

11-13 Percy Street, Auburn NSW

Fabcot Pty Ltd – November 2019





DOCUMENT CONTROL

DETAILED SITE INVESTIGATION REPORT

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EXECUTIVE SUMMARY

Scope of Work

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Results and Conclusions

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ATTACHMENTS

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Attachment B:ÁÜ^* ã c^\^åÁÓ[\^ÁÙ^æ\&@Á

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Attachment P:ÁT &PÚVÁŠ[* • Á

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1. ANTRODUCTION

 $\begin{array}{l} \dot{\text{U}} \land \dot{\text{Cat}} \bullet \dot{\text{Aa}}, \ \dot{\text{C}} \bullet \dot{\text{Cat}} \bullet \dot{\text{Aa}}, \ \dot{\text{C}} \bullet \dot{\text{Cat}} \bullet \dot{\text{Aa}}, \ \dot{\text{C}} \bullet \dot{\text{C}} \bullet \dot{\text{Cat}} \bullet \dot{\text{Aa}}, \ \dot{\text{C}} \bullet \dot{\text{C}} \bullet \dot{\text{Cat}} \bullet \dot{\text{Cat}} \bullet \dot{\text{C}} \dot{\text{C}} \bullet \dot{\text{C}} \dot{\text{C}} \dot{\text{C}} \dot{\text{C}} \bullet \dot{\text{C}} \dot{\text{C}} \dot{\text{C}} \dot{\text{C}} \dot{\text{C}} \dot{\text{C}$

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2. SITE INFORMATION

2.1 Site Identification

V@Ásic^•catacati}Ásch^æÁsi{]¦ãr^•Ás@Á;||[ā;*Á;|[]^¦cāN•KÁ

Street Address	Lot and Deposited Plan (DP)	Approximate Area (m²)
FFÁÚ^¦&°ÁÙd^^ŒÂŒà°¦}ÊÉPÙYÁŒFIIÁ	šį afráöúárfì hì gfá	HGŰ €€Á
FHÁÚ^¦& ÁÙd^^ŒÃŒ à ˈ} ÊÃÞÙY ÁŒFIIÁ	ŠĮ ďGÁÖÚÁFFÌ HÌ GFÁ	rut €€A

2.2 Site Zoning and Land Use

V@ÁãrÁá Á[}^åÁGeneral Industrial IN1'Á}å^¦Ás@ÁOE à`¦}ÁŠ[&æÁÓ}çã[}{ ^}cÁÚ]æþÉÁO€F€ÉÁ



2.3 Site Description

V@Á[||[¸ā]*Á[à•^¦çææā[}•Á¸^¦^Á[æå^Áå`¦ā]*ÁēxêÁB¸•]^8cā[}Áæ)åÁð\|åÁ¸[¦\•Á8[}å`8c^åÁà^ÁÕ^[ËŠ[*ā¢ÁB¸Á Ù^]c^{à^¦ÁG€FJÉÃŒÁ]@[d[*|æ]@®AÁ[*ÁB¸8|`åā]*Á]@[d[•Á+[{ÁÕ^[ËŠ[*ā¢ÁB¸Ç^•cālææā]}•Áà^ç^^}ÁTæÂæ)åÁ U&(à^¦ÁG€FJÁ\$Á;¦^•^}c^åÁB,ÁOEcæ&@,^}cÁGEÁ

CĐÁ, ૅ{à^¦Á, ૐ, æ ơ Á\ ª • Á, ^¦^Á;^^ ^} oÁ} Áœ Á, ^• oÁ ãã ^Áæ} å Áṣ Áš^ ç ^^} Áœ Áṣ [Ás ¾ åå * • ÈÁ @ Á ãơ Áṣ [› • oÁ ãã ^Áæ] | [çã æc^|^ Ár í à Áæ] @æþóÆ, æ oÁs[¦}^¦Á • ^åÁ[¦ÁsæÁ, æd à; * □ÉÁT €Ã Át læ • Áṣ [ˇ oØÁs[¦} ^¦Áæ) åÁ; [lo@, ^• oÁ à[ˇ } åæ^ DÁæ) åÁœ Án { æð; å^¦Á, Áœ Á ão ÁÇ í à DÁs[} &¦^ ơ ÈÁ

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2.4 Surrounding Land Use

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- "Á Northeast. ÁÔ[{ { ^ ¦ & aan þÁn þá à * d an þÁ ¦ [] ^ ¦ câ ^ ÉAP æ |æ { ÁÔ | ^ ^ \ Ásæ) å ÁV [[@ ^ ÁÓ | ^ ¸ ^ | ^ Á à ^ [] à LÁ
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2.5 Topography

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2.6 Surface Water

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2.7 Geology

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2.8 Registered Bores

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2.9 Acid Sulfate Soils

2.10 Underground Utilities

- Ù^¸^\Á cạāāð•Áˇ}Áà^ç,^^}ÁœÁ¡\c@æơÁS[\}^\Á,ÁæÁàˇāåā,*Á;}ÆS[ơÆÁ[ˇc@æơÁ
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- "Á V^|•dæÁcqããæ•Á"}Á}å^|}^ææ@ÁÚ^|& ÂÛd^^oÁæ;åÁn}&^!Ás@Áãæ^Áæ;[}*Ás@Á¸^•e^|}A
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"Á U] č•ĒÂÛ^å}^^Ár ææ^¦Áæ)åÁŒ•*¦ãåÁ cājāãã•Á`}Á`}å^¦}^ææ@ÁÚ^¦&îÁÙd^^oÁ;}Ás@Á,[¦c@,^•óÁ à[`}åæ)Â,ÁçæAí,ÆÁ

3. PROPOSED DEVELOPMENT

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4. PREVIOUS ENVIRONMENTAL INVESTIGATIONS

4.1 OTEK (2000) Phase I & II Environmental Site Assessment

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4.2 WSP (2012) Stage 1 & 2 Environmental Site Investigation

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- "Á Ö¦āļā, *Á^ç^} Áā[¦ā, *•ÁÇÓPFÁţ ÁÓPÏ DÁœ&¦[••Áx@ Áãc^Á, ãc@ÁœÁ; &\Á; [*) c^åÁá¦āļā, *ÁātÁţ Á ^•œà; [ã@ÁæÆå] c@Á, -Áāl]ÀQ•œa; eæţā} Á, -Á*; [*) å, ææ^¦Á; [} ãţ¦ā; *Á, ^||ÁÕY FÁţ Áā; l;ā; *ÁOPCLÁ
- "Á Ö¦āļā, *Áo@^^Áa[¦ā, *•ÁÇÓPÌÁṭÁÓPF€DÁæ) åÁā, •cæļ|ææā;}ÁṭÁæÁ‡¦[`}叿æ^¦Áṭ[}ãṭ¦ā, *Á¸^||Á
 ÇÕY ŒDÁB,Áa[¦ā, *ÁÓPJÁB,Áo@Áçã&ā,ãc´Á;Áo@Áæàæ)å[}^åÁNÙVÁ;}Áo@Áa[`c@, ^•oÁáæ^Á
 à[`}åæb^LÁ
- "Á Ö¦āļļā, *Áç [Áa[¦ā, *•ÁçÓPFFÁæ) å ÁÓPFGDÁæå bæ&?} cÁt Ác@ Áæàæ) å[} ^å ÁNÙVÆJ Ác@ Á&?} dæļÁ
][¦æī[}Áţ, Ác@ Ácãc Áæ) å ÆJ• œæļææā]}Áţ, Áæá*;[`}å¸ ææ°¦Áţ [}ãt[¦ā, *Á¸ ^||ÁçÕY HDÁ¸ ãc@], Æa[¦ā] *Á
 ÓPFHÆÁ



- "Á Ö¦āļā, *Á, -Á;} ^Áa[¦ā, *ÁÇÓPFHDÁæ) åÁā, cæļ|ææā;} Á; -ÁæÁ*¦[`}å, ææ^¦Á; [}ãū[¦ā, *Á, ^||ÁÇÕY€] DÁ æåbæ&^} cÁ; Ác@-Á&æÁ; æ @Áæ4~æÁ; Ác@-Á≈æ• c^¦} Á;[¦æā;} Á, -Ác@-Á*ãr^LÁ
- "Á Ö¦āļā, *Ás@^^Áa[¦ā, *•ÁÇP CŒÁ[ÁP CŒDÁ, ãs@ā, Ás@Á,[¦cā[}Á, Ás@Á}å^¦&¦[-oÁse^aá.*•^åÁse ÁseÁ.
 •[æà Áse, æê LÁ
- "Á Ö¦ajjā, *Ás@^^Áa[¦ā, *•ÁQPOEÁ[ÁPOÊDÁ•ā, *ÁscÁ@a) åÁse* *^¦Á, ãs@a, Ás@ Ásæ* ^åÁs} &|[•`¦^Á, ãs@a, Ác@ Ásæ* ^åÁs} &|[•`¦^Á, ãs@a, Ác@ Ásæ* ^åÁs} &|[•`¦^Á, ãs@a, Ác@ Ásæ* **]
- "Á Ù^|^8@;^Áæ; æ;^ ã; Á; ÁGCÁ [¾Á æ;] |^• Á; ¦Á/ÚP ÉÓVÒÝ ÉKUÔ• ÉÁ/OEP• É; @} [|• ÉÁJÔÚ• ÉÁ Ú | |^ 8@; ¦¾ æ;° åÁÓ¾ @} ^ |• ÁQÚÔÓ• ŒÁ* ¦ ~æ8æ; o• Áæ; åÁ@æ;^Á; ^æ;• LÁæ; åÁ
- "Á Ô[||^&cā[}A, A; ||`} å, ææ^\A; æ{]|^•A; [{A, ^||•A0, FA[{A, ^||•A0, FA[}A, A] Cæ||^åA; Cæ||°A; •
- ĨÁ Œ ạ ˆ ã Á ã Á ấ Á ấ Á â

 $Y \ \dot{U} \dot{A}S[\ \} \& \ \dot{a} \wedge \dot{a}$

 $V@AS[\] S[\] \bullet A[\] \bullet$

- ″Á Ù[ā•Á, ^¦^Á; `} å.Á; Áà^Á; ^} ^¦æ|^Á; ãæà|^Á; ¦.Ás; { { ^¦.8ãæ4,ÁzÁ; å`•dãæ4,Áæ; å.Á·•^LÁ
- "Á Xæ][ˈ láɪ[lðaː láɪ ˈ lÁɪ lÁVÔÒÁṣð å Áñar Ás^* læåæð oá, l[å &or Á, æ Á, [ośs[] ãå^l^å, ^&^• æð Á * ãç^} Á&@[lðaæ^å Áa[lç^} or Á, ^!^Ás^c &c^å Áā, ái ` cå[[lÁsd-^æ ÉAP [¸ ^ç^lÉÃO^[EŠ[* ã¢Á, [c^• Á c@æá,] | ^Á; ^Át l[ˇ } å ¸ææ^lÁaæ] | /Á, æ Ás[||^&c^å Ásd) å Ásd) æð ^å Ál; lÁVÔÒÁÇÕY I □ÉÁ



5. SITE HISTORY

5.1 Aerial Photograph Review

 $\tilde{O}^{[\stackrel{\leftrightarrow}{\text{ES}}[* \tilde{a}c\acute{A}]} \mathring{a}^{\dagger} \mathring{a} \mathring{a}^{\dagger} \mathring{a}^{\dagger$

Aerial 1943

Area	Description
Ùãc^Á	V@ÁãrÁaÁ}å^ç^[]^åÁajåÁşæ&æjæÄÇçãa^}&^Á;-Á[¦{^¦Á;æ\^o⁴æå^}ā*Áajå^çãa^}oÁæéÁ*!-æ&^Á^æë¦^•ÈÁ Pæ æ;•Áô;^^\Á@æá^^A^Á;@æðá^^}Á^æð}^AáÆjåÁ^*•ÁæjåÁ*)•Áæj}*ÁæjÅ;*ÁæÁ*æ°;}Áa[*}åæ*ÈV@Á[¦{^¦Á&@æ)}^ Á;-Á Pæ æ;•Áô;^^\ÁaÁ;ããa ^ÁgÁœé*æ°;}ÁæjÁ;ÁæÁã*ÈÁ OÆÁ{æjÁa}Á©åÁajÁ[¦œ¸Aæ*åÁgÁœÁ;[¦œ¸A*æÁ;A@ÁãrÁ¸ãæjÁæAé^ÁæÁ,ãæÁ;¾í[¦æ¾;Á;-ÁæÁ^•ãa^}æáÁ]];[]^¦cÁgÁæÁ;[;œ¾;-ÁæÁ*•ãa^}æáA
Ù*!![*}åą*•Á	Šæ) åÁg Ás@Á,[¦cœÉnæ cóse) åÁ;[ˇcœÁn Á} å^ç^ []^åEÄÜ^•ãa^}; œæpÁs^ç^ []{ ^}o•Án ¢ãn cós[Ás@Á;[ˇc@, ^•cn, Ás@Á •ãnÁs^ā, *ÁJn¦& ÁJd^cE

Á

Aerial 1951

Area	Description
Ùãr^Á	V@ÁãrÁ^{ aṇ•Á}å^ç^[]^åÈV@Á[¦{^¦Á&@è}}^ Á¸ÁPæe æ(•ÁĈ¦^^\ÁæÁçãā) ^Áœ[ˇ*@ó@Áæe♂¦}Á][¦qā¸}Á¸ÁœÁærÈÁ OÆÁq[&]¸ã^Á¸ÁálÁ;æc°¦ãæHásÁçããa ^ÁgÁœÁ;[¦c@,^•ƠÁ;[¦qā¸}Á¸ÁœÁærÈЮ;åÁs^}dæ ^Áæd[¸*ÁœÁ¸^•♂¦}Á •ãa^Á¸ÁœÁ;¦{^¦Á&@è}}^ Á¸Áææ;æc° æ(•ÁĈ¦^^\ÈÁ
Ù~!![~}åā,*•Á	CZÁcct*^Áccscq[;^Ás* ặàā;*Áccce Ás^^}Ás[;) • d* &c^à Áq Ácce Áq Ácce Áq Ácce Áq Ácce Ág Ácce Ácce

Á

Aerial 1975

Area	Description
Ùãz^Á	V @ Á 㺠Áæ Áa^ } Áa^ç^ []^åÁæ Áæ Áæ Áæ Ák² Á² ÓÁæ [ˇ ŒŒŒÆ*^Áæ æ ∢[cŒÁ[[^åÁaˇ ą́åą̄ * Áº¢ã ơ Áæ&![••ÆŠ[ÓÆÁ [}Ác@ Á¸^•ơ\}Áæ Á¸Áœ Á 㺠Áæ)åÁjæÁ[[~åÁaˇ ą̃åą̄ * Á¸8&ˇ]ðr•Ác@ Á[ˇ c@ l}Áç [Ác@á* Á¸Ác@ Áræ ơ\}Á@⊕Á [Ác@ Á 㺠ÈV @ Á¸[l c@ æ cÁ¸[l cą̄ } Á¸Ác@ Á 㺠Áæ Á *^åÁç l Ásæk Á,æ Á æ Å ‡ ÈÁ
Ù*!![*}åą*•Á	Ù`;;;`}åāj*Ápa)å`•^Áq[Ás@Á;[;o@Āj^•oÁsa)åÁr[`o@ÁsiÁsjå`•dãsa†ÈV@Á/[[@^•ÁÓ;^¸^;^ÆsiÁsāā;pÁq[Ás@Á }[;o@æedÈV@Á;;[]^;cÁqÁs@Á>æoÁsaéAsoç^ []^åÁjãs@ÁsaÁn{a;*odāsa†Ásiðáš*Asajå;*Ásajå,AsadAjæd;aj*ÈÁ

Á

Aerial 1991

Area	Description
Ùã¢^Á	V@Á;ãc^Á^{ æāj•Áæ;Á,^¦Ác@Á;¦^çã;ĕ•Á;@;d;*¦æð;ŒÁ
Ù" ["}åą̃*•Á	Ù`!![`}åā]*Ájaa)å`•^Áq[Ás@Áj[lo@Éj,^•oÁsa)åÁn[`c@Án{ æāj•Ánjå`•dãædEV@Áj;[]^lcºÁq[Ás@Aj[lo@ÁœæAsn^}Á l^å^ç^ []^åÁq[ÁnoÁs`;!^}oÁjæê[`dEV@ÁU~•^oÁOE]ā]^ÁÚ!ājæ]*ÁæsájācÁœæÁsn^}Ásq[}•d`&c^åÁq[Ás@Áræ•oÁj.Á c@Ájāc*EÁ



Aerial 2007

Area	Description
Ùãc^Á	V@Á;ãc^Á^{ æāj•Áæ;Á,^¦Ác@Á;¦^çã;ĕ•Á;@;d;*¦æð;@ĚÁ
Ù*!![*}åą*•Á	V@Ánjå*•dãaaḥÁ;![]^¦c'Án[Án@Án[`coṃki-Án@Ánãc/Án@e-Ána^^}Ánå^ç^ []^åÈÁV@Án{ænjā;*Án`!![`}åā]*Áæajà`•^Á ãnÁne-Áj^¦Ánc@Á;¦^çā[`•Á;@;d'*læaj@À

Á

Aerial 2019

Area	Description
Ùã¢^Á	V@ÁãrÁ^{æjoÁæjÁ^¦ÁœÁ¦^çã; oÁ; Q q *¦æjæÄ
Ù ` [` } å ǧ * • Á	Ù`;;[ˇ}åā]*Áæ)åˇ∙^Án^{æan]•ÁæeÁ;n^;Ás@-Á;¦^çā[ˇ•Á; @[d[*læn] @ŽÁ

5.2 Cumberland Council Records

- ″Á V@Áş,•œa||ææā[}Á;√ÁæÁGÍÊE€€Ëβãb^Á}å^!*¦[`}åÁ;^d[|Áæa)∖ÁÇÖŒÐÏJÐÐFÉÆGFÁÖ^&^{à^!ÁFJÌFDLÁ
- "Á V@Áæ] | &&ææā} } Áæ; å Áæ;] ¦ [çæþÁ; ¦ Áœ Áß[} cā, `^åÁ•^Á; Áœ Á; ¦^{ @*^•Á; | Áœ Á; ¦ Áœ Á; ¦ Áæ; å Åæ; å
- "Á V@Áæ]|ā&æā]}Áæ)åÁæ]]¦[çæþÁ[¦ÁæÁa[*)åæô^Á^Ëæþã}{ ^}oÁa^c, ^^}Áç, [Á^¢ã·cā,*Á§å*•dãæþÁ æþ[d^^}oÁÖÖÖÆÆÐFÎGÏÆFÆÆÆÅ]ÅÖÖÆÐFÐÆÁ à^¦ÁΘ€FÆÆÆÅ;åÁÖŒÐHÐÆÁ

 $\begin{array}{l} \text{OZE}_{\tilde{\mathbf{a}}} & \tilde{\mathbf{a}} \wedge \tilde{\mathbf{b}}_{\tilde{\mathbf{a}}} \wedge \tilde{\mathbf{a}}_{\tilde{\mathbf{a}}} \wedge \tilde{\mathbf{a}}_{\tilde{\mathbf{a}}_{\tilde{\mathbf{a}}} \wedge \tilde{\mathbf{a}}_{\tilde{\mathbf{a}}} \wedge \tilde{\mathbf{a}}_{\tilde{\mathbf{a}}} \wedge \tilde{\mathbf{a}}_{\tilde{\mathbf{a}}}} \wedge \tilde{\mathbf{a}}_{\tilde{\mathbf{a}}_{\tilde$

Ö[&`{ ^} o^ Á[¦Ác@ Árãr^Áa^c, ^^} ÁrJÌ FÁæ) å ÁrJÌ JÁ, ^!^Áæçæālææi|^Áæ) å Áæåå!^••^å Át[Ác@ Át &&`]^ā * Ár^} æ) o Á

, @} Ác@ Árãr^Á, æ Át, }^åÁa^Açæðā[`•ÁÙ`]^!æ)}`ææā[} ÁÓ[æðå•ÈÓŒå[&`{ ^} oÁ+[{ ÁrJÌ Í Á, æ Áæåå!^••^åÁt[Á

Xã &[`} oÁÔ[}•[|ããær^åÁQ\å`•dãr•ÁÚc ÁŠcåĒÁæ) Áð] b' &æí]} Á{ [` |åð] * Áæ) å Áå^&[¦ææð] * Á&[{] æ) ^ÁÇ|æ cã& Á

{ æ) ~æ&c !^!DĚOÇ [c@|Áå[&`{ ^} oÁ+[{ ÁFJÌ I Á, æ Áæåå!^••^åÁt[ÁÓ^^&@æ€ ÁÇCE•DÁÚc ÁŠcåĒÆæÁæ] å Á

@æðå, æ^Á, @|^•æðð * Á&[{] æ) ^EÁ

 $T = \frac{|\hat{A}|^{-\frac{1}{2}} \hat{A}}{|\hat{A}|^{-\frac{1}{2}}} \hat{A} = \hat{A} =$

Þ[Áic@\¦Áano Á ^\^Áa^^{ ^aÁ^|^çæ}dÉÁ

5.3 Storage of Dangerous Goods

SafeWork NSW Dangerous Goods Licences

 $\begin{array}{l} \text{CEA} \bullet \land \text{ads} \land \text{Ac@} \land \text{Last} \land \text{La$



