Some site grading in the vicinity of the well casing may be required.

Well 2

Well 2 was located approximately 8 m west of Kaboni Road, adjacent to a small evergreen tree, near the southeast corner of MN 780 Kaboni Road. The well casing extended approximately 0.5 m above ground surface and was observed to be in fair condition, with some damage noted near the top of the casing. The well casing was obstructed at approximately 0.6 m below the top of the casing. A steel chain appeared to be fixed to the casing and extended below the top of the ground surface. The chain is inferred to have been left following installation or during a previous attempt to pull the casing from the ground.

No visual or olfactory evidence of petroleum hydrocarbon impact was noted in the excavated or exposed soils in the shallow test pits advanced in the immediate vicinity of the well.

The well should be readily accessible for the drill rig; however, overhead power transmission lines are located approximately 2 m east of the well casing, requiring appropriate safety measures and controls to be implemented by the abandonment contractor and Hydro One. A narrow east-west oriented drainage ditch was located immediately south of the well casing, limiting the available workspace during abandonment.

Well 3

Well 3 was located within a clearing located approximately 130 m east of Kaboni Road. The well was located along the western edge of a grassy field, adjacent to a wooded area. The well casing extended approximately 0.1 m above ground surface and was observed to be in good condition. The well casing was capped with a metal plate, approximately 0.2 m in diameter, with pipe fitting protruding from the center of the plate. The plate could not be removed with the equipment at hand during the site visit. According to information provided by our site contact, the well was reportedly installed for gas production.

No visual or olfactory evidence of petroleum hydrocarbon impact was noted in the excavated or exposed soils in two shallow test pits advanced in the vicinity of the well casing. The encountered soils generally consisted of approximately 0.3 m of topsoil underlain by native sands.

The well was readily accessible using a four wheel drive truck. Access was obtained through an entrance located on Kaboni Road approximately 200 metres south of the well. With the exception of narrow access through an existing gate and laneway, no significant issues regarding drill rig access were noted.

Well 4

Well 4 was located within a forested area approximately 80 m east of Murray Hill Road. The well casing extended approximately 0.4 m above ground surface and was observed to be in fair condition, with some damage noted near the top of the casing. Water was encountered at approximately 0.4 m below the top of the casing. The well casing was obstructed at approximately 0.7 m below the top of the casing.

A faint petroleum hydrocarbon odour was noted emanating from the casing and gas was noted to be bubbling intermittently through the water column. No visual or olfactory evidence of petroleum hydrocarbon impacts were noted in the shallow test pits excavated in the vicinity of the well. The test pits were excavated to a depth of approximately 0.5 m and encountered approximately 0.25 m of topsoil underlain by native silt with some clay.

Direct drill rig access to the well will require significant site preparation, including grading, clearing and grubbing.

Well 7

Well 7 was located within a forested area approximately 15 m east of Kaboni Road. The forested area was characterized by a dense thicket of trees generally averaging 0.1 to 0.2 m in diameter at breast height. The well casing extended approximately 0.6 m above ground surface and was observed to be in fair condition with some damage consisting of a slightly flared upper 0.1 m of casing. The well casing was obstructed with debris approximately 0.2 m below the top of casing. The open portion above the obstruction was noted to be dry at the time of the site visit.

A faint petroleum hydrocarbon odour was noted emanating from the well casing. No visual evidence of petroleum hydrocarbon impact was observed in subsurface soils surrounding the well casing following the excavation of shallow test pits in the area. No visual evidence of petroleum hydrocarbon impact (sheen) was observed on the surface of the water within the nearby creek.

Direct drill rig access to the well from the road will require significant site preparation, including grading, clearing and grubbing. An adjacent drainage swale located approximately 2 m west of the well, although dry at the time of the site visit, was noted to be approximately 1.3 m deep. The swale runs parallel to the adjacent roadway and discharges to the aforementioned creek, located approximately 20 m to the north. The swale comes up to grade approximately 10 metres south of the well providing a possible alternative access route to the well, which avoids the swale.