- "Á Ö^&|æbæaā[} Á; Á; [Á: $\{ \text{læt}^{\hat{A}}, \text{lÁ@ab} å | \hat{a}\} * Á; ÁÖab) *^![* ÁÕ[[å ÁæbÁs@ Á ãt^ÁÇXã ^ ÁQ å * dãæbÁ Ú|æ• cã&• ÉGG ÁT æ∂ ÁG€€Î DÁæb) å Á$
- "Á Þ[cãa38æaā]}Án, Ánc@Ánc[læt^Án, ÁrÁpÁn ÊE€€Ápād^Ásiað•^|Ásaà]ç^Át¦[`}åÁpæ)\Áse)åÁrÁpÁrGÊ€€€Ápād^Á
]^d[|^`{Áræ Ásaà]ç^Át¦[`}åÁpæ)\ÁQP`}c^\{[cãp^ÁUc ÁScà ÉPG€Ápt)^ÁQ€FÎDEÁ

Þ[Á&`;\^} cÁæ\}•^• Áæ\Á@\åÁ;\Á@A ão\È\@Á\~æ&@Á\&[;åÆ Á;\^•^} c\åÁæ ÁOEccæ&@ ^} cÁŒÁ

Underground Utility Clearance

 $\begin{array}{l} \text{CU}_{A}\hat{A}_{A}^{\dagger} & \text{CU}_{A}^{\dagger} & \text{CU}_{A}^{\dagger}$

5.4 NSW OEH Contaminated Land Database

 $CEA^c_ca^a_A A^c_ca^b_A A^c_b A^c_$

5.5 Protection of Environment Operations Act 1997 Public Register

 $\begin{array}{l} \text{CE} ^{+} \wedge \text{ad} \& @ \hat{\text{I}} [\text{Ac} @ \hat{\text{A}}] ^{+} \hat{\text{a}} \text{ev} | \hat{\text{A}} \wedge \text{exa} | \hat{\text{a}} @ \text{a} \hat{\text{A}} ^{+} \hat{\text{A}} \hat{\text{L}} \wedge \text{exa} | \hat{\text{A}} | \hat{\text{Ac}} @ \hat{\text{A}} \hat{\text{L}} | \hat{\text{Ac}} @ \hat{\text{Ac}} | \hat{$

5.6 NSW Contaminated Sites Notified to NSW OEH

OzÁ^æ&@Á¸Áœ́ÁŠã ơÁ¸ÁÞÙYÁÔ[}œá¸ðjæc°åÁÛãc°•ÁÞ[cãð°åÁq́ÁÞÙYÁUÒPÁæðÁ¸ÁFͰÁU&qà°lÁÇ€FJÁ[`}åÁ,[Á !^&[¦å•Áq¦Áœ⁄Á`àb°&oÁãc∕Áæ¸åÁ,[Á,[cããæà|^Áãc°•Á¸ãœ@jÁFÁ{Á;Áœ⁄Áãc°ÉV@Á^æ&@Á^&;Á¦^•^}}c°åÁgÁ Otaæ&@ ^}oŚÉÁ

5.7 Unexploded Ordnance

 $\begin{array}{l} \text{CE}^{+} \wedge \text{ad} \& @\hat{\textbf{i}}_{1} & \text{A} \otimes \hat{\textbf{i}}_{2} & \text{A} \otimes \hat{\textbf{i}}_{3} & \text{A} \otimes \hat{$



6. SITE HISTORY SUMMARY

V@Á^çã\, Á; Á@á d; ¦ã&æþÁåæææÁ§ åã&ææ^•Ás@Á[||[, ā, *Áãe^Á@ád; ¦^KÁ

Site
Tæ ^^•ÁscáÁsæs~~ã^åÁs@Ásā^ÁQ;^ç^¦Ás@Ásā^Á^{ æāj^åÁ}}å^ç^ []^åÈÁ
V@Ánār^Á, ænÁ `àåāçāā^åÁgÁrJÎFÉÁV@Áa ʿā¦åā;*Á;¦^•^}oÁ;}ÁŠ[ơÁrÁ, ænÁ&[}•d `&c^åÁa ^ÁrJÎÍÁæ)åÁs@Áa ʿājåā;*Á [}Ás@Ánænơ¦}Á;[¦cā;}Á;Ás@ÁnārÁ;ænÁs;}∘d `&c^åÁa ^ÁrJÏ€ÉÁ V@ÁnārÁ;]^¦æc°åÁænÁæÁæÁæÁæÁæÁæÁæÁæÁæÁæÁæÁæÁ;[å•Á;æa) `æ&c'¦ā;*Áæ&ājācÁ;}cāÁrJÌFÉÁ
V@Ánão^Á, æn Ána&``āl^â Ánô Ánô Ánô Ánô (sea)ÁÕ[ç^¦}{ ^}oÁU`]^¦æn)}`ænaāl}ÁÓ[æhâ Ánò^-{¦^Ánà^ā;*Án[å Án[Ánô ÁU`à æbÁ CEc@¦ãnano ÁU`]^¦æn}}`ænaā[}ÁÓ[æhå ÁnjÁn]ìÍÁnn)å Áno ÁUcænó ÁOEc@¦ãnano AÛ`]^¦æn)}`ænaā[}Ána[æhå ÁnjÁn]ù JÈÁ
Xãr8[ˇ]ơỚĈ[}•[ãāææ^åÁQàǎ•dā^•ÁÚcÁŠcáÉÁæÁ æ•cã&•Á;æ&\ā;*Á;æ)ˇ-æ&cʿlā;*Á&[{]æ)^Á;8&ˇ]ā^åÁs@ÁiāvÁā,Á FJÌÍÉÓ^^&@æ;ÁQCE•DÁÚcÆScáÉÁæÁā]à^¦ÁæjåÁœàå,æ;^Á;@; ^•æ‡^Á&[{]æ)^Á;8&ˇ]ā^åÁs@ÁiāvÁā,ÁFJÌIÉ∀@Á }ˇ{à^¦Á;-Á^æ;•Áo@Áv}æ;•oÁ;8&ˇ]ā^åÁs@Áiā°ÁiÁ;[cÁ}[,}ĚÁÁ
V @ Á ão^Á, æ Áæsc ˇã^å Ás^ÁÓā;æ; ãÚc ÁScå ÉæÁ; æ cãs Á, æs\æ ā * Á; æ) ˇæsc ˈa] * Ás[{] æ) ^Ás ÁFJÌ JÈŚS[oÆÁ, æ Á []^¦æs²åÁs^ÁOEÔOÍ; æ cãs ÁQ; æ) ˇæsc ˈa] * Á; Á; [^•c ¦^}^Á; [åÁsæ • DÁæ) åÁS[cÁGÁ, æ Á;] ^¦æs²åÁs ÁOEâÁÜ[æåÁ Úc ÁScåÁĢ q ¦æ ^Áæssäjäc Á;¦Á; æ) ˇæsc ¦^åÁ*[[å•Á ˇs @Áæ ÁæāÁs[}åãā;}^¦• DÉÁ
XOÚÁÚæ&\ætā)*ÁŠcáÉÁæÁ, æeoæÁæ)åÁrc^^ Á;æ&\ætā]*Á&[{]æ)^Áæ&`ĭā^åÁs@ÁræAæÁæ)Á;}};};}Áæ[^Aíæoc^¦Á Þ[ç^{à^!ÁFJJJDÁæ)åÁ[åÁs@ÁræÁæjÁsÁjÁGEFGÁæ&&[¦åā]*Á[Á;} ā]^Á^æþÁ•oææ^Á^&[¦å•ÉÁ
ŌyÁFJJJÉÁs; [ÁO⊖ÉÉEC€ŠÁN}å^¦*¦[ˇ}åÁÛq[¦æ*^Á/æ)\•Á¸^¦^Ás^&[{ {ã•4ā}}^åÁsjÉ=ãcÁs^Áajlaj*Á¸ão@Ás[}&u'^ơ^ÈÁ V@Á;¦^çã;ˇ•Ás[}ơ^}o•Á;Ás@Áæa)\•Á¸^¦^Á;}\][¸}Ás`óÁæ••ˇ{ ^åÁq[Ás^Á;^d[^ˇ{ ÈÁ
$Y \ \dot{U} \dot{U} \dot{A} \dot{B} \dot{A} \wedge \dot{A} \dot{A} \dot{A} \dot{A} \dot{A} \dot{A} \dot{A} \dot{A}$
V@Áãơ/ãa/Án/adærå/ấŋ/Ág [AŠ[ơ-Á, ǎo@Š] ơ-Ár-ô-Áa/Án-Áa-Áa-Áa-Áa-Áa-Áa-Áa-Áa-Áa-Áa-Áa-Áa-Áa-

7. POTENTIAL SITE CONTAMINATION

Óæ•^åÁ[}Ác@Á'^•ˇ|ơ•Á[-Ác@Á]¦^çã[ˇ•Á'^][¦ơ•Áæ)åÁc@Á•ãɛ^Áã,•]^&cã[}Á´}å^¦cæ\^}Á[}ÁFÍÁTæÂÆFJÁc@Á -{||[_ ā,*Á;[ơ^}cãæHÁS[}cæ{ā;æāi}Áæ•ˇ^•Á,^¦^Áæ^}cãæ³åÁ[¦Ác@Á;ãz^ÈÁ

Manufacturing of white goods

 $V@\dot{A} \tilde{a}e^{\dot{A}} \approx \dot{A}_{\downarrow}^{2} + \dot{A}e^{\dot{A}} \approx \dot{A}_{\downarrow}^{2} + \dot{A}e^{\dot{A}} \approx \dot{A}e^{\dot{A}}e^{\dot{A}} \approx \dot{A}e^{\dot{A}} \approx \dot{A}e^{\dot{A}} \approx \dot{A}e^{\dot{A}e^{\dot{A}}$

″Á VÜPÁÐ åÁKUÔ•LÁÐ åÁ

″Á P^æç^Á\^œd•ÈÁ



Manufacturing of plastic packaging and polystyrene goods

 $X \tilde{a} & & X \tilde{a} &$

- ″Á VÜPÁÐ åÁKUÔ•LÁ
- ″Á P^æç^Á(^œd+LÁse)åÁ
- "Á Ú^¦Ë\$æ}åÁÚ[|^-↓" [¦ā]ææ^åÁŒ\^|ÁÛ*à•œæ}&∧•ÁÇÚØŒÙŒĂ

ASTs, USTs and vehicle maintenance

 $V@^{^{\acute{A}}} \mathring{a}^{+}![~] \mathring{a}\mathring{A}_{\vec{q}} ! \not= ^{\acute{A}_{\vec{q}}}) \bullet \mathring{A}_{\vec{q}} ! \not= ^{\acute{A}_{\vec{q}}} ! \not= ^{\acute{A}_{\vec{q}}}) \bullet \mathring{A}_{\vec{q}} ! \not= ^{\acute{A}_{\vec{q}}} ! \not= ^{\acute{A}_{\vec{q}}} ! \not= ^{\acute{A}_{\vec{q}}} ! \mathring{A}_{\vec{q}} ! \not= ^{\acute{A}_{\vec{q}}} ! \mathring{A}_{\vec{q}} ! \not= ^{\acute{A}_{\vec{q}}} ! \mathring{A}_{\vec{q}} ! \not= ^{\acute{A}_{\vec{q}}} ! \not= ^{\acute{A}_{\vec{q}}} ! \mathring{A}_{\vec{q}} ! \not= ^{\acute{A}_{\vec{q}} ! \mathring{A}_{\vec{q}}$

- ″Á VÜPÁÐ åÁÓVÒÝLÁ
- ″Á ÚŒP•LÁ
- ″Á XUÔ•LÁse) åÁ
- ″Á P^æç^Á\^œd•ÈÁ

Fill of unknown origin

Neighbouring sites

 $\begin{aligned} &\text{CEA}_{[\cdot]} \left\{ \ ^{\cdot} \middle| A_{\cdot} \right\} \text{ of } \hat{A}_{\cdot} \hat{A}_{\cdot}$

U c @ ¦Áā; å * • d ãæ þÁ ãc • Áā; Ás @ Áç ãs ða ãc Á; Ás @ Áa ãc Ás Ás @ Áa ãc Ás Ás | } • ãã ^ ¦ ^ åA Í [c ^ } cãæ þÁs [} cæ [ð]; ææ [ð] ææ ð] } Ár [ੱ ¦ & ^ • ÞÁ

Tooheys Brewery

 $V@\acute{A}/[[@^{•}\acute{A}O]^{^{+}}\mathring{A}\otimes \mathring{A}_{0}] = O\acute{A}\otimes \mathring{A}_{0}[] =$



8. CONCEPTUAL SITE MODEL

- ″Á Y[¦\^¦•Ás厦āj*Á[]^¦æeā[}LÁÁ
- "Á Úæd:[} Áçã ãã, * Ás@ Á ãc Áçã d { ^ ¦ DLÁæ) å Á
- ″Á V¦^}&@Á[¦\^¦•Ác@æcÁ æêÁ,^^åÁg Áæ&&^••Á}å^¦*¦[ˇ}åÁn^¦çæk^•ÈÁ

 $Uc@!\dot{A}^{8}] \circ \dot{A} \circ \dot{A}$

- ″Á Þ^ãt@a[ˇ¦•Á.ÁÔ[{{ ^¦&ãæþÁ;[¦\^¦•LÁæð;åÁ
- Õ¦[`}叿v¦Á•^¦•ÞÁQÁāÁ¸[‹våÁs@æóÁ¦[`}叿v¦Á•^ÁãÁā^|^ÁqÁ⏿våLÁs@Á¸ævÁāÁ¸Áq &ævåÁ ā,ÁæyÁā¸å°•d;ædÁxd>æÁxg}åÁs@¦^Áæb^Á¸[Á^*ã;cv¦^åÁa;[¦^•ÆşÁs@Á;æ&⏿čÁ;Ás@Á;ævÉÁ

8.1 Contaminant Exposure Pathways

V@Áæ•^••{ ^}• As å å å ææ Ác@Á[||[, ā * Á^|^çæ) ó Æ[} ææ [ā æ) ó Ár¢] [• ˇ ¦^Á; ææ@ æ ê• kÁÁ

- "Á Q @edeæ@a}}Án, Á& [} œefa; æe^åÁå*•o•Á& [}•d*&@a[;\^¦Æn, ^ā @a[;\•DA
- "Á Ofā•dæ&cā[} Áæ) åÁ§ * ^•cā[} Á[-Á*![*] å æe^!ÁQ ~-Ë ãe^DAæ) åÁ

8.2 Conceptual Exposure Model



Qása) ^Á; ~Ás@ Áā; \ • Áŝ[Á; [oÁ\çã oÁs[} cæ; ā; æ) oÁ\¢] [• ˇ ¦ ^Ásæ; } [oÁ; &&` ¦ ÈÁ

 $V@\dot{A}\&[\ \}\&^{\ }]\ c\ ae\dot{A}\{\ [\ a^{\ }\dot{A}\ a^{\ }]\ f\ |\ A\dot{A}\ ae\dot{A}\ ae\dot{A}\$

Á



Conceptual Site Model – Soil, Vapour & Groundwater								
Relevant Exposure		Receptors						
Pathways	On site users	On site construction workers	Neighbouring site users	Other				
Ù[ā/ág*^•cā[}/ád/Ö^¦{ a‡Á 8[}cæ&c/á/Ö~•cÁ	√Á	√Á	√Á	V^¦¦^∙dãæ∳Á%[[[*^Á ÝĢĀ				
Çlå[[¦Án]@adecenā[}Án,-Á çæd][ĭ •Ánå^¦án,^åÁu¦[{Á •[ājÁ	√Á	√Á	Æ	ËÄ				
U`cå[[¦Ánj@eqaæaāi}Án;√Á çænj[ĭ¦•Ánå∧¦ānç^åÁ√[{Á •[ājÁ	ÝĢÞÁ	ÝĢDÁ	Æ	V¦^} &@́́A [¦\^¦•Á ✓Á				
Qå[[¦Ánji@adeanani]}Ánji-Á çadj[ĭ¦•Áns\länj^åÁu][{Á *¦[ĭ}å,anac\lÁ	√Á	√Á	√Á	ΕÄ				
U`cå[[¦Ás]@e¢aæā[}Á;-Á çað][`¦•Ás^lãç^åÁ;[{Á *¦[`}å,aæ^¦Á	ÝĢÞÁ	ÝĢÞÁ	ÝĢÞÁ	V¦^} &@́́A [;\^;•Á ✓Á				
Ù[ar-Án^æ&@3,*Áq[Á *¦[ĭ}叿æ^¦Á	ËÄ	Æ	Æ	U}*[āj*Át¦[ັ}叿e^\¦Á ã[]æ&eÁ √Á				
Ő¦[ˇ}叿e∿lÁnnaà•dæ&a≨[}Á	ÝÁ	ÝÁ	ÝÁ VÁ					
Õ¦[ˇ}叿e^¦Ánāa*&@ed*^Á ﴿Ánˇ¦~æ&^Á¸æe^¦Á	Ä	΀	ËÄ	Ü^&!^æ@¶}ÁMÓCE *ææ&A ^&[•^•⊄{Á ✓Á				

Comments

 $\checkmark \dot{A} \stackrel{\wedge}{A} \not{c}] [\bullet \check{\ } | ^{\wedge} \dot{A}| \ \text{acc} @ \ \text{acc} \stackrel{\wedge}{A} [\ c ^{\wedge}] \ \text{acc} | ^{\wedge} \dot{A} [\ c ^{\wedge}] \ \text{acc} |$

⊞Äp[ơÁ^|^çæ);ơÁ

ÇæÐÂÛ`¦~æ&^Á\^æþÁ;¦^ç^}⊙Á[ãÁ\¢][•`¦^Á

Ça DÁU * cå[[¦ÁxxáiÁsáj* cái]}ÁÁ



9. ADATA QUALITY OBJECTIVES

 $V[\acute{a}_{a}_{b}_{c}_{a}^{A} \circ A_{b}_{c}_{a}^{A} \circ A_{b}_{c}^{A} \circ A_{b}_{c}^$

Step 1: State the problem.

Step 2: Identify the decision.

Step 3: Identify inputs into the decision.

- "Á Câ^} cãa8æaā} À -Áā• * ^• Á -Á [e^} cãæþÁ*} çã [} { ^} cæþÁs[} &^!} ÁQ@ā d !^ Á^çã \ DLÁ
- "Á Qìç^• cãt æzāt } Áţ -Á [ā́LÉA [ā́Áçæð [ˇ lÁæ) åÁ¹ l [ˇ } å¸ æz^ lÁţ lÁÔU ÚÔÁæ•• [&ãæz^ åÁ¸ ão@Áœã q l aðæþÁ ãz^ Á ¸ ** o^• Áæ) åÁ¸ ão@Á^* æð åÁ¸ Ác@ Á, l [] [^ åÁ^ å^ç^| [] { ^ } dÁ
- "Á OḤ] | [] | ãææ 'Á ˇa þãc´ Áæ•• ˇ | æ) & ^ÁæÁ ˇæ þāc´ Á&[} d [|Áq Ár} ææà | ^Áæþ Ár çæþ ˇææā] } Áq Áææà ðãc´ Áq Á c@ Áæþ æ¢ cã&æ þåa æææ bÁæþ å Á

Step 4: Define the boundaries of the site.

 $V@\dot{A}_{\parallel}![b^*8c\dot{A}_{\parallel}[^*] a^*a^*\dot{A}_{\parallel}^* A^*a^*\dot{A}_{\parallel}^* A^*\dot{A}_{\parallel}^* A^*\dot{A$

Step 5: Develop a decision rule.

 $V[\text{ \'Aaa88}^{\circ}] \text{ o\'Ac@ \'Aae} \bullet ^{\bullet \bullet} \{ ^{\circ} \text{ o\'Aa}^{\circ} \text{ \'a\'a}^{\circ} \text{ \'a\'a\'a}^{\circ} \text{ \'a\'a}^{\circ} \text{ \'$

- ″Á ÔU ÚÔΑ\$[Á,[σÁ\¢ã σÁ\$ Á|[ãΑ\æσÆ\$[}&\]dæā]}•Á\$, Á\¢&\••Á, Á|[ãΑ\æ•^••{ \^}σÆ\ãæ\Ã\äæ\Ã\
- V[Áxx8&^] ơÁc@Áxe•^••{ ^} ơÁc^8ã ã;}Á^•ˇ|ơÁ;Á-Á[ãÁçæ;[ˇ¦Áæ;]|ã,*Á;ˇ•ơÁ; ^^ơÁc@Á;||[¸ã,*Ásiãc';ãædÁÁ
 - "Á Ú^d[|^" { Áæ} å ÁXU Ô• Áå[Á,[oÁ\¢ã oÁ\$, Á @æ][¸Á[ãÁşæ][" ¦ÁææÁ\$[} &^} d ææã]}• Á\$, Á\¢&^•• Á; Á
 •[ãÁşæ][" ¦Áæ•^^•• { ^} oÁ\$; áæ\ãæÀ
- V[Ásc&&^] oÁc@ Áse•^••{ ^} oÁs^&ã ā[} Ás@ Á^•`|o•Á^Á¦[`}å, æe^¦Ás ç^• cā æaā[} Á; `•oÁ ^^oÁc@ Á[||[, ā]*Áslāe^¦ãædÁÁ
 - ″Á V@^Á^¢c^}dÊÁ,æcč¦^Áse)åÁ•[č¦&^Á;-Át¦[č}叿c^¦Ás[}cæ{ājæcāj}Á@æ•Ási^^}Ási^~āj^åÁq[Ás@∙Á ^¢c^}oÁ;¦æ&cā8æà|^LÁ



- "Á ÔU ÚÔÁ&[Á,[ÓÁ\¢ã ơÁB,Á¹\[ˇ)å, ææ^\ÁææÁ&[)&^}dææÃ[)•Ás@ææÁ&[ˇ|åÁ,\^•^}oÁæÁçæð][ˇ\ÁB,dˇ•ã[)Á
 -Íã\LÁæð,åÁ

Step 6: Specify acceptable limits on decision errors.

 $V@\dot{A}a^{\dagger}|\dot{a}\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}|a\dot{A}^{\dagger}$

Step 7: Optimise the design for obtaining data.

10. ASSESSMENT CRITERIA

 $$V@A_1': \tilde{a} = A^A^-A'^ & A_1': \tilde{A} \circ \tilde{a} = A^A^-A' & A_1' &$

 $V@ \acute{adj}] [aBaeeaj] \acute{A}_i \acute{a}_i @ \circ ^\acute{A}_j c^\circ \circ ^a aeeaj] \acute{A}_i ?\circ /\circ \acute{a}_i a\acute{a}_i a\acute{a}_i$

10.1 Soil Assessment Criteria

 $V@A[||[\bar{a} * A[\bar{a}Aee \bullet \land \bullet \bullet \{ \land \} oA\bar{a}\bar{a}^{\land} | \bar{a}eA[] \circ A\bar{A}[|A\bar{a}eA[] \circ A\bar{A}[] \circ A\bar{A}[|A\bar{a}eA[] \circ A\bar{A}[|A\bar{a}eA[] \circ A\bar{A}[] \circ A\bar{A}[|A\bar{a}eA[] \circ A\bar{A}[] \circ A\bar{A}[] \circ A\bar{A}[] \circ A\bar{A}[] \circ A\bar{A}[|A\bar{a}eA[] \circ A\bar{A}[] \circ$

NEPM Health Based Investigation Levels D (HILs D)

 $P(\tilde{S}) \triangleq Ad^{\hat{A}} + A\tilde{S}) + A\tilde{S} + A\tilde{S}$

NEPM Health Screening Levels D (HSLs D)



TDU Francisco	Soil HSLs for Vapor Intrusio	Soil Saturation		
TPH Fraction	0 m to <1m 1 m to <2 m		Concentration (Csat)	
ØFFÁÁ	Ĝ €Á	HÏ €Á	JÍ € Á	
ØG ^s Á	ÞŠÁ	ÞŠÁ	Í΀Á	

 $[\]label{eq:final_final$

NEPM Management Limits - Commercial / Industrial

 $T\text{ as} \text{ ast} ^{\{ \land \}} \text{ of} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{b}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{b}} \tilde{\textbf{a}} \tilde{\textbf{a}}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}} \tilde{\textbf{a}}} \tilde{\textbf{a}} \tilde{\textbf{a}}} \tilde{\textbf{a}} \tilde{\textbf{a}}$

TPH fraction	Management Limits for Commercial and Industrial (mg/kg) – fine soils
ØFFÁÔì. Ô _{F€} Á	ì€Á
ØGFÁNÔF€. ÔFÎÁ	F€€€Á
ØHÁNÔ _{FÎ} . Ô _H Á	HÍ€ÉÁ
ØlÁNÔ _H .Ô _{l€} Á	F€Ê€€Á

Á

NEPM (1999) Amendment Asbestos Criteria

Ecological Assessment

Ù[ā¼Á8[|[*ã&ækÁæ•^••{ ^}oÁ;æ Á;[oÁs[]•ãå^¦^åÁ;æklæ);c^åÁàæ•^åÆ;}Æ@Á[||[¸ā]*KÁ

″Á V@^Áæ)åÁ'•^Áã•Á¦[][•^åÁ[Áà^Á;}Ë'¦æå^Á&[{ { ^¦&ãæ)Á¸ão@Á;[Á:[ã/Áæ&&^••LÁæ)åÁ

″Á V@¦^Áse\^Á,[Á,}•ãc^Á\^}•ããç^Á\^}•ããç, Â\&[|[*ã8æ|Á^&\]q[¦•ÈÁ



10.2 Soil Vapour Assessment Criteria

V@Á[||[¸ā]*Án[ā|Áṣæ][`'¦Áæ••^••{ ^}oÁ&|ãc^¦ãæÁ, ^¦^Áæå[]c^åÁ[¦Ás@Á5]ç^•cãtæaã[}ÈÁ

NEPM Interim Health Screening Levels D (HILs D)

vocc	Interim Soil Vapor HILs for Commercial/ Industrial Land use (mg/m³)
V: 3&@[:[^c@}^Á	€ièàÁ
FÊFÊFË/¦3%,@[;[^c@a);^Á	GH€Á
V^dæ&@[¦[^c@\}^Á	ìÁ
&ã ËFÊEÖ3&@[¦[^c@}^Á	ÀÍÉ
Xã,^ ÁÔ@[¦ãã,^Á	€ÈÁ

Δ

NEPM Soil Vapour Health Screening Levels (HSLs D)

10.3 Groundwater Assessment Criteria

NEPM Health Screening Levels D (HSLs D)

 $\begin{array}{l} \text{Pù\&} \cdot \hat{\text{A}} = \hat{\text{A}} \cdot \hat{\text{A}} = \hat{\text{A}} \cdot \hat{\text{A}} = \hat{\text{A}} \cdot \hat{\text{A}} \cdot \hat{\text{A}} = \hat{\text{A}} \cdot \hat{\text{A}} \cdot \hat{\text{A}} = \hat{\text{A}} \cdot \hat{\text{A}} \cdot$

Õ¦[ˇ}叿æ^¦ÁPÙŠ•ÁÖÁ[¦Áræ)åÁ*^[|[*^Áæ)åÁå^]o@ÁGÁËÁLIÁ(Á¸æ•Á&[}•^¦çææãç^|^Áæå[]c^åÁ[}Áo@Áàæ•ãÁ *¦[ˇ}叿æ^¦Á¸æ•Ár}&[ˇ}ơ\^åÁœÁæÁæÁæ; æ¢ã[ˇ{Áa^]c@Á-ÁÁĒÁ,^d^•Áa^|[¸Á*¦[ˇ}åÁÇà*DÁşÁçæáãæà|^Ár^[|[*^ÈÁ



ANZECC (2018) Guidelines for Fresh and Marine Quality

Australian Drinking Water Guidelines (ADWG)

US EPA Regional Screening Levels

Health Based Guidance Values (DOH, 2017)

 $V@AUOCEUAPOTUAÇPOUCEAOEFIDA@AAAE[] c^aAO^] = 4c^aAO^] = 4c^aAO^]$

Analyte	Drinking Water Quality Guideline (ug/L)	Recreational Water Quality Guideline (ug/L)
ÚØU ÙÁŢĒÁÚØP¢ÙDÁ	€ÈEÏÁ	€ÏÁ
ÚØUŒÁ	€ťìÁ	ÍÈÁ

11. SAMPLING AND ANALYSIS PLAN

 $\tilde{O}^{[\frac{1}{15}[*\tilde{a}t]} = \tilde{A}t^{\frac{1}{10}} = \tilde{A$



Environmental Media	Sample Design	Rationale	Sample Location ID	Analytes	Date Date
Ù[āļÁÙæ[] ā]*Á Ç©āl*¦^ÁnHDÁ	 Ô[^&cā[}Áxa)äÁxa)æf•ãrÁ[-Án^ ^&cÁn[ājÁ æē] ^•Át[{Át: [*}å,ææ^!Á;[}ãt[:ā,*Á,^ Áà[:ā]**ÉÄ 	 Væt*^c@j*Á@jlÁænjåÁn{ ^ætÁ[}^Á &[}cæt@jæ@jl}EÁ 	TYF⊕LÉNYF€ÍÉNYF€ÌÉN TYF€JÉNYFF€	 VÜPÁ XUÔ•Á ÚŒ•Á P^æ;^Á; ^œ;•Á 	HEÁT æ ÁÐEFJÁT ÁLÁ R*}^ÁÐEFJÁ
Ù[āļÁxæ][ĭ¦Á Qiç^•cā'æaā[}Á Çozā*¦∧Á;DÁ	• Q•cæ ææā }Á;Áç^ ç^Á[ā¼çæð][ˇ¦Áæð] ^•Á;}Á æÁnleÆ;Á¦āālËaæ•^åÁæð] āj*Á;ææv^¦}Á	 CB&![••Áx@Áṭ[d]:ajơḥÁœÁæAæÁ _@!^Áx@Áajäj*Á;ajÁæA &[}•d*&c*áA æàḥ;Àr:æå^ÁæjäÁ çæɨ[ˇ:/Áŋdˇ•ã;}ÁæÁæḥ[ơ*) cãæþÁ ^¢][•ˇ:/Áŋæ@@æÈ 	ÙÓFÆÄÙÓHÁ	• VÜPÁ • XUÔ•Á	Qu•cæaa ^å.Án√An₹}^Á GEFJÁ Ü^d&n Ç^å.Án Án₹}^Á
Á	 V@^^Ár[ā/kjæ][\ Á æ] \ • Á \ ^ Á a e æ ^ å A e æ ^ å A e æ ^ å A e æ / å e æ ^ å A e æ 6 æ Å e æ 6 æ Å e æ 6 æ Å e æ 6 æ Å e æ e æ e æ e æ e æ e æ e æ e æ e æ	• Q1,8¦^æ•^Ás@Ás^}•ãĉÁ;-Á•æṭ] ā;*Á æ&¦[••ÁæÁ;[••ãa ^Á•[č¦&^ÁæÁ^æÁ	ÙXÌ ÉÄÜXJÉÄÜXF€Á	VÜPÁXUÔ•Á	G€FJ
	• TaPÚVÁna[¦āj.*•Ánanábana&^}oÁn[Á¸^ •ÁnTYF€GÁ an)åÁÑYIÁ	 V[Ásæþáðalææ^Ás@ÁÝÙÖÁ^•][]•^Á æťæðj•oÁ}[, }Á:[*}å,ææ^!Á &[}åãáðj•Á 	T ŴFÁÐ ÅT ŴFJÁ	• ÞŒÁ	
Pãt@ÁÜ^∙[ˇcã[}Á Ùãc^Á	 V^}ÁT ∂PÚVÁà[¦ð]*•Ánæ&![••Án@Ánæeo^!}Á][¦oða]}ÁnÁn@ÁnæoÁ 	 V[Áæ•^••Á;@Á*¢¢^}øÁ;ÁVÔÒÁ§Á æŊïçã{ÉÅ 	T ÓUGÁ (ÁT ÓUF€ÁS) åÁT ÓUFÌÁ	• ÞŒÁ	FJÁ.ÁGHÁŒ**•cÁ
Ô@adea≻^¦āraæā[}Á Ç27ai*¦^Ã[DÁ	 Ù^ç^} ÁT āPÚVÁn[¦ā]*•Á;} ÁncÁt¦ãn Énae^åÁ æ{] ^Á;æc^t } Ánc&![••Ánc@Á;} å^!&![-oÁnc4^æÁ [} ÁÑ; oÁCÁ 	 V[Áæ•^••Á[¦ÁæÁVÔÒÁ[ˇ¦&^Áæò^æÁ§Á c@Á}å^¦&[-Áæò^æÁ 	T WFFÁĘÁT WFÏÁ	• ÞŒÁ	ŒFJÁ
	 V@^^ÁT 2PÚVÁá[¦ā]*•Áá^}^ææ@ÁæÁ[¦{ ^¦Á -æ&d!^Á;}ÁŠ[ơÁTĚÁ 	• Ô [•^Á;ĭoÁsaeæÁraa]•ÁsjÁs@Á *¦[ĭ}å,aæ^¦Á;^ Á;^ç[¦\Á	T ŒJGEÁÇ ÁT ŒJGGÁ	• ÞŒÁ	
Ő¦[ˇ}叿^¦Á	 Q • cæqlææā[}Áæq)åÁnæq[] ā]*Á[-Ánā¢Á*;[ĭ}叿æ^¦Á ¸^ •Á;ān@ā]ÁæqlĭçāæqlÁ*;[ĭ}叿æ^¦Áæql[}*Án@-Á ^æ•e^;}Áæq)åÁ;[;c@o ;}Áæl[ĭ}åæd^£Ä 	• OE•^••Á[¦Á][ơ^}αῶψÁ;}ĒãơÁ;¦Á;~Ë •ãơÁ;∄¦ææã;}Á;Á&[}αæ;∄æ;ο•Áā;Á *¦[ˇ}å,ææ^¦ĒÄ	TYF⊖FÁ(ÁTYF⊖IÉÁ TYF⊖ÎÁsa)åÁTYFFFÁ	 VÜPÁ XUÔ-ÁÁÚXUÔ-Á P^æç^Á; ^œ+ÁÁ 	H€ÁTæÍÆFJÁ;FÂÁ
O)ç∧∙ca*aea[i]}Á (22a*'¦∧AîDÁ	• Q.•cæ ææā }Áse)åÁræ{] ā,*Á;-Á[ˇ¦Á *![ˇ}å,ææ^!Á;[}āā[¦ā,*Á;^ •ÁsæÁse)åÁ ā[{^åāsæ^ ^Æs[;}Á*!æåā*}oÁ;-Ás@Á;!{^!Á -æ&4;!^Á;}Æs[oÁrÁ	OE • ^ • • Á[¦Á¹[ˇ]叿æ^¦Á 8[}æé]ð[aæā]ð[á]åā ā]ææā]*Á;[{Á , @ærÁ*[[å•Áæ]åÁ; 敜38•Á {æ)ˇ-æ&cˇiā]*ĚÁ }	TYF€Ï (‡ÁTYFF€Á	 VÜPÁ XUÔ-ÁÐÚXUÔ-Á P^æç^Á; ^œ+Á 	R}^ÁGEFJÁ

Ö^œaqi\^åÂJæ^ÁQ;ç^• cā æqi() ÄÜ^][¦cÁ Á FJ€F€]ÌÜ] œEFØq; æpX€G G⊙Þ[çFJÁ ÁÚæt^ÁFJÁ



					Geo-Logix
Environmental Media	Sample Design	Rationale	Sample Location ID	Analytes	Date
	• Q.•cæ æaā }Áæ)åÁæ{] ā]*Á;Áç[Á*:[ˇ}叿æ^;Á ¸^ •Áæ^}^ææ@ÁœÁ}å^!Á& [-óÁ;}ÃĞ[óÁŒÁ	 V[Áæ•^^•Áæ/Ár¢c^}cÁrÁrÔÒÁÐÖÔÒÁ ÐÁRÓÁÐÁRÍC Á¹[~)å,æc^!Á 	TYFFÍÁæ) åÁTYFFÎÁ	• XUÔ•Á	FÎÁ.ÁGÌÁŒ*ˇ∙cÁ G€FJÁ
	• Qo•cce aeaā[}Án,Ánc@^^Án;[`}å¸aeo^¦Á,^ •Án,}•āe^Á cce}*^cā]*Án^å;[&\Án;[`}å¸aeo^¦ĐÁ	 V@Ás^^] Á, ^ •Á, ^!^Á, æán^åÁ, ão@Á •@el [, Ásel] çãæbÁ, ^ •Á, @!^ÁVÔÒÆÁ ÖÔÒÁ; !ÁXÔÁ, æ Æn^c>&c åÁg Áæ•^^••Á c@Áç^!cã&æbÁ^¢c^} oÆ, Æ![* } å, æc^!Á ã] æ&cÁ 	TYGEFÁÇÁTYGEHÁ	• XUÔ•Á	Á
	Q • cæl aæā[}Áse) åÁræ[] ā]*Á;Áæç^Ár@æl [, Á *![`}å,ææ^!Á,^ •ÁçTYFFÏÁ[ÁTYFGFDÁ , ão@n,Ár@-Ásel] çãseA*![`}å,ææ^!Á;ão EÁ Q • cæl ææā[}Áse) åÁræ[] ā]*Á;Ás;[Á*![`}å,ææ^!Á , ^ •ÁçTYGEIÁse) åÁTYGEIDÁ,ão@n,Ás@-Á à^å![&\Á*![*}å,ææ^!Á;ãoEÁ	 V[Áse•^^••Ás@Á;~ËãcÁc¢c\}ơÁ,-Á VÔÒÁSÖÔÒÁs;åÁxÔÁşÁ;[ˇ}叿c\¦Á 	TYFFÏÁGÁTYFGFÁ TYGGIÁSA) åÁTYGGÍ	• XUÔ•Á	Á
	• Ô[^&cā[}Á;~Á[*¦Á*¦[*}å,aec^¦Árae[] ^•Á *•ā;*Ás@-ÁÖ^[]¦[à^AÛÚFÎÁ:@-å¦[]*}&@A •^•c^{ Á	• V[Á& [•^ÁįčoÁůaææÁťæ)•Á§Ás@Á *¦[č}叿e^¦Á¸^ Á¸^ç[¦\ĒÁ	PÚFÁĮ ÁPÚI Á	• XUÔ•Á	GGÁGE**•oÁG€FJÁ
	• Ô[^&@[}Á[-Á*: [*}å_æ&^!Áræ[] ^•Á![{Á ^¢ãrœ]*Á¸^ •ÁŐYFÉEŐYGÁ⊕)âÁŐYIÁ	 Y ^ ÂÔY FÁ\$ Á] * æå â } o Áæ) å Á • ^ å Á (‡ Áæ• • ^ • • Á[Ás[] cæṭ ā] æ) • Á { å ææā] * Á; } Á āæ^ Á • Y ^ ÂÔY CÁ\$ Á[&ææ* å Áæå bæ&^ } o Át Áæ) Á æà æ) å [} ^ å ÁWÙVÁ; } Áæ Ás [ˇ cæ } Á à [ˇ] å æ÷ Á; -Áæ Ás ār ĒA • Y ^ ÂÔY Æs Áæ Ás [&ææā; } Á; @ ! ^ Á V ÔÒÆÄÖÔÒÁÆK ÔÁ; æs Áš ^ cr &cr å Ás ^ Á Y ÙÚÁ; ÁGEFGÁ 	Á	 VÜPÁ XUÔ-ÁĐÂUXUÔ-Á P^æç^Á; ^œ‡-Á 	ÍÁÁÁÁÁR*}^ÁG€FJÁ
Á	• Ô[^&@aj}Áj-Át¦[*}å,aeo^¦Ájae(] /•Á;[{Á •^ ^&o4,^ •Á;¦Áse)æj•ãjÁj-ÁÚ/20EÙÁ	•	ŐY FÉÁTY F⊖ÎÉÁTY FF⊖ÉÁ TY FFIEÁTY FFÍÉÁTY FFÎÁ	• ÚØŒĴÁ	GÎÁDÁGÏÁDE**•oÁ G€FJÁSQ}åÁFGÁ Þ[ç^{à^¦ÁG€FJÁ

12.ÁNVESTIGATION METHODOLOGIES

Ú¦ā¡¦Áq;Á&[{{^}}&^{^}}o^{^}[-Áā]d`•āç^Áā]ç^•oā*aæā[}ÊÁc@:Á•āɛ^Á¸æ•Á•&æ}}^åÁ[¦Á`}å^¦*¦[`}åÁ•^¦çã&^éAæ}åÁ
`cājāāā*•Áà^Áæ}Áā]^}å^]o^*;å^}oÁ*cājāācÂ[&ææ[¦Áæ)åÁ&|[••Ё&@&\^åÁ¸āo@Ác@:Á^•`|o•Á;-ÁæÁÙ^¸^¦ÁÙ^¦çã&^ÁÖãæ±¦æ;Á
æ)åÁÖãæ4ÁÓ^-[¦^Á[`ÁÖā*aÁÇÖÓŸÖDÁ^æ&&@ŽÁ

12.1 Soil Sampling Methodology

OHÁAJÁ æ Áçã al^ÁS •] ^&c^åÁ; ¦ÁOĐÔT ÈÁ

12.2 High Resolution Site Characterisation

Pât @Á^•[|ˇdī[}ÁnárÁ&@ede&cc'lǎnæaā[}Á, ænÁs[]å *&c'åÁ*•ā]*Ásæálæ&\Á;[*}c'åÁātÁ** *ā]]^åÁ, ão@ÁsæÁT^{{ à læ}^Á āj c'læ&tÁP^ålæi|ã&ÁÚ¦[-ājā]*ÁV[[|ÁÇTāPÚVDÁ, ænÁ*dājā*^åÁsæáAGGÁa[lā]*Á|[&æaā]}•Áæ&'[••Ác@-ÁnārÁÇTOÚFÁQ[Á TOÚCCDÉÁ

12.3 Groundwater Well Installation

 $\begin{array}{l} \text{CEA}_{1} \text{ cathA}_{1} \text{ AGEA}_{2} \text{ cathA}_{2} \text{ cathA}_{3} \text{ cathA}_{4} \text{ cathA}_{4$

զ[`}叿c^¦Á¸^||•Á¸^¦^Áq•œd|^åÁg,Áæ&&[¦åæj&^Á¸ãœÓMinimum Construction Requirements for Water BoresÁ ã,ÁCE•dæjædÇŠYÓÔÉGEEHDĚOŒA`{{æ^Áq-Ác@Áç[Át¦[`}叿c^¦Áa^æðā;*Á[}^•Áæ)åÁg,•œd|ææã[}Á;^c@|å•Áæ;Á]¦^•^}&^åÁa^|[¸É&[}•d`&æī]Áa^œæf•Áæ^Á;!^•^}&^åÁg,Ác@Áæcæ&@åÁ[ãÁa[¦^@|^Á[*•ÁQCææ&@;^}óÁ⊃DĚ