Well 13

Well 13 was located on generally level ground within the roadside ditch, approximately 15 m west of Kaboni Road. A narrow hedgerow of trees was located immediately northwest of the well casing. The well casing extended approximately 0.5 m above ground surface and was observed to be in fair condition with some damage to the upper 0.1 m of casing noted. Several large rocks were observed obstructing the well at a depth of approximately 0.1 m below the top of the casing. A metal tape measure was passed beyond the obstruction

and oil was encountered at approximately 1.7 m below the top of the casing. The well remained open to a depth of at least 8 m.

No visual or olfactory evidence of petroleum hydrocarbon impact was noted in the excavated or exposed soils in one shallow test pit advanced immediately adjacent to the casing. The encountered soils generally consisted of native sands underlying a thin layer of topsoil.

Drill rig access to the well casing will require significant site preparation. An elevation change of approximately 3 m over the 15 m distance from the adjacent road will require site grading and the possible importation of suitable fill material in order to provide suitable access and a level working platform. Some clearing and grubbing of the adjacent hedgerow may also be required.

Analytical Results of Soil Samples

A total of four soil samples were collected from selected shallow test pits advanced in the vicinity of Wells 1B, 3 and 4. The samples were analyzed for petroleum hydrocarbon parameters including: petroleum hydrocarbons in the fractions $F1_{C6-C10}$, $F2_{C10-C16}$, $F3_{C16-C34}$, and $F4_{C34-C50}$ (collectively referred to as PHC F1-F4) and benzene, toluene, ethylbenzene and total xylenes (collectively referred to as BTEX). The samples were collected into pre-cleaned, laboratory-prepared vials and jars and kept on ice in a cooler until delivery under chain of custody procedures to the Maxxam Analytics depot in London, Ontario.

The samples were identified as SS#1BA and SS#1BB (Well 1B), SS#3A (Well 3), and SS#4A (Well 4). The results of chemical analysis are summarized in Table 2 and were compared the applicable criteria in the Ministry of the Environment (MOE) document: "Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the *Environmental Protection Act*" (April 2011) (MOE Standards). The standards considered appropriate for the Site were the residential/parkland/institutional property use for a non-potable groundwater condition (Table 3 of the MOE Standards). Additionally, based on the potential requirement for waste soil removal during remediation activities, the results of chemical analysis of the collected soil samples were further compared to Table 1 of the MOE Standards (i.e. background). A copy of the Certificate of Analysis is provided in Appendix B.

As summarized in Table 2, with the exception of SS#1BA, all soil samples returned concentrations of PHC F1-F4 and BTEX below the applicable MOE Table 3 Standards. Soil sample SS#1BA was collected immediately adjacent to Well 1B, within the heavily oil-impacted organic material surrounding the well casing. The sample returned concentrations of one or more of the petroleum hydrocarbon parameters significantly above the MOE Table 3 Standards. Soils in this area will, therefore, require remediation, likely in the form of excavation and disposal, during abandonment activities. With the exception of SS#4, all soil samples returned concentrations of PHC F1-F4 above MOE Table 1 Standards (background). It is inferred that any excavations generating waste soil material requiring off-site disposal will require appropriate off-site disposal at a suitably licensed landfill.

Minimal petroleum hydrocarbon impacts were observed in the vicinity of Wells 2, 3, 4, 7 and 13. As a result, it is anticipated that any excavated material generated during abandonment activities can be temporarily stockpiled and potentially used as fill at one of the other well sites, if required.

As noted above, oil staining was observed surrounding Wells 1A and 1B. It is anticipated that the impacted area at these sites is limited, with the area of staining extended less than approximately one m from the well casing for both wells. For budget level cost analysis purposes, it was inferred that the impacted material likely extended up to the underlying bedrock, which is anticipated to be approximately 3 m below ground surface.

Cost Estimate

A suggested budget level cost allowance for the proposed abandonment and remediation activities is provided in Appendix C. The estimate is based on the conditions observed at the time of the site visit on September 12, 2012. A breakdown of the costs by task, and the assumptions made in developing the cost estimate, are provided in Appendix C. The costs provided herein are for planning purposes only. The actual costs to complete the well abandonment and remediation activities will depend on the encountered conditions and a suitable contingency fund should be established.