Alluvial Water Bearing Unit

Well ID	Location	TOC Elevation (m AHD)	Date Completed	Total Well Depth (mbg)	Screened Interval (mbg)	SWL (mBTOC)		
	U}•ãt^ÁFFËHÁÚ^¦&`ÁÙd^^óÁ							
T Y F€FÁ	Ù[ˇo@~æ•o%s[¦}^¦Áj}Ás@~Á à[ˇ}åæb*Á,ão@Aræ• æ(•Á Ô¦^^\Á	ÎËÏGÁ	Hebel Edefjá	ÏĖÁ	IËÁÁÎËÁ	HÈÏÌÁ		
TY F€GÁ	U}Án@Áni[ˇ}åæb^Á,ñan@Á Pæ• æ(•ÁÔ¦^^∖Á	ÍÈHÎÁ	HEBEÍ EDSEFJÁ	ÍÈÀ	GÈSÁ Á ÈSÁ	ŒÏ ŒI Á		
TYF€HÁ	U}Án@Áni[ˇ}åæb^Ájãn@Á Pæ• æ(•ÁÔ¦^^∖Á	IĚHGÁ	HeBeÍ BO€FJÁ	IÈ€Á	FÈ€ÁÁIÈ€Á	FËÌ GÁ		
TYF€Á	Þ[¦o@æoÁ&[¦}^¦ÁjÁo@Ájãe^Á	I ÈHÏ GÁ	HFB€Í BO€EFJÁ	IÈ€Á	FÈ€Á Á Ì€Á	FÈ€ÎÌÁ		
TY F€Î Á	Þ[¦ɑ@²¦}Áà[ˇ}åæ4^Á	ΙÈĖ€GÁ	€HBEÎBO€EFJÁ	IÈ€Á	FÈ€Á Á Ì€Á	FÈÎÌÁ		
TY F€Ï Á	Y ^• ơ\} Á;[ˈcāt] Á; Á@Á ã Á å[Ï ÈÏ HÁ	€-BeÎE®€FJÁ	I È€Á	FÈ€Á Á È€Á	ŒÏIFÁ		
TYF€ÌÁ	Ö[, }Á*lænáði}oÁ,-Á[l{^lÁ {æ)`~æ&c`lā,*Ánd^æÁ	ÏÈEÏ€Á	€HB ÊÎBD€FJÁ	IÈ€Á	FÈ€ÁÁIÈ€Á	FË€ÎÁ		
TYF€JÁ	Ö[, }Átlæáða}oÁ,-Á[l{^lÁ {æ}~æ&c`lðj*Áæó^æÁ	ÎÈÎIÁ	€HB ÊÎBD€FJÁ	IÈ€Á	FÈ€ÁÁIÈ€Á	FÉGIÌÁ		
TY FF€Á	Yão@njÁ[¦{^¦Á {æ), ~æ&cč¦āj*Áxdo^ænÁ	ÏÈÐH€Á	€HB ÊBEFJÁ	ΙĚÁ	FĚÁÁĚÁ	ŒÌ Ì FÁ		
T Y FFFÁ	Þ[¦ơ@-¦}Ána[ˇ}åæ-þ^Á	ÍÈÍHÁ	€lE®ÎEOSEFJÁ	ÍÈ€Á	GÈ€ÁÁÌÈ€Á	FËΪÌÁ		
TY FFGÁ	Þ[¦o@Ánd->æÁ[}Án@Ána[*}åæd-Á à^ç^^}Ángo dÆÁnd)åÆngo dÆÁ	ÍÈH€Á	CFBEÌED€FJÁ	ÍÈÉÁ	FÈ€ÁÁIÈ€Á	FÈÍIÁ		
T Y FFHÁ	Ô^} d^Á; ÆŠ[ŒÆÁà ¾åå; *Á	ÏÈGI€Á	GFBeÌ BO€FJÁ	ÍÈÁ	ŒÌÁÁÌÈÁ	O∄I€Á		
T Y FFI Á	Þ[¦c@;^•c%&[¦}^lÁ;-ÁŠ[cÁFÁ à ð ð ð ð ð	ÏÈGÍ€Á	G FBE Ì EDSEFJÁ	ÍÈÁ	GÈÁÁÈÁ	H Ì UÌ Á		
TY FFÍ Á	W;å^¦&i[-oÁsek^æÁjææækj/ Á ¸ão@ÁTYF€GÁÇ^¦]^}å&a`jæéÁ q[Ás@Ájão^Ási[`}åæb^DÁ	IÈ€Á	GHBEÌEDS€FJÁ	HĚÁ	€ĽÍÁÁHĽÍÁ	€ĚGÏÁ		

Well ID	Location	TOC Elevation (m AHD)	Date Completed	Total Well Depth (mbg)	Screened Interval (mbg)	SWL (mBTOC)
TY FFÎ Á	Þ[¦œÁnå*^Áj,Ás@Á ˇ}å^¦&¦[-óÁsd^æÁÁ	I ÈH€€Á	GHBEÌEDSEFJÁ	HĚÁ	€ĽÁÁÁHĚÁ	FÈÏIÁ
		U~•ãe^ÁÇFÍ	ÁÚ^¦&^ ÁÛd^^ dDÁ			
T Y FFÏ Á	Ù[ˇo@æ•o⁄&[¦}^¦Á;-ÁFÍÁ Ú^¦&`AÛd^^oÁ	IĚJ€Á	€ŒŒŒFJÁ	ÎÈ€Á	HÈ€Á ÂÎÈ€Á	FÈIJÁ
T Y FFÌ Á	Þ[ˈlo@əæoó&[ˈ]^láj-ÁFÍÁ Ú^l&îAÛd^^oÁ	ÍÈH΀Á	€Œ#EÐEFJÁ	l ÈGÁ	FÉSÁ Á ÉSÁ	HÈH€Á
T Y FFJÁ	Þ[¦c@¦}Áa[ˇ}åæ^ÁjÁÁFÍÁ Ú^¦&^ÁÚd^^cÁ	ÍÈHÌ€Á	€Œ#EÐEFJÁ	ΙĚÁ	FĚÁÁĚÁ	ŒÌ I GÁ
TY FŒÁ	Þ[ˈlc@ˈl} Áa[ˇ] åæf Áj ÁFÍ Á Ú^l& ÁÙd^^cÁ	ÍĚH€Á	€Œ#EЀFJÁ	ÎÈ€Á	HÈ€Á ÂÎÈ€Á	FÈHJÁ
TY FŒFÁ	Þ[¦c@, ^•ơás[`}åæð^á;ÁríÁ Ú^¦&^AÙd^^oÁ	ÎËI€Á	€HBF€BD€FJÁ	îĚÁ	HĚÁÂĚÁ	À∋ÎÉĐ

Á

 $V@^{^{\dot{A}}} = \frac{1}{3} \frac{\partial \Phi^{\dot{A}}}{\partial \Phi^{\dot{A}}} = \frac{1}{4} \frac{\partial \Phi$

Well ID	Location	TOC Elevation (m AHD)	Date Completed	Total Well Depth (mbg)	Screened Interval (mbg)	SWL (mBTOC)
ÕY FÁ	Ù[ˇơ@, ^∙ơ��[¦}^¦Á	ÏÈEGFÁ	€ÌEÐÉFGÁ	ΙĚÁ	FĚÁÁÉÁ	GÈ€JÌÁ
ÕY GÁ	Ù[ˇơ@¦}Áà[ˇ}åæa^Á æåbæ&^}ơÁ[ÁWÙVÁ	ÏÈEÏIÁ	€JEEÉ EDSEFGÁ	IÈ€Á	FÈ€ÁÁÌÈ€Á	€Ì GÌ Á
ÕY €I Á	Þ[¦c@ærcÁ;[¦cã;}Á;Ác@Árãc^Á }^ærÁ&ærÁ;ær@ÁerAæÁ	ΙÈIJΙÁ	€ÌEEÉEDEFGÁ	IÈ€Á	FÈEÁÁ Á ÈEÁ	€ÌI€Á

Á

Bedrock Water Bearing Unit

Q[| Áa[| ā] * • ÁT Y GEI Áa; åÁT Y GEI ÉÁ; ^ | { æ; ^ } OÁÚXÔÁSæð ā] * Á; æð Áā; • œð | ^ å ÈÁV @ ÁÚXÔÁ; æð Áā; • œð | ^ å Áā[Ás@ Áā^] c@Á [Ás@ Áā ^] c@Á Áæ; å Åæ; å Ææ; å

Well ID	Location	TOC Elevation (m AHD)	Date Completed	Total Well Depth (mbg)	Screened Interval (mbg)	SWL (mBTOC)
		U}•ãc^ÁÇFF⊞	FHÁÚ^¦&^ÁÙd^^dDÁ			
TY ŒFÁ	Úanãi^åÁ, ão@ÁTY F€GÁ	ÍÈÍÍ€Á	GI ЀJÐЀFJÁ	FŒÉÁ	ìÈÁÁFFÈÁ	A ÍL∰
TY G€GÁ	Úæāi^åÁ, ão@kÕY €IÁ	IÈÍ€Á	GÍÐŒJÐЀFJÁ	FI È€Á	FFÈ€Á.ÁFIÈ€Á	€ÈJ€Á
TY ŒHÁ	Úanãi^åÁ, ão@ÁTYF€ÌÁ	ÏÈEF€Á	GÍЀJÐЀFJÁ	FFÈ Á	F€È€Á ÁFFÈÍ Á	ŒGJFÁ
	U~•ã°ÁÇTÍ ÁÚ^¦&° ÁÙd^^ŒÁ					
TY Œ Á	Úæãi^åÁ,ão©ÁTYFFÏÁ	IĚÌ€Á	€IEFEEЀFJÁ	FŒÉÁ	JÈEÁ ÁFGÈEÁ	€ÌÎHÁ
TY ŒÍ Á	Úæãi^åÁ,ão©ÁTY FFJÁ	ÍÈHÏ€Á	€I#FEED€FJÁ	FHĚÁ	F€LĚÁ.ÁFHLĚÁ	ŒÏ JÁ

12.4 Groundwater Well Development

 $Y ^{\|\bullet \acute{A}@eah} \acute{A}_{c} a_{b} a_{h} a$

Location	Date Bailed	Volume Removed (litres)	Note
		U}∙ã¢^Á	
TY F€FÁ	HFBEÍÐG€FJÁ	FÍ Á	Óæajî^å Ána¦ Á Ù a* @Anᦠ* æa) a&Anᦠa [ˇ ¦ Ána) å Áné a* @Aná @An} Án; } Án ææn ¦ Á
T Y F€GÁ	HFBEÍÐЀFJÁ	FÌ Á	Ù a*@A&@~{a&æ—4A;å[č¦Á
TYF€HÁ	HFBEÍÐG€FJÁ	F€Á	Óæanj^å Áns¦^Á Ù a* @on∫;¦*æ) a8√n[å[*¦Á
TY F€ Á	HFBEÍEЀFJÁ	FÌ Á	Óæa‡^åÁsi;^Ás⇔e^¦Án∓∈ŠÉĞ;^-eÁqiÁ^&@ed*^ÁQCEÉÁQ;`i•DÉA àæa‡^åÁ;ŠÁ Ù a†@eÁ;;*æ)a&Aå[`¦Á
TY F€Î Á	(I-Be Î-B9€FJÁ	FFÁ	Óænā^âÁna¦^Ánee^¦Án ŠEĀN~eón[Á^&@nd*^Án]HÁQ*¦•DEÁnanān^âÁ å¦^Ánee^¦Án ŠÁ Ù a†@an[¦*an) a&a[*¦Á

Location	Date Bailed	Volume Removed (litres)	Note			
TYF€ÏÁ	€HBE ÎED€FJÁ	îÁ	Óæajî^åÁa¦^Áece^¦ÁiŠÉji^-cón;Ár&@eb;*^ÁgCÁQ;*;•□Éáaæijî^åÁ å¦^Áece^¦ÁGŠÁ			
TYF€ÌÁ	€HBE ÎED€FJÁ	FÍ Á	ËÁ			
TYF€JÁ	€l BeÎ ED¥EFJÁ	F€Á	Óæāj^åÁs¦^Ásee^¦Á ŠÉj^-eÁj Á^&@eb*^Á;ç^¦} à @Ésiæāj^åÁ å¦^Ásee^¦Á ŠÁ			
,		,	Ù a*@4&@{ a&a44å a*[` ¦ Á 			
TY FF€Á	€HBE ÎED€FJÁ	FHÁ	ËÁ			
T Y FFFÁ	€l BeÎ ED€FJÁ	G€Á	ËÁ			
TY FFGÁ	COENÉÈ EOS€FJÁ	I€Á	ÉÁ			
TY FFHÁ	GHBEÌEDSEFJÁ	I € Á	ËÁ			
TY FFI Á	GHB€ÌEOS€FJÁ	H€Á	ËÁ			
TY FFÍ Á	GHBEÌ£OS€FJÁ	I€Á	ĔÁ			
TY FFÎ Á	GHBEÌ£OS€FJÁ	F€Á	Óæijn á Áil í Á			
ÕY FÁ	HFBEÍ£09€FJÁ	F€Á	Ù a @A,^d[A,a[ˇ¦Á			
ÕY GÁ	HFBEÍÐS€FJÁ	F€Á	Ù a*@Aj.^d[Pp;ajAj.å[~¦Á			
ÕY € Á	HFBEÍEЀFJÁ	îÁ	Óæa¶^å Áns¦^Á Ù a* @e4[; k* æ} a&4[; å[°; k			
TY G€FÁ	GÍЀJÐЀFJÁ	G€Á	ËÁ			
TY G€GÁ	GÍЀJÐЀFJÁ	G€Á	ËÄ			
TY GEHÁ	GÍÐŒJÐЀFJÁ	G€Á	ËÄ			
U~•ãe^Á						
TY FFÏ Á	€HÁBÁEI EFEDDEFJÁÁ	HGÁ	ËÄ			
TY FFÌ Á	€HÁBÁEI BFEBDEFJÁ	F€Á	Óæi‡^åÁsi^Ásee^¦ÁiŠEÄ^-cÁtjÁ^&@et*^Ájç^¦}ãt@EÁsæi‡^åÁ å!^Ásee^¦ÁiŠÁ			
			Ù a*@wá¦*æ)a&váå[ˇ¦Á			
TY FFJÁ	€HDF€ED €FJÁ	G Á	Ù a*@xn\;'*aa)a&xn\(a*[`¦Á			
TY FG€Á	€HBF€BB€FJÁ	Ġ Á	Ù a*@Ása∿^ A∱a[ˇ¦Á			
TY FŒÁ	€HÁBÁEI BF€BЀFJÁ	H€Á	ËÁ			
TY GEI Á	€I #F€ED€FJÁ	I€Á	ËÁ			
TY GÉÍ Á	€I #F€ED€FJÁ	ΙÍÁ	Ë			

12.5 Groundwater Sampling Methodology

 $\tilde{O}_{[[]}^{*}] = \frac{1}{4} \cdot \frac{1}{$

Õ¦[ˇ}叿æ^¦Ánæ{]|^•Á¸^¦^Ás[||^&c^åÁ¦[{Á¸^||•ÁÕYFÉATYF€ÎÉATYFF€Ása}åÁTYFFIÁ[¦ÁÚØŒÛÁsa}æ¢^•ãnÁ;}Á FGÁp[ç^{à^¦ÁG€FJÁ;•ã,*Á@妿•|^^ç^•ÈÁ

 $\hat{U} = 4\hat{a}\hat{a}\hat{c} \hat{A}\hat{O}[\} d[|A_1|[8^{\hat{a}} |^{\hat{a}} + 4\hat{a} |^$

12.6 Hydropunch Groundwater Samples

12.7 Compound Specific Isotope Analysis

Compound specific isotope analysis (CSIA) is an analytical method that measures the ratio of stable isotopes (¹³C/¹²C, ²H/¹H, or ³7Cl/³5Cl) of a contaminant. CSIA results can provide conclusive proof of contaminant degradation, insight into degradation mechanisms, rate estimations, and contaminant source distinction/delineation. Á

12.8 Soil Vapour Sampling Methodology

OZÁŢ cæḥÁţ -ÁFGÁ¸æ• ēç^Ár` àÁ |æàÁ [āļÁçæ] [ˈ ˈÁræ{] | ^ l • Á¸ ^ l ^Áş • cæļ ^ åÁş ÁR` } ^ÁG€FJ Áæ& [• • Ác@ Á[[d] l ⏠ơÁţ -Ác@ Á] l [] • ^ åÁà ā å å * Áœò æÁţ } ÁœÁH€Áţ Á l äå Ëaæ ^ åÁræ﴿] | ā * Á¸ ææc¹ } ÁÇÙXFÁţ ÁÙXÏ Áæ¸ åÁÜXFFÁţ ÁÙXFÍ ÞÀV@ ^ Á æå åããå } æþÁ• [āļÁçæ] [ˈ ˈ lÁ•æ﴿] | ^ • ÁÇÙXÌ Áq ÁÙXF€ÞÁ¸ ^ l ^ A&[| | ^ & & åÁð¸ Ác@ Áæb ^ æÁ[-Á• * •] ^ & & åÁ¸ @ác Á* [å • Á { æ¸ *æ&c l ⏠* ÈÁÖ] | ā&æc^ • Ÿ ^ l ^ Áæb ^ } ÁææÁÙXFÁæ¸ åÁæÁs|æ¸ \ Á¸ æ• Áæþ• [Á cājā ^ à ÈÁÙ[āļÁşæ] [ˇ ˈ lÁ[* • Áæb ^ Ÿ l ^ • ^ \$ & åÁ ⏠ÁOĒcæ&@ ^ } oÂÙĒÁÜ

򾥋ç^Áçæ][* ¦Áræ{] | ^ ¦Áş•œa|ææã] } Á; ^c@] å[|[* ^ÁS[{] ¦ãr ^ å kÁ

- "Á V@Áa[¦^•Á,^\^Áæáçæ) &^åÁaj d¸ÁœÁ j ð, å% å% j ð, å% å% j å Åæj å
- "Á V@Áa[¦^•Á¸^¦^Án^æp^åÁ.•ã¸*ÁæÁ¸|æe œãAÁ||^ç^Áæð¸åÁn¢]æð¸åææà|^Án][}*^Áa[Á¸¦^ç^}œÁ
 ææ([•]@\a&Áa;|^æàc@[**@ÊÁæ)Áæ[}&¦^e√Á,|**Á¸æeÁæ)Á^㸕œæ||^åÁa[Á¸¦[c^&AóæÁr TÙLÁÁ
- ″Á V@Áa[¦ā]*•Á, ^¦^Á^ā]• œec^åÁæ) åÁājā @^åÁ, ão@Ás[}&\^c^ÈÁ

12.9 Quality Assurance

Û ĕdacî Á&[}d[|ÁQÛ ÔDÁ•æ{]|ā]*Á¸æ•Á`}å^¦œà^}Áā,Á*^}^¦ædÁæ&&[¦åæð,&^Á¸ãc@Á•]^&&ã&æã;}•Á[`dã,^åÁā,Á
ΆIIÌŒÈÉGuide to Sampling and Investigation of Potentially Contaminated Soil. Øā\åÂÛ ÔÁ;æ{]|^•Á¸^\^Á
&[||^&c^åÁæð,åÁa,&|`å^åÁa@Á[||[¸ā]*KÁ

Sample Identification	Date	Sample Type	Sample Matrix	Rate of Collection
ÖÙFÁ	HFB€Í BO€EFJÁ	Øã^ åÁå*] ã&æe^Á;-ÁTYÏBEEÉËÉÉ	Ù[ặ Á	FÁSjÁrÍÁræ[] ^∙Á
VÙFÁ	HFB€Í BO€EFJÁ	Øã^ åÁsiā] a&æe^Aj,-ÁTYÏBEEĚËEËÁ	Ù[ặ Á	FÁSJÁ⊤ÍÁræ{] ^∙Á
ÖXFÁ	€HBEÎBOSEFJÁ	Ø8^ åÁå*] ã&æe^Aj,-ÁÛXFÁ	Ù[ājÁxæ][ˇ¦Á	FÁ§ÁFÍÁræ{] ^∙Á
Ó æ}\ÁÁ	€HBEÎBOSEFJÁ	V¦æ)•][¦œÁa æ)∖Áræ{] ^Á	Xæ <mark>}[ˇ¦Á</mark>	FÁ,^¦Áaæ&@Á
ÖY FÁ	€ÍEÐÊÍEÐSEFJÁ	Øã\¦åÁå`] ã&æe^A[√ÁTYF€IÁ	Yær\¦Á	FÁ§ÁFHÁræ[] ^∙Á
VY FÁ	€ÍEÐÊÍEÐSEFJÁ	Ø8\ åÁda] a&æe*Áj-ÁTYF€IÁ	Yæe^\¦Á	FÁSjÁFHÁræ[] ^∙Á
ÖY FÁ	FŒFFEŒFJÁ	Øða` åÁÖ`] ð&ææt^Áj,√ÁTYFFIÁ	Yæe^\¦Á	FÁ§IÁIÁ•æ[] ^•Á
VY FÁ	FŒFFEŒFJÁ	Øða` åÁÖ`] ð&ææ^Áj,√ÁTYFFIÁ	Yæc\¦Á	FÁ§IÁIÁ•æ[] ^∙Á
ÖY GÁ	GÏ B€JED€FJÁ	Øã\¦åÁå`] &&æe^A[√ÁTYF€GÁ	Yæc\¦Á	FÁ§jÁlÁræ[] ^∙Á

Sample Identification	Date	Sample Type	Sample Matrix	Rate of Collection
VY GÁ	GÏ EŒJEŒFJÁ	Øā\¦åÁdā] 3Bæet^Áj,√ÁTYF€GÁ	Yær\¦Á	FÁ§AÎÁa∉] ^∙ÁÁ
ÖY HÁ	€ÌBFEBЀFJÁ	Øã^ åÁå*] ã&ææ^Áj√ÁTYFG€Á	Yær\¦Á	FÁSJÁÍÁ æ{] ^∙Á
VY HÁ	€ÌEFEEЀFJÁ	Øã^ åÁdā] ã&æe^Aj,-ÁTYFG€Á	Yær\¦Á	FÁ§ÁÍÁa∉] ^∙Á
ÖFÁ	Gesseì EOS€FJÁ	Øã^ åÁå*] ã&ææ^Áj,⊸ÁTYF€IÁ	Yær\¦Á	FÁ§ÁJÁ(æ{] ^∙Á
VFÁ	GESEÌ EDSEFJ	Øã\¦åÁdaj a&æe¢Áj-ÁTYF€IÁ	Yær\¦Á	FÁ§ÁJÁ;æ{] ^∙Á
ÖGÁ	GÎ⊞EÎED€FJÁ	Øã^ åÁå*] &&æe^Aj,-ÁTYF€GÁ	Yæ^¦Á	GÁ§ÁJÁ;æ{] ^∙Á
VGÁ	GÎEBÎED€FJÁ	Øð∿ åÁda] aBæet^Áj-ÁTYF€GÁ	Yær\¦Á	GÁ§ÁJÁ;æ[] ^∙Á
ÖHÁ	GÏEÐ EЀFJÁ	Øã^ åÁåč] ã&ææ^Áj√ÁTYFFIÁ	Yær\¦Á	GÁ§ÁJÁ;æ{] ^∙Á
VHÁ	GÏEÐ BЀFJÁ	Øã\¦åÁsiā] a&æe¢Áj-ÁTYFFIÁ	Yær\¦Á	GÁ§ÁJÁ;æ[] ^∙Á
ÖI Á	GÌ⊞EÌEOSEFJÁ	Øã^ åÁåč] ã&ææ^Áj√ÁÕYFÁ	Yær\¦Á	FÁSIÁIÁ æ{] ^∙Á
VI Á	GÌ⊞EÌEOSEFJÁ	Ø81\åÁdið] ð8æ€1√Á,-ÁÕY FÁ	Yær\¦Á	FÁSIÁIÁ æ{] ^∙Á
Ù] ã^Á	GeBei ED€FJÁ	V¦æ)•][¦o%a æ)∖Á	Yæ^¦Á	Á
Ó æ}\Á	GeBei ED€FJÁ	V¦æ)•][¦oÁ]ã^Á	Yæ^¦Á	Á
Ù] ã^Á	GÎ⊞EÎED€FJÁ	V¦æ)•][¦o%a æ)∖Á	Yæ^¦Á	Á
Ó æ}\Á	GÎEBÎED€FJÁ	V¦æ)•][¦oÁjã^Á	Yær\¦Á	Á
ÜFÁ	€ÍEÐÎEDSEFJÁ	Üą,•æe^Á	Yær\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜFÁ	GeBei ED€FJÁ	Üą̃•æe^Á	Yær\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜFÁ	FŒFFЀFJÁ	Üą,•æe^Á	Yær\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜGÁ	GGBEÌ EDS€FJÁ	Üã,•æc^ÁQP^å¦[]ˇ}&@Á(&æaã,}•DÁ	Yæ^¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜHÁ	GGBEÌ EDEFJÁ	Üã,•æe^Á	Yær\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜI Á	GÎEBÎED€FJÁ	Üã,•æe^Á	Yær\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜÍ Á	GÏEÐ EЀFJÁ	Üã,•æe^Á	Yær\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜÎ Á	GÌ⊞EÌED€FJÁ	Üã,•æe^Á	Yær\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜÏ Á	GÏ B€J£D€FJÁ	Üã,•æe^Á	Yæ°\¦Á	FÁ,^¦ÁåæêÁ,-Áæ(] ā,*Á
ÜÌ Á	€Ì#FEBD€FJÁ	Üą̃•æ¢^Á	Yæ°\¦Á	FÁ,^¦Á‱aêÁ,-Á-æ[] ã,*Á

 $V@^{A|aaa}[|aae[|^Aaa] c^{+}] = A^{A} C^{+}] = A^{A} C^{+} A^{A}$

13./GEOLOGY

Fill Material

Channel Infill Sediments

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Former Channel

Haslams Creek

Image 1: Former Channel of Haslams Creek

 $V @ \acute{A} ^ {aa}_{a} ^ {a}_{a} ^ {$

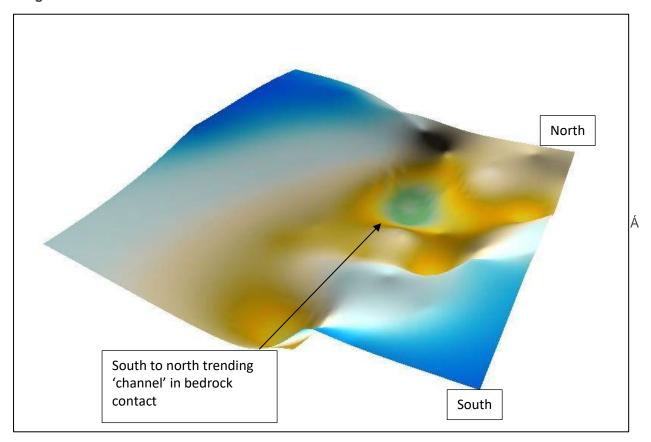
50 75 100 m

Residual Clays

Ö¦āļā;*Á^•`|œÁş;åå&ææ^Ás@Ásu^^\Án^åã;^}}œÁ;\$¢^!|^Á^•ãå`æÁs|æê•Á; @ã&@Á;æå^Áş;qíÁOE@æð|åÁÛ@æ‡^Ás^å¦[&\ÉÁ [¦Á;æå^Ásã^&d^Áş;qíÁ;@æ‡^Ás^å;[&\ÈÁ

Shale Bedrock

Image 2: Bedrock Contact



14. SITE HYDROGEOLOGY

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Α

ALLUVIAL WATER BEARING UNIT

Õ¦[ˇ}叿æ^¦Á^¢ã·o^ÁĒÉÁÁ-Á-Á;à*Á¸ã©@JÁ⊕|ઁçã{Á¸Á-©©Á;¦{^!ÁPæ>|æ;•ÁÔ¦^^\ÈÕ¦[ˇ}叿æ^¦Á|[¸Áāã^&cã]ÁmÁçæàāæà|^Á¸ã©Á*^}^!æÁ --|[¸ÁqÁ@Á;[¦c@Áæ)åÁ;[¦c@ææoÁgØd*'¦^ÂCEDMÁJæ*:[{ ^dæ&A@æåÁ*|^çææā;}•Áæ)*^Á;[{Á-HÁ,CEPÖÁqÁA,CEPÖEÖ;[ˇ}叿æ^¦ÁaÁ\${}-È TāPÚVÁ^•ˇ|o^Áæ^}cãa?åÁc@Áæ|;çã{ÁæA@殢©;Á@c^¦[*^}[ĭ*^Á,ão@ÁæÁ;|æåÁæ)*^Á;-Á@妿ĕ|æ&Á8;}å"&cã;ãæ%*È

Water Quality Characteristics						
Ò ^&da&a\$/4Ô[}å*&aãçãcÁ	GeÌ Ág ÁFÍĒ HGÁµÙÐB《ĒÁ° ĕçæ∤^} αÁg œa∮Ásã•[ç^åÁn[ãā•Ás^ç,^^} ÁFHHÁg ÁF⊖ĒEÌÌÁ, *ЊÁ					
] PÁ	í keî Áṭ Áì keì Á					
Ü^å[¢Á	Ë÷ÏIÈÁĘÁĘÁXÁ					
U¢^*^} Á	€ÈEJÁ; *BŠÁ; ÁGÈJÍÁ; *BŠÁ					
V^{] ^ æĕ ^ Á	FÎ Ê ÁŢÁGFÊ ÁÔÁ					
	Water Bearing Unit Characteristics					
Ο Εç^¦æ*^ÁÔ[}å*& αᾶρᾶ6 ÁÇ&(Ð-DÁ	F¢F€ ^{‡e} Ág ÁHĚÁ F€ [©] Á					
P^妿ĭ æ¾Ő¦æååN}cÁ	€ÌECÁ					
Ò~^&cãç^ÁÚ[¦[• ãc Á	eie rát áeithá					
Ø [, ÁX^ [&ãĉÁÇ; Ð^æ;DÁ	Pat @rÁspadamana rÉA[8adh rÁt¦ranacr¦Ás@adhAF€€Á, Ðradá					
Õ¦[ˇ}叿e^¦ÁØ [¸ÁÖãi^&cã[}Á	Õ¦[ˇ}叿e^¦Áվ[¸Ánná;ædãæà ^Ána)åÁn^}^¦ædjåÁnojå[¦c@æeoÁ					

Á Á

BEDROCK WATER BEARING UNIT

Ó^å¦[&\Á¹[*}叿œ^¦Á¤Á¸æœ^¦Á¸ão@jÁ¸œф^Áà^å¦[&\ÈV@òÁ¸æœ^¦Áà^æð]*Á[}^Áæ^Aææ^¦æd;Aæ];Aā;`*Éæ&]•Áæ)åÁ;~ËãvÁæ)åÁ;~ËãvÁæ)åÁ;~ËãvÁæ)åÁ;F€(Áa^j[¸Áa²Á*;-æ&^ÉæðÁæ];|[çā;ææ^ÁÜÈŠÁ¸ÆFÁ;OEPÖEÄJæ):[{ ^dæA@æåÁ^|^çææã;}•Áæ)*^Áa^; ^^}Áæ†Áæ)åÁ;ÈÁ { OEPÖEÖ[;*jå,ææ°¦ÁşÁæ)Áa^å;[&\ÆáÁ[;ā,*ÁgÁæ)Á;[;c@æ•cÁØæ*;^AÄÓŒÄ

 $P^{\hat{a}} = \frac{126}{8} \left[\frac{1}{4} \cdot \frac{1}{8} \cdot \frac{1}{4} \cdot \frac{1}{8} \cdot \frac{1}{4} \cdot$

	Water Quality Characteristics					
Ò ^&da&æ ÁÔ[} å « &cāçāc Á	FÎÊÎÎÂÇÎÁÇÎÐÊÎI€ÁµÙÐ&(ÊÁ°°ãçæ†^}oÁÇœdÁãã*•[ç^åÁn[ãå•Áà^ç,^^}Ár∈ÊFÍÁÇÁFHÊHÌÁ;*EŠÁ					
] PÁ	Í Ě Î ÁĘ Â Ë HÁ					
Ü^å[¢Á	JÈÁĘÁÍ GÈÁ; XÁ					
U¢^*^} Á	€DEÏÁ, *EŠŠÁĘÁĒÏIÁ, *EŠŠÁ					
V^{] ^ æe	FJÐÁ(Á GHÌ ÁÔÁ					
	Water Bearing Unit Characteristics					
OE_{c}^{+} at ^ $AO[$ } a * 8 CE_{c} ac AC_{c} + O ^ 8 DA	F¢F€ªÁÁ					
P^妿 ã&ÁÕ¦æåã\} oÁ	€ÈEFÍ Á					
Ò~^&cãç^ÁÚ[¦[• ãĉ Á	€ÌÈ€Í ÁÍA					
Ø [¸ÁX^ [&ãĉÁÇ&{ÐDÁ	GÁ F€ ^đ Á					
Ø [¸ÁK^ [&ãĉÁÇ;Đ^ædÁ	€ÌĒJÍ Á					
Õ¦[ˇ}叿e^\ÁØ [¸ÁÖā^&cā[}Á	Õl[*}叿c^lÁ [¸Ásā^&cā̞}ÁsēÁ[¸ælå•Ás@Á;[ˈc@æedÁ					

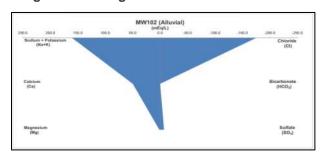
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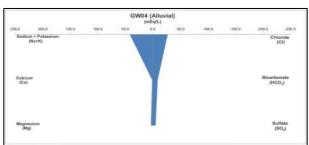
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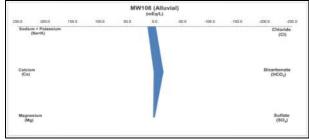
զ[*}叿e^\'Á;[}ã[|ā;*ÁåæææÁ@æÁājåå&æe^\åÁo@Á[||[¸ā;*Á@å¦[*^[|[*&&æÁs[}åãã]}•KÁ

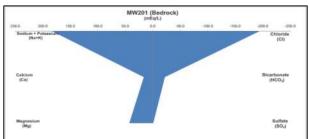
- ″Á V@Áæd|`çã{ Ásiān]|æê•Ánât}ãa38æd;oÁ@c°\[*^}^ãcÁ¸ão@Á@at@t^Áçædãææà|^Á@妿ĕ|ã&Á&[}åi &kāçãæã•ÈÁ
- $\tilde{A} = \tilde{O}[\tilde{a} \approx \tilde{A} \tilde{A} = \tilde{$
- "Á V@Ás^å¦[&\Áj[c^}cāj{ ^dā&Ás`¦-æ&^ÁsiÁ@ã @¦Ás@æ)Ás@Áæj|`çãæjÁj[c^}cāj{ ^dā&Ás`¦-æ&^Á @&&@Ásiåā&æe^•ÁæjÁj] æ}åÁs^¦cã&æjÁs¦aæåãs}dŽÁ

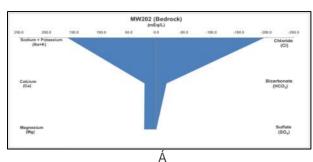
Image 3: Stiff Diagrams of Cation Anion Balance

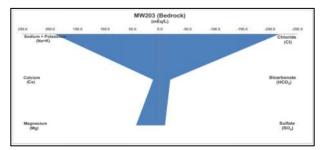


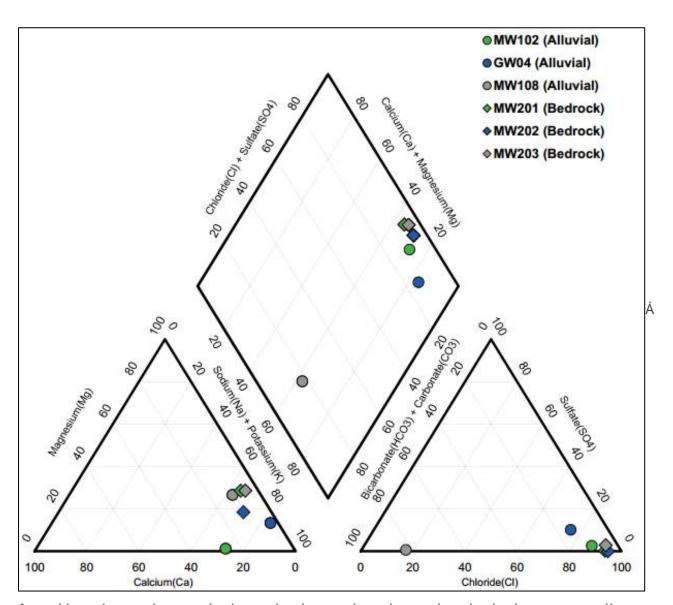












Ôæcā[}ÁÐÁæ)ā[}Ásaæ)a; &^Ás[åā&æe^•Ás@ Áæ]*çãæþÁæ) åÁs^å¦[&\Á;æe^¦Ás^ædā;*Á`}ãæ Áæd^Á;[oÁs;c^¦&[}}^&c^åEÁ

15./RESULTS

15.1 Phase Separated Hydrocarbons

 $\dot{\cup} @ e^{\dot{A}_{A}} = \dot{A}_{A}^{(1)} = \dot{A}_{A}^{(2)} + \dot{A}_{A}^{(2)}$

15.2 Soil Analytical Data

 $\dot{U}[\bar{a}\dot{A}\bar{a}] \not= \hat{a}\hat{a}\hat{A}^{\dagger} \wedge \hat{a} \wedge \hat{A}^{\bullet} \\ \{ \not= \hat{a}\hat{a} \wedge \hat{a}\hat{A}\bar{a} \wedge \hat{A}^{\bullet} \wedge \hat{A}^{\bullet} \\ (\not= \hat{a}\hat{a} \wedge \hat{a}\hat{A}\bar{a} \wedge \hat{A}^{\bullet} \\ (\not= \hat{a}\hat{a} \wedge \hat{a}\hat{A}\bar{a} \wedge \hat{A}^{\bullet} \wedge \hat{A}^{\bullet$

TRH and BTEX

VOCs

PAHs

Metals

Asbestos

15.3 Soil Vapour Analytical Data

Ù[āļÁçæ][ˇ¦Áæ)æ|îœ&æ†Á'^•ˇ|œÁæ†^Á•ˇ{{æ+ã*^åÁjÁVæà|^•ÁlÎÁæ)åÁlĨÈÄŠæà[¦æe[¦^Á'^][¦œÁæ;^Á]¦^•^}&^åÁājÁ Otaæ&@ ^}œÁ'ÈÁ

TRH and BTEX

 $V\ddot{U}P \acute{A} \ddot{O}_{1} \ddot{E} \ddot{O}_{2} \acute{A}_{1} \wedge \acute{A} \dot{A}_{2} \wedge \dot{A}_{3} \dot{A}_{4} \otimes \dot{A}_{3} \dot{A}_{4} \otimes \dot{A}_{3} \dot{A}_{4} \otimes \dot{A}_{3} \dot{A}_{4} \otimes \dot{A}_{4} \dot{A}_{5} \dot{A$

 $V[|`^{^} ^A] \approx A^a ^c &c a^a A \approx A^a () &c a^a A ()$

VOCs

15.4 Groundwater Analytical Data

զ[``}叿e^¦Áæ)æ|îca&æ|Á^•``|o•Áæ\^Ár`{{æiār^å/ĀjÁ/æà|^•ÂiÁs@[`*@ÁFHÈÄŠæà[¦æe[¦^Á^][¦o•Áæ\^Áj!^•^}c^åÁ ∄ÁCEcæ&@_^}oÁVÈÁ

TRH and BTEX

 $V\ddot{U}P\acute{A}DF\acute{A} \stackrel{A}{\sim} \mathring{A} \wedge c^{*} \&c^{*} \mathring{a} \stackrel{A}{\sim} \&c^{*}$

 $V[|``^$^{A} = A^{A} \cdot C^{A} \cdot A^{A} \cdot A^{A}$

$$\label{eq:condition} \begin{split} \dot{O}o@~|\dot{a}^{\wedge}\}:^{\wedge}_{,} &\approx \dot{A}_{a}^{*} \wedge c^{*} \otimes c^{*}_{a}^{*} \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \\ &\otimes \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \\ &\otimes \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \\ &\otimes \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \\ &\otimes \dot{A}_{a}^{*} \otimes c^{*}_{a}^{*} \dot{A}_{a}^{*} \dot{$$

 $\{ B \} \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \land \bullet \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \land \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \land \bullet \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \land \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \rightarrow \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \land \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \rightarrow \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \land \stackrel{\text{\tiny Light}}{\text{\tiny Light}} \rightarrow \stackrel{\text{\tiny L$

VOCs

FÈFÉÖ ã& @[|[^o@a)^Á¸æ•Áå^ơ^& ơ^& ơ^åÁææÁ&[}&^}d ææā[}•Áæà[ç^Á|æà[|æe[|^Á|^][|dā]*Á|ã[ã•Aã]Á*|[* }叿e^|Á •æ4]| * •ÁÖY \in ÊÝT Y F \in CÁæ) åÁT Y F \in EÁ

FÌFĒÖā&@[|[^c@}^Á, æ-Áå^c^&c^åÁææÁ&[}&^}dææÍ] •Áæà[ç^Áå¦ā]\āj*Á, æc^\Áæ•^^•-{ ^}oÁ&lãc^\ãæÁā]Á *\[`}å, æc^\Á•æ{]|^ÁÕY $\ = \ Aæ$ åÁææÁ&[}&^}dææĨ]•Áæà[ç^Á|æà[|ææ[\^Á'][|cāj*Á|ājāæ^Áà`cÁà^|[, Ác@^Áæ•^^•-{ ^}oÆ\⿣\$|Å; æc^\Áæ\$|[^A|ājāæ^Áà`cÁà^|[, Ác@^Áæ•^^•-{ ^}oÆ\⿣\$|Á*|[`}å, æc^\Áæ\$|]|^•ÁTYF $\ = \ E$ Á

FÈFÈCË/¦&&@[¦[^c@æ),^Á, æ•Áå^c^&c^åÁææÁ&[}&^}dææ[ç^Á|ææ][¦ææ[¦^Á'^][¦cā]*Á|ā[ã•Áā,Á*¦[`}叿æ^¦Á •æ{]|^•ÁÕY €IÁæ),åÁTY F€CEÁ

QËÚ¦[]æ}[}^Á¸^!^Áå^c^&c^&c^åÁææÁ&[}&^}dææã]}•Áæà[ç^Ájæà[¦ææ[¦^Á!^][¦cã]*Ájã[ãæ•Áā]Á*¦[ˇ}叿æ^¦Á•ææ[]|^•Á TYFFÍÉÄTYFFĨÉÄTYFFĨÉÄTYFFĨÉÄTYFFJÉÄTYFG€ÉÄTYG€

 $\begin{array}{l} \& \tilde{a} \stackrel{:}{\text{EFE}} \stackrel{:}{\text{EFEE}} \stackrel{:}{\text{EFE}} \stackrel{:}{\text{EFEE}} \stackrel{:}{\text{EFEE}$

 $\begin{array}{l} \text{V$|$38.00[$|$[^\circ c^\circ \}^{\dot{A}}$ &$a\bullet^{\dot{A}} \land c^\circ \&c^\circ \mathring{A} \land ae^{\dot{A}} \&[^\circ \} \land aea_{\dot{A}}] \land \mathring{A} \Rightarrow \mathring{A$

 $X3_{1}^{1}/48.00[la8^{4}; ae^{4} Ac^{4} Ace^{4} Ace^{4}] \cdot Ace^{4} A$

 $\ddot{U}^{\hat{a}} = \dot{A} \times \dot{A} \times \dot{A} = \dot{A} \times \dot{A} \times \dot{A} = \dot{A} \times \dot{A} \times$

SVOCs

ÙXUÔ•Á,^\^Á,[ơ\\$^c^&c^\$\&c^\$\&f\] &\}dæaā;}•Át\^æ&\Áx@æ\Áx@æ\Áx@æ\Áx@e\Áx@e\Áx@e\Áx@e\Áx@e\Áx][¦cā,*Áa,ão Áa,Áæ\Át\[`}叿&\Á •æ{]|^•Áæ}æ\^^å\ÁX/æ\|^ÁF\EDÀÁ