Recommendations

It is recommended that the seven historical oil wells described herein be properly abandoned in accordance with applicable Ministry of Natural Resources (MNR) requirements. Priority should be given to abandoning Well 1B, since oily product was observed on the ground surface immediately surrounding the well casing, and Well 2 due to its proximity to nearby residences. The remaining wells should be prioritised for abandonment based on proximity to the previously completed well, scheduling and access considerations.

Closure

We trust that the information provided herein is sufficient for your needs. Should you have any questions or concerns, or if we can be of additional assistance, please do not hesitate to contact the undersigned.

Yours truly,

GOLDER ASSOCIATES LTD.

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Attachments: Tables 1 and 2
Figure 1
Appendices A, B and C

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TABLE 1
FIELD OBSERVATIONS OF WELL CONDITIONS
Wikwemikong Unceded Indian Reserve #26
Manitoulin Island, Ontario

Well ID	UTM	Casing Well Details	Access	Notes
#4	444665 5069257	diameter: 127 mm (5") thickness: 3 mm stickup: 43 cm water/oil level: 42 cm (water) obstruction: 74 cm notes: - casing solid, good shape, minor rusting - minor bend but near top - obstruction feels like rocks +/- mud	- well located approximately 80 metres southeast of roadway - access is flat to gently sloping upwards - remnants of an old roadway beyond a gate - thin bush (mostly poplar) averaging 4 to 6 inches in diameter - could use wheeled rig with minor help of excavator and/or chainsaw	- well giving off minor gas odour - started bubbling and expelling gas when agitated with probe but was intermittent and stopped after about 3 min. - no visible impact on ground surface surrounding casing
#2	444347 5068949	diameter: 127 mm (5") thickness: 3 mm stickup: 45 cm water/oil level: dry to obstruction obstruction: 64 cm notes: - casing mushroomed on top - solid, good shape, minor rusting - obstruction feels like rocks - chain attached - inferred to be left after someone attempted to pull casing	- well located at SE corner of lawn for MN 780 Kaboni Road, behind small tree - well located approximately 8 m west of roadway and 1.9 m west of adjacent power pole and overhead wires - no issues for wheeled rig - access by homeowner laneway and across lawn on flat ground - shallow (E-W) drainage ditch immediately south of well casing	- no apparent odour - no evidence of impact to surrounding ground surface
#3	444528 5068970	diameter: 127 mm (5") thickness: 3 mm stickup: 11 cm to steel plate, 20 cm overall water/oil level: capped on top with steel plate obstruction: unknown notes: - casing capped with 8" diameter steel plate with 1.5" steel pipe fitting - appears to be pounded on - not welded - small hole in side of casing - peat or topsoil in top of hole	- well located approximately 250 m down laneway from main road and along farmers field - no issues for wheeled rig	- well reportedly drilled for gas, not oil - high vapour readings with Eagle but only through hole in casing but confined, no apparent odour otherwise - no visible impact on ground surface surrounding casing
#7	444278 5069747	diameter: 127 mm (5") thickness: 3 mm stickup: 55 cm water/oil level: dry to obstruction obstruction: 21 cm notes: - mushroomed top but otherwise good condition - small hole in side of casing approximately 4" from top	- well located approximately 15 m east of Kaboni Road through dense but young bush (4" to 6" diameter trees) - located approximately 2 m east of narrow, 1.25 m deep, N-S oriented drainage ditch (dry) - ditch sloped down to adjacent creek located approximately 18 m north of well - access with wheeled rig would be difficult - need to access approximately 10 m south along roadway and around drainage ditch - ground would need to be leveled and a significant amount of brush cleared for rig	- minor gas odour from well - well on top of small hill and slopes quickly down towards drainage ditch to west - no visible impact on ground surface surrounding casing
#1B	443823 5070007	diameter: 127 mm (5") thickness: 5 mm stickup: 50 cm water/oil level: to top of casing (bubbling) obstruction: 68 cm notes: - casing in very good shape and solid in ground	- well located approximately 500 metres west of Kaboni Road through farmers field. Minor dip when crossing drainage ditch - may need fill for access with wheeled rig. - well located approximately 5 to 10 m into the bush from farmers field. - needs clearing, some adjacent trees are mature and up to 12" in diameter.	- gas bubbling up through oil and water - about 3 foot radius around well casing that is oil stained, minor depression, contianing buckets and debris. - well reportedly blew oil half-way up adjacent trees, no evidence of this, trees appear in good condition. - no evidence of impact outside the 3 foot radius, sandy ground - collected a sample of oil from well
#13	444294 5069881	diameter: 127 mm (5") thickness: 3 mm stickup: 50 cm water/oil level: 2.74 m obstruction: 7 cm notes: - rocks at top of well but open beyond with oil level at 2.74 m (9'). Well remained open to end of tape (8m / 26') - top of casing is damaged but in good shape after about 15 cm following minor bend/crimp	- well located in ditch, about 3 m below adjacent road surface. - well located along tree line, approximately 15 metres west of road - difficult for wheeled rig to access without significant grading	- oil in well at depth, only faint gas odour observed - no evidence of impact surrounding well
#1A	444238 5070074	diameter: 127 mm (5") thickness: 3 mm stickup: 16 cm water/oil level: cemented obstruction: cemented at approx. 6 cm below top of casing notes: - casing in good shape but cut close to ground - cemented at top but air/gas escaping as evidenced by bubbles when water added	- well located about 185 m west of Kaboni Rd., through farmers field (grass) - no issues with wheeled rig	- faint gas odour from well through perforations in cemented top - minor oily staining on surrounding ground surface , radius of about 0.5 m around casing