PAHs

 $\begin{array}{l} \text{$\dot{\Phi}^{\circ}$} = \frac{1}{4} \left(\frac{1}{4} - \frac{1}{4} \right) \left(\frac{1}{4} - \frac{1}{4} - \frac{1}{4} \right) \left(\frac{1}{4} - \frac$

Dissolved Metals

OEF•^} & Buán con & Control & Andréa () & Control & Andréa () & Control & Control & Andréa () & Control & Andréa () & Control & Con

 $\hat{O}@[\{\tilde{a}\{A_{\alpha}^{\bullet}\hat{A}_{\alpha}^{\bullet}\hat{A}_{\alpha}^{\bullet}\hat{A}_{\alpha}^{\bullet}\hat{A}_{\alpha}^{\bullet}\} \land \hat{A}_{\alpha}\hat{A}_{\alpha}^{\bullet}\} \land \hat{A}_{\alpha}\hat{A}_{\alpha}^{\bullet}\} \land \hat{A}_{\alpha}\hat{A}_{\alpha}^{\bullet}\} \land \hat{A}_{\alpha}\hat{A}_{\alpha}^{\bullet}] \land \hat{A}_{\alpha}\hat{A}_{\alpha}\hat{A}_{\alpha}^{\bullet}] \land \hat{A}_{\alpha}\hat{A}_{\alpha}\hat{A}_{\alpha}^{\bullet}] \land \hat{A}_{\alpha}\hat{A$

 $\hat{O}[\]\]^{\dot{A}} \stackrel{\text{dec}}{\text{dec}} \stackrel{\text{dec}}{\text{dec}} \\ \hat{A} \stackrel{\text{de$

 $\tilde{S}^{\hat{A}} = \tilde{A}^{\hat{A}} \cdot \tilde{C}^{\hat{A}} + \tilde{A}^{\hat{A}} \cdot \tilde{C}^{\hat{A}} = \tilde{A}^{\hat{A}} \cdot \tilde{C}^{\hat{A}} \cdot \tilde{C}^{\hat{A}} = \tilde{A}^{\hat{A}} \cdot \tilde{C}^{\hat{A}} \cdot$

Zā, &Á, æ-Áå^c^&c^åÁææÁ§[} &^} dææā[} •Áæà[ç^Ác@-ÁŒÞZÒÔÔÁ;^•@, æe^¦Áæ••^••{ ^} oÁs!āc^!āæÁā, Á⁺:[ˇ] å¸ æe^¦Á •æṭ]|^•ÁÕY FĒÃÕY GÊÃT Y F€FÊÁT Y F€GÊÁT Y F€ ÊÃT Y F€ ÊÃT Y F€ ÊÃT Y F€JÁæ} åÁT Y FF€EÁZā, &Á¸ æe Áæ‡ [Á å^c^&c^åÁææÁ§[} &^} dæā[ç^Ác@-ÁŒÞZÒÔÔÁ; æ±ā]^Á¸ æe^¦Áæ•^•••{ ^} oÁs!āc^!āæÁā, Á⁺:[ˇ]å¸ æe^¦Átæ\$[]|^•Á
ÕY GÊÃT Y F€ ÊÃT Y F€JÁæ} åÁT Y FF€EÁZā, &Á¸ æe Áå^c^&c^åÁææÁ§[} &^} dæā[ç^Ác@-Áæà[;aæ[;^Á^][;aā]*Á |ā[ãæ Áā Á†;[ˇ]å¸ ææ^¦Átæ]|^•ÁT Y FFEEÁZā, &Á¸ æe Áå^c^&c^åÁææÁ§[} &^} dæā[;aæ[;^Á][;aā]*Á |ā[ãæ Áā Á†;[ˇ]å¸ ææ^¦Átæ]|^•ÁT Y FFEEÁXā, æe Áå fY FFFEEÁX

Öã•[|ç^åÁ; ^cæ+Á,^!^Á;[œ4.^c^&c^åÁæà[ç^Áæà[!ææ[!^Á^][!c3]*Áã[ãæ Áā,ÁæHÁ^{æá]ā]*Á:[`}叿æ^!Áæ{]|^•Á æ)æf.•^åÁ[Væà|^ÁFCIDÁ

PFAS

 $V@\acute{A}^* \{ \acute{A}_i = \mathring{A}_i =$

15.5 Compound Specific Isotope Analysis

 $V\hat{O}\hat{O}\hat{A}\&ab\hat{a}[\hat{A}\tilde{a}[\hat{q}]^A\hat{A}|aaa\hat{q}\bullet\hat{A}^A|Aa\hat{a}\hat{A}^A\hat$

15.6 High Resolution Site Characterisation

CZÁrd[]*Á^•][]•^Á; æ•Á; ^æ•Á; ^æ•Á; ^áà·ÁÝÙÖÉÄ; å å8ææã; ^Á; ÁæÁææ; [*^} ææ^åÁ@ å¦[8æåà[}ÁÇVÔÒÁÐÄÖÔÒÁÐÁXÔDÁ; Á T āPÚVÁà[¦ā;*•ÁT ŒÚFÁæ; åÁT ŒÚFJÉÆ; {] |^c^åÁæåbæ&^} cÁ; Á; ^||•ÁT Y F€GÁæ; åÁÕY I Á^•]^8œã; ^|^ÈÉÔ[{] æðã;[}Á æð æð;•oÆÔÔÁáæææÁs; å å8ææ^åÁ@Á^•][}•^•Á&[¦¦^|ææ^åÁ; ãc@ÁæÁ]]^¦Á^8æð; Á; Æð. Á; ææ^¦Á&; |ĭ { }ÁşÁæÁæÁ *![ĭ}å, ææ^¦ÉÁ

Þ[Á; c@¦Á^•][}•^Á;} Á;@ÁŸÙÖÁ; æ;Á; ^æ;'^åÁ; Áæ¦Á; c@¦ÁT ðPÚVÁ;;[¦ð;*•ÈÁ Ø;ØÁ^•][}•^•Á; åð&æ;ã;^Á;-Á; ^c@æ;^Á; æ;Á; ^æ;'^åÁ; Á•¢;^¦æ;Á; 'èÈÁ

16. AQA/QC ASSESSMENT

16.1 Field QA/QC

RPD Results

 $\dot{U}[\bar{a}/\hat{a}^*] | \bar{a}\partial_{a}e^{-} + \bar{b}\partial_{a}| |\bar{a}\partial_{e}e^{-} + \bar{a}\partial_{a}| | \Delta e^{-} +$

Ù[ā/k;æ][ˇ¦Áåˇ]|ã&æe^Á^•ˇ|o•Áse^Á,ão@;Ás@Áseå[]e^å/Áse&&^]œ;&^Ás¦ãe/¦ãæ/(ÁseÉÉ€ÃÁQCEÙIIÌŒÈDÉÁ

- ″Á XÔÁŞIÁda]|a&æe^ÁjæaãÁTYF€IÁsa}åÁVYFLÁ
- ″Á FÈCHÈ Ë:/¦ā[^c@|à^}:^}^Ás[Á;ā]|a&ææ^Á;æālÁTYFG€Áse)åÁVYHLÁse)åÁ
- ‴Á Òc@ |à^}:^}^Á§iÁs*]|&Bæec^ÁjæáiÁTYFG€Áse)åÁÖYHÁ

 $V @ \acute{A} \phi \& A^{\dot{a}} \& A^{\dot{b}} \mathring{A} \otimes \mathring{$

Field Blanks

 $\hat{O}UU\hat{O}\hat{A}_{A}^{A} \hat{A}_{A}^{A} \hat{A}_$

ÔU ÚÔÁ, ^¦^Á,[ơÁs^ơ\&ơ\áÁs,Ás@Át¦[ˇ}叿ơ\Áæ\|åÁs|æ)\Áæ(]|^•Ás,åæ&ææā,*Áæ(]|^Áœæ)å|ā,*Áæ)åÁsæ)•][¦ơÁ ♂&@;ãˇ^•Á,^¦^Árˇ~æ&a\}ớÁ;Á,¦^ç^}ơÁs¦[••Ás(}œæ(ā,ææā)}Ás^ç,^^}Áræ(]|^•ÁqVææ)|^ÁFIDÈÁ

Rinsate Samples

 $\hat{O}UU\hat{O}\hat{A}_{\Lambda'}^{A} = \hat{A}_{\Lambda'}^{A} + \hat{A}_{\Lambda'}^{A} + \hat{A}_{\Lambda'}^{A} = \hat{A}_{\Lambda'}^{A} + \hat{A}_{\Lambda'}^{A} + \hat{A}_{\Lambda'}^{A} = \hat{A}_{\Lambda'}^{A} + \hat$

- ″Á GËÚ¦[]æ}[}^Á§AÜHLÁ
- "Á Ó¦[{ [åã&@[;]{ ^c@æ}, ^Áæ}, åÁÔ@[;]-[;{ Á§, ÁÜÎ LÁæ), åÁ
- "Á Ô@[:[-{:{ ÁŞ ÁÜÏ ÈÁ

QŒÚ¦[]æ}[}^Á¸æ-Áå^৫%åÁ§Á;[`}叿æ^¦Áæ{]|^ÁPÚGÀÄUHÁ¸æ-Á&[||^&c^åÁ[||[¸ã¸*Áæ{]|ã¸*Á;ÁPÚFÁ¸@&@Á¸æ-Á*æ{]|^Áã;ÁPÚGÁ¸å&&æ;å*Ác@Áå^৫%áã¸Áæ,Áç@Á;⏿-Á*æ{]|^Áã;Á}[6Á;[{Áæ,Áā;æå^``*æ*Áåå,Ác@Á¦ā,*æ*Á*æ;]|^Áã;Á}[6Á;[{Áæ,Áā;æå^``*æ*Áåå^&%}]

 $V@\dot{A}^{\ } \stackrel{\text{dis}}{=} \mathring{a}^{\ } \stackrel{\text{dis}$

 $\tilde{O}^{[ES]} = \tilde{a}(A_{A}) - \tilde{a}(A_{A}) -$

Laboratory QA/QC

OZÁ { { zel^ Áj -ÁŠzeà [| zelf | |^ ÁÚ OZÐÚ ÔÁ& zezzelfa Á | |^ • ^ } c^ å Ág Ás@ Áf | | [] ā * Ázzeà |^ ÈÁ

Report #	Analysis Within Holding Time	Surrogate Recovery	Lab Duplicate RPD %	Lab Matrix Spike Recovery	Lab Control Sample	Lab Method Blank
ÎÍJÏÏÍËÙÁ	✓	✓	х	✓	✓	√
ÎÍJÏÍJËŒÁ	✓	-	-	-	✓	✓
ÎÍJIÍGËYÁ	✓	✓	✓	✓	✓	✓
îíJïîìËYÁ	✓	✓	✓	✓	✓	✓
ÎÎFIJ€ËYÁ	✓	✓	✓	✓	✓	✓
ÎÎFÎÍIËYÁ	✓	✓	✓	✓	✓	✓
ÎÏGJ€JË∕Á	✓	✓	✓	✓	✓	✓
ÎÏHÏÏHË⁄Á	✓	✓	✓	✓	✓	✓
ÎÏIFI€Ë∕Á	✓	✓	✓	✓	✓	✓
ÎÏGJFHË/Á	✓	✓	✓	✓	✓	✓
ÎÏHÏÏÏËYÁ	✓	✓	✓	✓	✓	✓
ÎÏJÍŒFËYÁ	✓	✓	✓	✓	✓	✓
Î Ï JÍ GÍ ËY Á	✓	✓	✓	✓	✓	✓
ÎÏJÍGHËYËXGÁ	✓	✓	✓	✓	✓	✓
ÎÌFHFHË⁄Á	✓	✓	✓	✓	✓	✓
ÎÌFHEÌËYÁ	✓	✓	✓	✓	✓	✓
Ï€COEÛPÁ	✓	-	-	-	✓	✓
ÌÌÏ΀ËYÁ	✓	-	✓	✓	✓	✓
ÒÙFJHÏ I Í Ï Á	✓	-	✓	✓	✓	✓

Quality Assurance Criteria	Quality Control Criteria		
Holding Times	Accuracy		
TRH 14 days soil / 7 days water / 14 days vapour	Surrogate, matrix spike, control sample 70-130%.		
VOCs 7 days soil / 7 days water / 30 days vapour	Surrogate recovery 50-150%.		
SVOCs 7 days water	Precision		
PAHs 14 days soil / 7 days water	Method Blank Not detected		
Metals 6 months soil / 28 days water	Duplicate - No limit (<10xEQL), 0-50% (10-20xEQL), 0-30% (>20xEQL)		
PFAS 14 days water			
Ammonia, Chloride, Nitrate, Sulphate 28 days water			
Alkali Metals 6 months water			
Alkalinity (speciated) 14 days water			

659775-S

 $V@A/(aaa)Aa^*] | aBaee^A/UUOA^*] [| c^aA/(aae^*)^* Aa(c^*) | aaA^* | aaac^*Aa(c^*) | aaaa$

17. DISCUSSION

17.1 Trichloroethylene in Groundwater

 $V@\acute{A}^{\bullet\bullet}|_{O}\acute{A}_{\bullet} = A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet}@\acute{A}_{\bullet}|_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet} A_{\bullet}@\acute{A}_{\bullet} A_{\bullet} A_{\bullet}$

TCE Distribution in Groundwater

 $V @ \acute{A}' ^{\bullet `} | o \acute{A} | \acute{A} P \ddot{U} \dot{U} \dot{O} \acute{A} e) ~ \mathring{A} \acute{A} | [`` \} \mathring{a}_{,} ee ^{\cdot} | \acute{A} | \acute$

 $V@^{\hat{A}} + \hat{A} + \hat{A} = \hat{A} + \hat{A} = \hat{A} + \hat{A} + \hat{A} = \hat{A} + \hat{A} + \hat{A} = \hat{A} + \hat{A} = \hat{A} + \hat{A} = \hat{A} = \hat{A} + \hat{A} = \hat{A} = \hat{A} + \hat{A} = \hat{$

GDÁVÔÒÁō Áàæ&\Áåã~`•ā,*Á¦[{Áj^aæÁæ^\!•Áæ}åÁ[!*æ)ā&Á(æ°\!⿆ŽW@\!^Áō ÁæÁ&[!!^|ææā]}Áà^ç,^^}Ác@Á]¦^•^}&^Á[-ÁVÔÒÁæ)åÁōō Áå^*!æåæ)oÁj![å`&o•ÁājÁ*![`}叿e°!Áæ)åÁc@A[&&`!!^}&^Á[-Áj^aæÁæ^\!•Á ¸ão@jÁs@Áæ|`çã{ÁæÆŐY€ETYF€ÍÁæ)åÁTYFFFÉÁ $\tilde{O}_{\tilde{a}_{i}^{n}}^{\hat{a}_{i}^{n}} + \tilde{A}_{i}^{n} = \tilde{A}_{i}^{n} \tilde{A}_{i}^{n$

 $\label{eq:continuity} $$ V\hat{O}\hat{D}_{O}^{A}\hat{O}_{O}^{A} \wedge \hat{A}_{O}^{A} \wedge \hat{A}_{O$

- $V@A\hat{a}^{\dot{a}}_{\dot{a}}^{\dot{a$

V@Áa[;}Át¦æaåð}ơÁv¢ơ\ơÁ;ÁVÔÒÁĐÓÔÒÁĐ¢)åÁXÔÁĐ,ÁĐĄlˇçãĐÁt¦[ˇ}叿e\¦Á@æeÁa^^}Áa^A¸Aå^A¸Á\^•ˇ|o•Á+[{Á ,^||•ÁTYFFÏÁÇÁTYFGFÁ[&æe\åÁ;}ÁrÍÁÚ\^¦&`ÁÙd^^đĂ

TCE Source

 $V@\dot{A}\tilde{a}^{\dot{A}}\dot{A} \approx \dot{A}_{1}^{1} + \dot{A} \bullet ^{\dot{A}}\dot{A}_{1}^{\dot{A}}\dot{A} \approx \dot{A}_{1}^{\dot{A}}\dot{A} = \dot{A}_{1}^{\dot{A}}\dot{A}\dot{A} = \dot{A}_{1}^{\dot{A}}\dot{A} = \dot{A}_{1$

 $V @ \mathring{h} c@ \mathring{h} [c] \wedge \mathring{h} [c] \wedge \mathring{h} (c) \mathring{h} (c) \wedge \mathring{h} (c) \mathring$

- V@\^ÆnÁ[Áŋåa&æaa]}ÁŋÁ[aÞÁ[aÞÁ;æ][`\ÊÁ\[`}叿æ^\Á,\ÁrÜÙÔÁ^•`|oÁs@æaÁæÁVÔÒÁ[`\&^Á ^¢ãoÁ;}Áaæ^LÁ
- V@ÁVÔÒÁS[} &^} dæaā[} Ásh^c/s&c^á/āj Á¹;[``} å¸ ææ^¦ ÁææÁ¸ ^||ÁT Y F€GÁ¸ ææ ÁS|[•^Áu[ÁFà Á; Á
 •[|`àājāc ÉÁ¸ @ææ, Øás ÁS[{ { [}|^ÁS|}•ān^!^å Áæ¸ Ásj Ásj å aðsææ[¦Á; Áæ@Á;[c^} cáæ, Ág / è-ó-Á;[} Ë
 æ`^[`•Á; @æ•^Áā ˇānÁÇÖÞOŒÚŠDÁŘ; IÁā ˇānÁVÔÒÆÁ; Árçān ÓÁsj Ár@Á* à•*¦-æ&^ÉÝ ār@Á; Árçān^} &^Á
 [-羮ÖތڊÁ*¢ārcāj *Á;} Ár@Á*āæ^Ás^•] ãæ^Ás@Áş[|`{ āj[`•ÁsæææÁæ&` ǎn^åEÁs@Áæ••`{] cāj} Ásj Ásg Ácææ*áÆj Ás][•^Á;[çāj āc Átj Ár@Á
 U~•^ÓŒI āj^ÁÚ¦ā cāj *Áæsāðāc IÁ
- V@Á PÔÁSæða[}Æa[d]^ÁæðajÁ, ÆËPÌÈš Æå^৫\&৫\åÆajÁ; É![`}å, ææ\¦ÆæÅ, ^||ÆTYF€CÆajå&Bææ\•Á
 |ãæ\åÆa¦\æaå[]}Æi[d]]^ÁæðajåÁ;|ææ&\•ÁæØÁ, ^||ÆajÁæØÁ¸æðajæcíÁ, ÆæØÁ[`¦&\ÁQVÔÒÆEHÁ;ÆEHÁ
 PHÔDÁA
- V@Áå^&\^æāj*Á⁄ÔÒÁ&[}&^}dæāj}•Éāj&\^æāj*ÁæājÁjÁ-Áå^**læåæjøÁj¦[å*&ø•ÁÖÔÒÁæjåÁKÔÁĮÁ
 VÔÒÉæjåÁ∱^••Á,^*æãç^Á/ÔÒÁ&æài[}Æā[[d]]^ÁæājÁşjÁ;|[*}åjææ\¼áæj]|^•ÁÕY IÉÄTY €FIÉÄ
 TY FFFÆæjåÁFÚIÆjååæærÁœ•^Á,^||•Áæ¢^Á;|c@¦Á;[{Ác@Á[*|&\LÆajåÁ

Plume Stability

Avaluta	GW4 Contaminant Concentration (ug/L)					
Analyte	WSP (2012)	Geo-Logix (2019)				
VÔÒÁ	F £ G€€Á	ŀ F €Á				
ÖÔÒÁ	F £ O€€Á	F ÎLICC Á				
XÔÁ	JÍ € Á	l F€Á				
V[æÁVÔÒÁÐÓÔÒÁÐÁÔÁ	HÊHÍ€Á	GÆG€Á				

Á

Onsite TCE Vapour Intrusion Risk

- VÔÒÁṣ Á¹;[ˇ] 叿eʰ;Áṅ¢ã ơ Áæ&;[••ÁœÁṣ[;tāṭ] Áṭ ÁœÆ Áãr¸Á¸@;^ÁœÁsæ āåä¸ã ¾¸āļÁs^Á
 8[]•dˇ&c³á¸ãœÁæá¸*•]^} å°åÁ; |ææÁæð;];[¢āṭæeʰ)^ÁGÁ; Áæà[ç^Á¹;[ˇ]åÁˇ;-æ&∿LÁ
- V@ÁVÔÒÁAÄÖÔÒÁAÁKÔÁ; [^•Á; [^•Á; [oÁ·¢c'] åÁà^] ^ææ@Á@Á; [+aī;]Á; Áæ@Áà já á já Á; Áà^Á
 8[]•dˇ8c'åÁæ Á; [æàÁ;]Á*; [æá^ÈÓææ)*^•ÁÿÁ*; [ˇ]å, ææ^!Á*; [›çææī;]Á; [›ææ; ājæ)oÁ
 8[]8^]dæaī;]Á; [ˇ]åÁ; [oÁà^Ár¢]^8c'åÁ; Á^•ˇ]oÁÿÁæáçæ; [ˇ]Áÿdˇ•ã;]Áã\ÉÁ