Notes: 1. Table to be read in conjunction with accompanying text.

Prepared By: DM
Checked By: JM

TABLE 2

ANALYTICAL RESULTS FOR PETROLEUM HYDROCARBONS AND BTEX COMPOUNDS IN SOIL

Wikwemikong Unceded Indian Reserve #26
Manitoulin Island, Ontario

	Location:	SS#1BA	SS#1BB	SS#3A	SS#4A		
	Depth (mbgs):	0.4	0.4	0.4	0.5	2011	2011
	Soil Type:	OILY ORGANIC	SAND	SAND	SILT	MOE TABLE 3	MOE TABLE 1
	Sample Date:	12-Sep-2012	12-Sep-2012	12-Sep-2012	12-Sep-2012	STANDARDS[1]	STANDARDS[2]
PARAMETER	UNITS						
Benzene	µg/g	<0.060	<0.020	<0.020	<0.020	0.17	0.02
Toluene	µg/g	**0.24**	<0.020	<0.020	<0.020	6	0.20
Ethylbenzene	µg/g	**0.33**	<0.020	<0.020	<0.020	15	0.05
p+m-Xylenes	µg/g	1.3	<0.040	<0.040	<0.040	--	--
o-Xylene	µg/g	0.70	<0.020	<0.020	<0.020	--	--
Total Xylenes[3]	µg/g	**2.0**	<0.040	<0.040	<0.040	25	0.05
PHC F1 (C_6 - C_{10})[4]	µg/g	**720**	<10	<10	<10	65	25
PHC F2 (>C_{10} - C_{16})	µg/g	**18000**	<10	**24**	<10	150	10
PHC F3 (>C_{16} - C_{34})	µg/g	**150000**	**430**	**1200**	140	1300	240
PHC F4 (>C_{34} - C_{50})	µg/g	**62000**	**330**	**820**	83	5600	120
Reached Baseline at C_{50}		No	No	No	Yes	--	--
F4G-sg	µg/g	**250000**	**1200**	**3000**	-	5600	120

NOTES:
1. MOE 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act*'. Table 3 Full Depth Generic Site Condition Standards in a non-potable groundwater condition for residential/parkland/institutional property use. Values in brackets apply to medium and fine textured soils; non-bracketed values apply to coarse textured soils.
2. MOE 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act*'. Table 1 Full Depth Background Site Condition Standards for residential/parkland/institutional/industrial/commercial/community property use.
3. Total xylenes represents the sum of p+m- and o-xylenes.
4. Recorded concentrations for PHC F1 are measured values minus BTEX concentration.
5. "mbgs" Metres below ground surface.
6. "µg/g" Micrograms per gram.
7. "<" Below method reporting limit.
8. "--" No applicable standard or not analysed.
9. Table to be read in conjunction with accompanying text.

Prepared By: DM
Checked By: ST