Off-site Soil Vapour

 $\begin{array}{l} \text{Xad}_{\text{\tiny i}} = \text{Xad}_{\text{\tiny i}}$

Compound	Groundwater Concentrations (ug/L)	Concentrations Attenuation Factor (AF)		Target Indoor Air Concentration (mg/m³)	
VÔÒÁ	FHÁ	FĚ ¢F€ ^Ë Á	€È€€GÁ	€È€ÌÁ	
ÖÔÒÁ	Á GÁ FĚ¢F€ªÁ €		€È€€HÎÁ	€ÈEHÁ	
Þ[&•Á	ØI[{ Á¸^ ÁT Y FFFÁ	T[•0%2[}•^\;çææ@;^Á *![*}å,ææ^\á[fa]å[[¦Á æ&áADZÁ:[{ák@-Á R[@-•[}áka)åAOcca;*^!Á T[å^ ÁÇVÙOÚOEÆGEFIDÁ	O⊡Á&æ†&ĭ æe^åÁ	Óæ&\Á&æ\&` æe^åÁ+[{Á Væà ^ÁFCEÇEDÁ -Á Ù&@å` ^ÁÓFÁ -Ás@Á CEÙÔÁ=ÒÚTÁGEFHÁ	

Δ

 $V @ \acute{a} / c Q \acute{a} / [\acute{a} \circ c \bar{a} = ac \bar{a} * \acute{a} \mathring{a} = [] \acute{a} \circ a / \bar{a} / \bar{a} \circ a / \bar{$

- VÔÒÁĐĄ åÁÖÔÒÁ, ^!^Á, [ơŚħơ & & åÁŊÁĐĄ ^Á* àÁ | æðàÁ [ðÁÇæð] [* lÁæð] | ^ÁS[|| ^&C åÁ; }ÁœÓÁ
 * à b & & ãc ÆÑŊÁ¸ & åð * Áæð] | ^ÂUX Ï ÆÑ || ^& & åÁŊÁ¸ ÆÑ |[^Á, ! | ¢ð ãc Áð ÁT Y FFFÆŊå å ã&æðð * ÁVÔÒÁ
 æð åÁÖÔÒÁÇæð [* lÁÐ Áææð } *æðð *ÁŊÁœ Áçæð | ^Á | } ^LÁÐÐ ÅÁ
- V@Á¹¦[ˇ}叿湦ÁgíÁgiå[[¦ÁsvañÁsææ²)¸ĕæāŋ}Áæ&c[¦ÁpíÁFĚ¢F€[®]ÁsvÁs@Á;[•cÁs[]•°¹çææãç^Áçæ¢ˇ^Á
 •]^&ãð¹åÁsî^Ás@Ánqí@]•[]ÁseŋåÁÖccāj*^¦ÁT[å^|ÁgVÙÒÚOÐÉÁG€FÏ□DÉV@Ásæ&cĕæþÁsæɛ²)¸ĕæāŋ}Áæ&c[¦Áã/Áša^ÁsæþÁg¦å²,¹ÁgíÁs²,Ágíæ³jãčå^Áç••Ás[]•^¦çææãg^ÈÁ

17.2 PFAS in Groundwater

 $\begin{array}{l} \text{$\dot{Q}$P}_{\phi}\grave{U}\hat{A}_{\phi} & \text{\dot{A}}_{\phi} & \text{\dot{A}}$

17.3 Soil Contamination

$$\begin{split} &\mathring{\text{L}} \left[\stackrel{\text{A}}{\text{A}} \stackrel{\text{A}}{\text{C}} \circ \stackrel{\text{A}}{\text{A}} = \frac{1}{2} \cdot \mathring{\text{A}} \left[\left\{ \right. \right] \middle| \wedge \text{c}^{\lambda} \stackrel{\text{A}}{\text{A}} = \text{A}^{\lambda} \stackrel{\text{A}}{\text{A}} = \frac{1}{2} \cdot \mathring{\text{A}} + \text{A}^{\lambda} = \frac{1}{2}$$

 $\begin{array}{l} Q_{A}\hat{A} = \hat{A}_{A} = \hat{$

17.4 Heavy Metals in Groundwater

 $P^{a}_{a}^{A}_{A}^{A$

17.5 Underground Storage Tanks

 $\begin{array}{l} V_{,} [\text{A}M\dot{U}V\bullet\dot{A}_{,}^{,} \land \dot{A}\& \land \&[\{ \{ \tilde{a}\bullet\tilde{a}_{,}^{,} \land \dot{A}\& \dot{A}\& \land \dot{A}\& \land \dot{A}\& \land \dot{A}\& \land \dot{A}\& \land \dot{A}\& \land \dot{A}\& \dot{$

- "Á V@Áæà•^} &^ÁşiÁ; -ÁVÔÒÁşiÁ: [ājÁæáÁHÈÁ; Áå^] c@ÁşiÁæÁşi[¦āj*Á&[{]|^ċ°åÁà^ÁUVÒSÁÇG€€€DÉÁæ)åÁ
]¦^•^} &^ÁşiÁ; -Ár@¦oÁs@æájÁ;^d[|^`{ Ás[{][`}å•ÁşiÁ¹;[`}å,æċ°¦Áæåbæ&^}oÁşiÁs@ÁVÙVÁ;}Ás@Á
 •[`c@⊹]}Áà[`}åæb^Áşiåä&æċ^•Á;^d[|^`{ Árd[ˈæ²^LÁ
- "Á V@Áxæà•^} &^Á; ÁvÔÒÁŞ Át¦[`}叿æ^¦Áræé]|^ÁTYFFGÁ[8ææ^åÆ[{^åãææ^|^Æi[¸}Át¦æåã}) oÁ [Áx@ÁNÙV•Æ;Áx@Áxê)ÅcA;] dæÁ;[;]Át¦æåã} oÁ

 $V@ \^ \acute{a}_{a}^{\dot{a}} = \hat{A}_{a}^{\dot{a}} - \hat{A}$

18. DUTY TO NOTIFY

 $\dot{\Delta}_{\hat{A}} = \dot{\Delta}_{\hat{A}} + \dot{\Delta}_{\hat{A}} +$

Groundwater or Surface Water						
Notification Trigger	Comment					
V@Á&[}cæ(ā)æ)oÁ@ænÁ^}o^!^åán[!Á,ā Á(¦^•^^æà ^Á^}o^!Á *![ˇ}å,æo^!Á,lÁ*ٽ!ææ&^Á,æo^!Á	VÔÒÉÄÖÔÒÁS) åÁKÔÁS6^Á;¦^•^} αÁŞÁt¦[ˇ}叿e^¦ĚÁ					
æ) å	Á					
\@\&\\ \\ \&\\ \\ \\ \\ \\ \\ \\ \\ \\ \\	V@Á VÔ Ò ĐÃ Ô Ô Á Á Á Á Ô Á & [}8 ^ }d æ a # } • Á ± †Á £ Á £ É A Á £ Á £ Á £ É A Á £ É A Á £ É A É A É A É A ^ •] ^ 8 C a f ^ Á ± • ^ • • { ^ } O É & á f ^ } á £ É Á É					
æ) åÁ	Á					
V@Á&[}&^}dæaā[}Á,Ás@Á&[}œæ{ā]æ)oÁs,Ás@Á*![ˇ}叿æ^!Á;!Á • ˇ!-æ&^Á;ææ^!Á;ā]IÁ;!^•^^æà ^Á&[}æā; ^Áq;Á^{æā;Áæà[ç^Ás@Á •]^&äæ³åÁ&[}&^}dææā;}ÉÁ	Y @\$^Ás^*¦æåææāj}Á;-ÁvÔÒÁsjÁt¦[`}叿æ^¦ÁspÁrçãa^}dÉA &[}&^}dæaāj}•Á;-Ás@Á&[}œæ;ājæ)orÁ;ā Á^;æājÁæà[ç^Ás@Á æ••^••{^}ofsjdÁc@Á[¦^•^^æà ^Á-č'¦^ÈÁ					

 $\dot{Q}_{c} = \frac{1}{4} \dot{A}_{c} + \frac{1}{4} \dot{A}_{c} +$

19. REVISED CONCEPTUAL SITE MODEL

	Conceptual S	Conceptual Site Model – Soil, Vapour & Groundwater					
Balanant Ermanna		Receptors					
Relevant Exposure Pathways	On site users	On site construction workers	Neighbouring site users	Other			
Ù[ã/Ág*^•αã}Án5Ö^¦{æþÁ &[}æ&SAÁNÖÖ*•αÁ	ÝÁ	√ÁÇae à^• ([•Á§ @a¢aæá[}) DÁ	ÝÁ	V¦^}&@^{[;\^¦Á ✓ÁQa•à^•q[•Á5]@adacaa[}DÁ V^;¦^•dãadÁÖ&[[[*^Á Ý©anÁ			
Opå[[¦Ánj @ealeanafi]}Án,-Á çænj[ĭ¦•Ánå^lãnj^åÁn;[{Á •[āpÁ	ÝÁ	ÝÁ	ËÄ	Æ			
U`cå[[¦Ásj@expanaaaī})ÁjÁ çæ}[ĭ¦•Áså^¦äç^åÁ√![{Á •[ājÁ	ÝÁ	ÝÁ	ËÄ	V¦^} &@́Ą [¦\^¦•Á ÝÁ			
Opå[[ˈ/ʎāj @cabendai]}/ní/-Á çæaj[ĭ !•/nán/lãp^å/ni/[{ Á * : [ĭ}å, æne^!Á	ÝÁ	ÝÁ	ÝÁ	Æ			
U`cå[[¦Ánj @co+ananā[)Án,-Á çæn][ĭ!•Ánå^lānj^åÁ-l[{Á *¦[ĭ}å,ane^¦Á	ÝĢÞÁ	ÝĢÞÁ	ÝĢÞÁ	V¦^}&@Á[¦\^¦•Á ✓®Á			
Ù[a≱Ár)æ&@a)*Áq[Á *¦[*}叿æ^¦Á	Æ	Œ	Œ	U}*[ā]*Á*¦[`}叿æ^¦Á ã[]æ&oÁ ÝÁ			
Õl[*}叿e^lÁsaà∙dæ&da[}Á	ÝÁ	ÝÁ	ÝÁ	Æ			
Õ¦[`}叿e^¦Ásãa&@ed*^Á qÍÁn`¦~æ&^Á¸æe^¦Á			Œ	Ü^&¦^æaaaaa } ÁbáCE ັæaa&Á ^&[•^•⊄^{ Á ÝÁ			

Comments

 $\sqrt{\dot{A}} \, \dot{A} \, \dot{\phi} \,] \, [\, \bullet^{\times} \, | ^{\dot{A}} \, \dot{A} \, \dot{\alpha} \, \dot{\alpha} \,] \, \dot{\phi} \, \dot{\alpha} \,$

∰ap[oÁ^|^çæ) oÁ

ÇΦΦÛ "-æ&^Á^æΦÁ \^°¢^} σ Á [ãÁ ¢] [• " \^Á

 $\hat{O}[\ \} \bullet d^* \& a_{1}^{a} \ \} \ A_{1}^{c} \ |\ A^{c}| \ A^{c}|$

- V¦^} &@Á[;\^¦Á\¢][•`;\^Áq Áæà^•q[•Áa`¦ā,*Ái]^;\ææā[}Á, Ás@Áã\LÁæ}åÁ
- V!^} &@Á; [!\^!Áŋ @edaæāi;]Ái,-ÁVÔÒÁçæ] [` !Ár{ æ) ææā; *Á![{ Áŋ] æ&c^åÁt![` } å, ææ^!Á, @ārÁ
 &[{] |^cā; *Ár`àÁr`!~æ&rÁ; ææi; c^}æð; &rÁ; [!\•ÈÁK

20./CONCLUSIONS

 $Y \tilde{a}c@\hat{h}c@ \dot{h}c@ \dot{h}c@$

Á

21. LIMITATIONS

 $\label{eq:control_c$

 $\tilde{O}^{[ES[*arA]_*]} = \hat{A} \otimes \hat{A}$

 $V@\acute{A}_{[|\cdot|\bullet\acute{A}^{*}]} \mathring{A}^{!}cah^{A} \mathring{A}^{*}\acute{A}^{*} \mathring{A}^{*} \mathring{A}^{A$

aděÁ• * ãzanà ðã ác Ár -Ás@ ÁÚã Ar Ár ¦ Ása} ^ Ár] ^ &ã &B Ár • ^ ÉÁr ¦ Ásane^* [¦ ^ Ár -Ár • ^ ÉÁr ¦ Á

à EÁ] [c^} cán dá can cát (cán cát á ha cát á ha

 $\mathring{a} \stackrel{.}{\to} |^{\hat{A}} / \mathring{c} / \mathring{A} \stackrel{.}{\to} \mathring{A} \stackrel{.}{\to$

 $\hat{E}_{A}^{(+)} \hat{E}_{A}^{(+)} \hat{A}_{A}^{(+)} \hat{A$

 $\begin{array}{l} -2\dot{A} \mid | ^{\bullet \bullet} \rangle & & \\ & \dot{A} = \dot{A} \otimes \dot$

Y auq ˇ ơÁạĩ auā * Áo@ Áj æbæt læḍ @Áœà[ç^ɸ @ l^Áæà[læṭ l^Áơ • ơ Áœạç^Áà ^^} Ásæb læð áÁi ˇ ơÁà Ái ơ@ l•Ái } ÁO^[Ë Š[* āvē Áà ^ œфÉàv@ Ár • ơ Áæb ^Á^] | [å ˇ & ^ åÁi Ás@à Á^] [lơÁ; } Áo@ Áæ• • ˇ {] ơái } ÁsœæÁs@ Ár • ơ Áæb ^Áæ& ¾ lær ÈÓÔ^[Ë Š[* āvÁœæ Á; [oÁ] * œÁi å^] ^ å ^ } ф Át Áṣ ^ å Áæ Áæ& ¼ Áæ • ˇ { ^• Á; [Á^•] [} • āà ðāi Ái Á Áæ Áæ& ¼ Áæ • ˇ { ^• Á; [Á^•] [} • āà ðāi Ái Á Áæ Áæ& ¼ Áæ • ˇ { ^• Á; [Á^•] [} • āà ðāi Ái Á Áæ Áæ 6 € ÉÁ

Õ^[ËŠ[*ārÁæ••`{^•Á;[Á^•][}•ānājācîÁā;Á^•]^&oÁ;—Áæ)^Á&@e)*^•Áā;Ác@Á&[}åãāj}Á;—Ác@ÁÜārÁ; @&@Á@æç^Á [&&`;¦^åÁ•āj&^Ác@Ácā;^Á; @}ÁO^[ËŠ[*ārÁ*æc@¦^åÁåæææÁæ)åЦÁq[[\Á•æ;]|^•Á√[{ Ác@ÁÜārÁ;}ÁāæÁ•ãrÁ āj•]^&cā;}•Áåææ^åÁ√[{ Á28 May to 8 October 2019È

 $\dot{\Delta}^* = \dot{\Delta}^* + \dot{\Delta}^* +$

Á Á

22. REFERENCES

 $CE \bullet d = \frac{1}{2} \frac{1$

 $CE \bullet d = \frac{1}{2} A + \frac{1}{2}$

Ö ãæ ÞÁÓ^-[¦^Áº[ˇÁÖ ð ÁÇÐEFJ DÁ@cd HEÐ] ¸ ÈFF€€ ÈS[{ È ĕ EÐÁOES-88^••^ å ÁGFI ÁOE * ˇ• ÓÁS) å ÁGÎ ÁÛ^] c^{ à^¦ÁD€FJ DÁ Ø | ^^: ^ÁS) å ÁÔ @ | | ^ÁGFJÏ J DÁÖ | [ˇ } å 、æ c^!ÊÁÚ | ^ } cð SA ÁP æ | ÁQ 8.ÉÁFJÏ J ÈÁ

Õ[[*|^ÁÒædo@ÁÇGEFJDÆÙ^å}^^ÉAÞÙYÉÁ

 $P^{\dot{a}} d\hat{a} d\hat{b} d\hat{a} d\hat{b} d\hat{a} d\hat{b} d\hat{a} d\hat{a} \wedge d\hat{b} d\hat{a} d\hat{a} \wedge d\hat{b} d\hat{a} d\hat{$

 $\dot{S}Y \circ \dot{O} \dot{A}_{Q} C = 0 + D \dot{A} = 0 + A \dot{O} = 0 + A \dot{A} = 0 + A \dot{O} = 0 + A \dot{A} = 0 + A \dot{O} = 0 + A \dot{A} = 0 + A \dot{O} = 0 + A \dot{A} = 0 + A \dot{O} = 0 + A \dot{A} = 0 + A \dot{O} = 0$

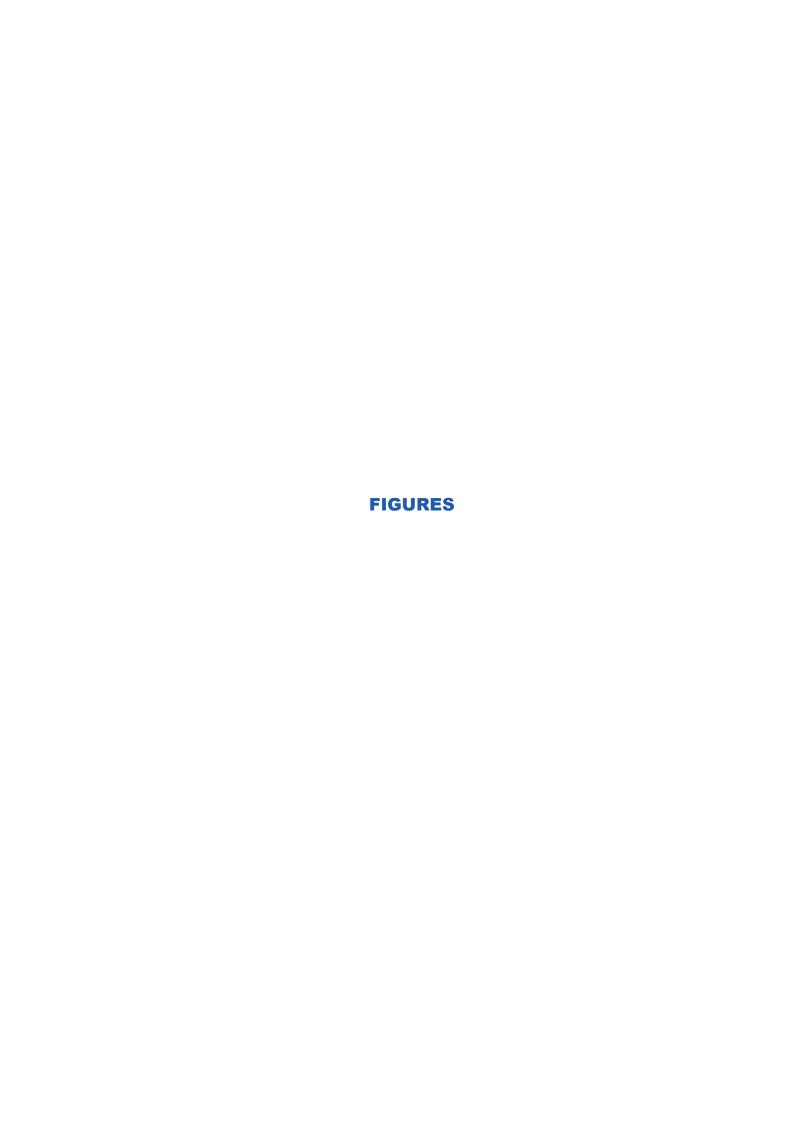
 $\begin{array}{l} \text{$\dot{\Phi}$ Y AÖOÔÂQGET DAO$ a^{3} ^{\bullet}$ A_{+}^{\bullet} A^{\bullet} $A^{\bullet}$$

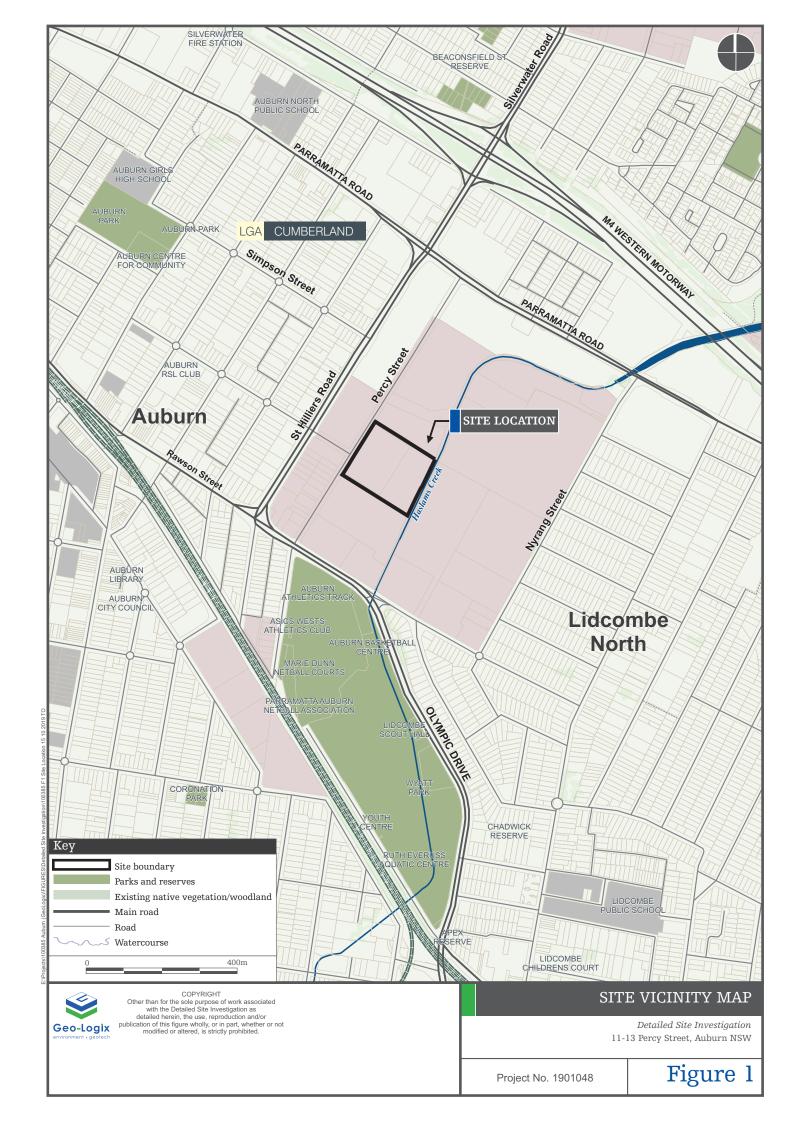
ÞÙY ÁÒÚŒÁÇĐ€FÍ ÞÁÕ ˇãå^|ð¸^•Á[}Ác@^ÁÖ ˇc Áq ÁÜ^][¦oÁÔ[}ææ(ð¸ææð¸)Á ˇ}å^¦Ác@^ÁÔ[}ææ(ð¸ææ^åÁŠæ)åÁ Tæ)æ*^{ ^}oÁŒ8oÆJJÏÁ

 $\begin{array}{l} \text{PÙY \'AOUOZAQOEFGDÃO} \tilde{a}_{0} \wedge \tilde{$

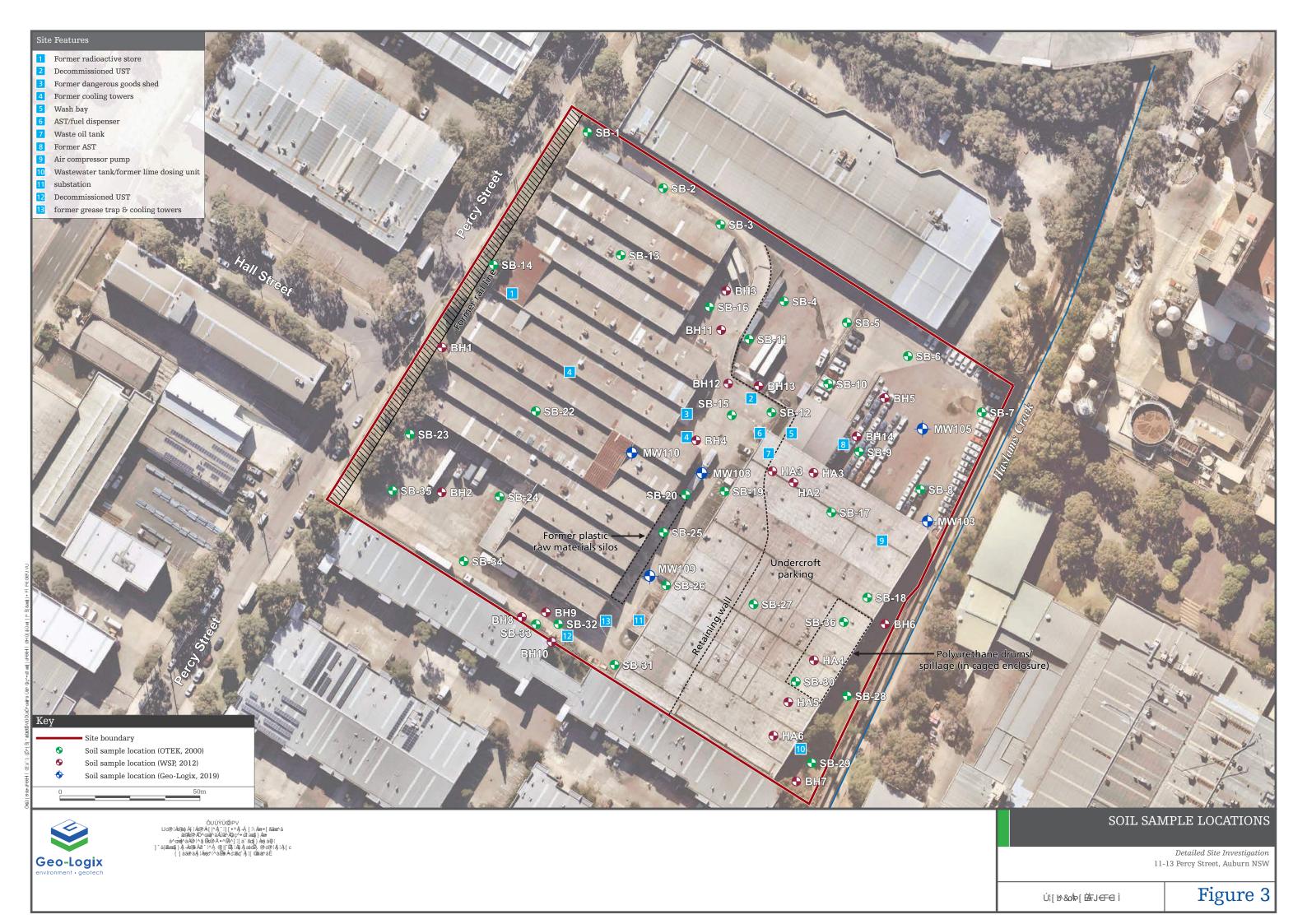
WÙÁ ÒÚŒÁ ÇŒFÏ DÁ ÒÚŒÁ Ù] ¦^æå•@^^óÁ -{ ¦Á T [å^||ā,*Á Ù `à•` |-æ&^Á Xæ}[` ¦Á Q d `•ā; } Á https://www.epa.gov/vaporintrusion/epa-spreadsheet-modeling-subsurface-vapor-intrusionÁ

Y ÙÚÁÇCEFCDÁÙcæt^ÁFÁBÁGÁÒ}çã[}{ ^}cæþÁJã¢ÁQìç^•cãtæaã;}ÉÁFFÉFHÁÚ^¦&°ÁJd^^dÉACEà`¦}ÉÁÞÙY ÈÁÜ^çãr^åÁFGÁ R'}^ÁGEFCEÁÜ^-^¦^}&^ÁÇEE€HEFJÎÈEFDEÁ



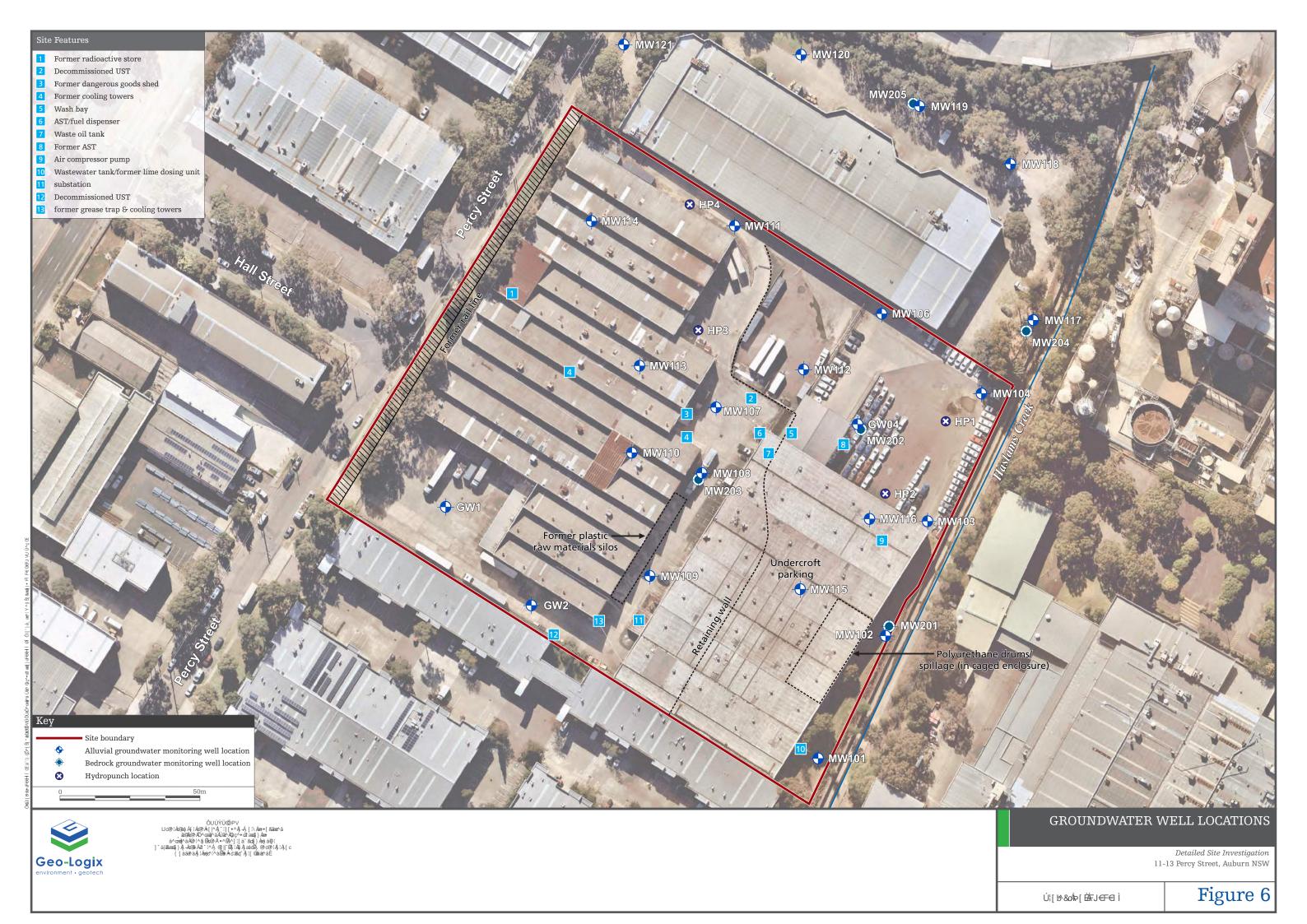




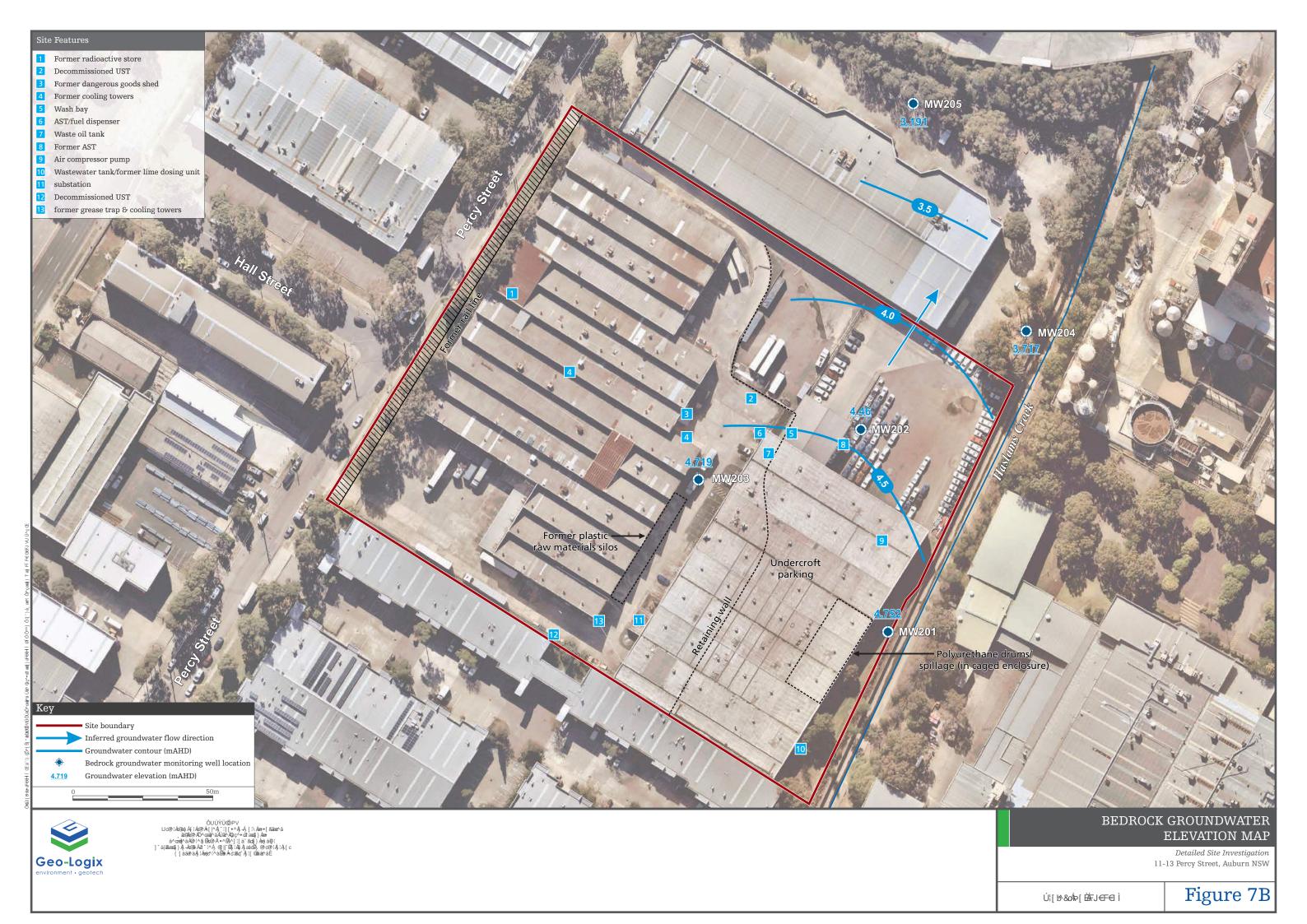


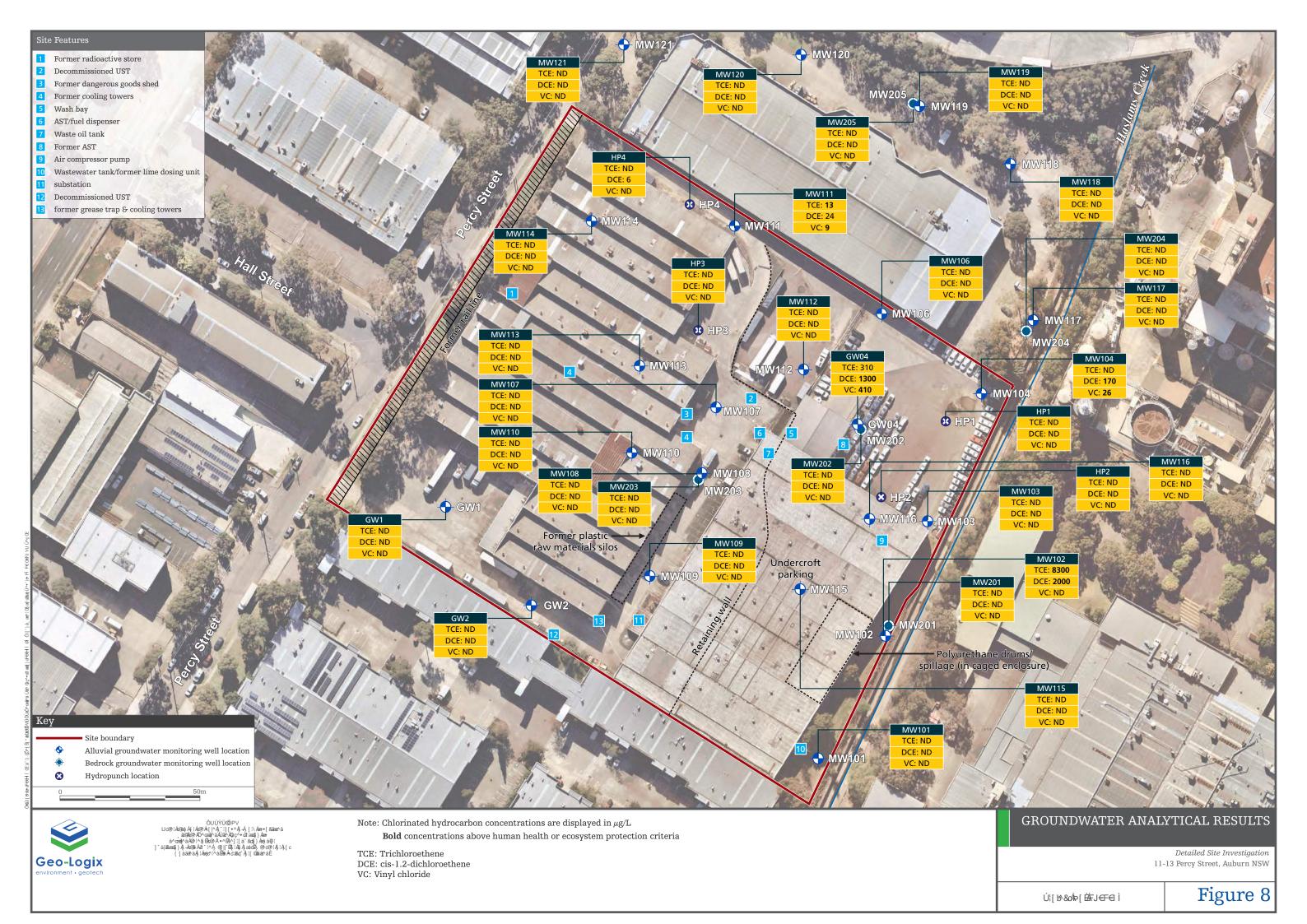












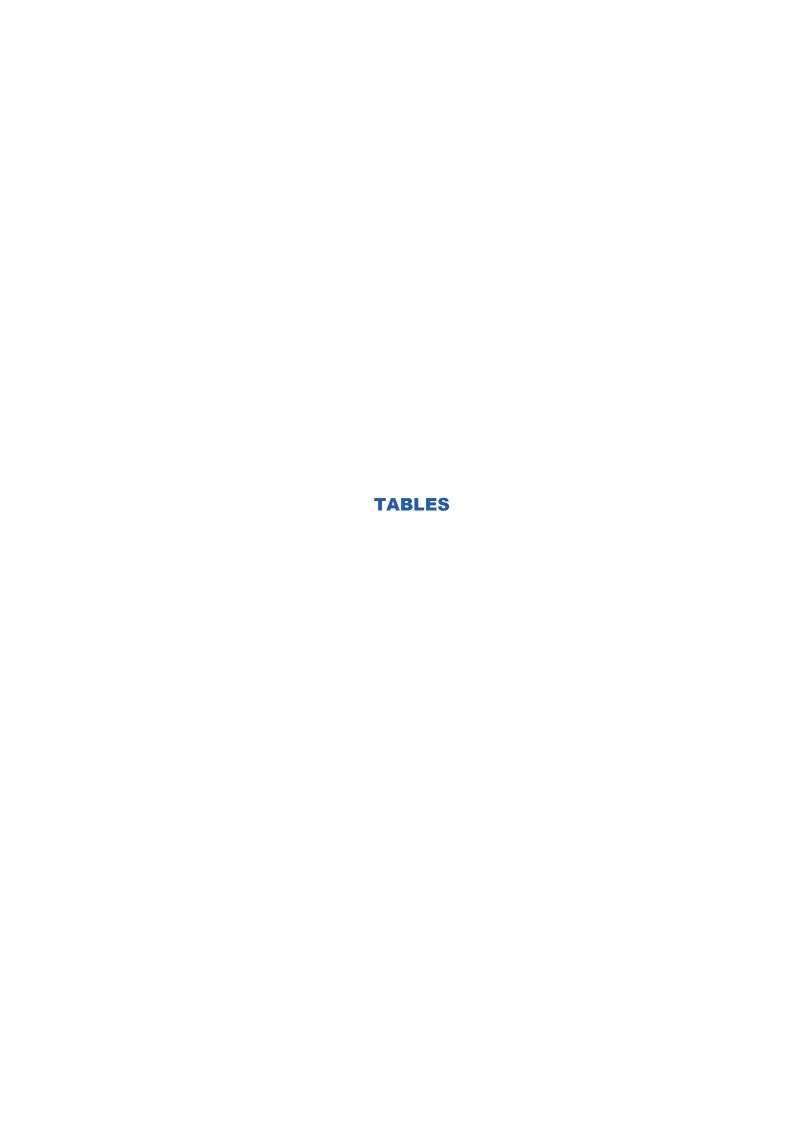




Table 1 : Summary of Groundwater Analytical Data - Anions and Cations

Detailed Site Investigation Project No.: 1901048

FFËHÁÚ^¦&^ÁÙd^^c Έˇ¦}ÁÞÙY

	Conversion Factor	Sample ID	MW102	GW04	MW108	MW201 Bedrock 27/09/2019	MW202 Bedrock 27/09/2019	MW203 Bedrock 27/09/2019
		Zone	Alluvial	Alluvial	Alluvial			
		Date	27/09/2019	27/09/2019	27/09/2019			
Concentrations in mg/L								
ᢗᡛᢩᡏᢧ} •								
Ô@[¦ãa^ÁÇÔ D	Ë		ÎG€€	JÏ€	îì	ÎJ€€	ï ∈∈ €	ΪΪ € €
Þãdæ Á Á ÞUHDÁæ ÁÞ	Ë		ŁÆŒG	F	ŁÆEG	ŁÆŒG	ŁÆREG	ŁÆŒG
Þãtæ Á ÞUHD	ΙÈĠ		ÞÖ	I	ÞÖ	ÞÖ	ÞÖ	ÞÖ
Ù [] @ee^ÁÇÙUI D			H€	G€	ĺÈ	HÌ	ŁÃ	II€
Ó&Bætà[}æe^ÁÇPÔUHDÁæe ÁÔæÔUH	Ë		ŁÁG€	ΙÍ€	쀀	FF€€	JH€	JH€
Ó&Bælà[}æe^ÁÇPÔUHD	FÈFJ		ÞÖ	ĺIJ	JÏÍ	FHI F	FFH	FFH
Ôælà[}ær^ÁÇÔUHDÁæ ÁÔæÔUH	Ë		ìî€	ŁÆR€	ŁÆR€	ŁÆR€	ŁÆ€	ŁÆR€
Ôæà[}æe^ÁÇÔUHD	€Ϊ€		Í FÎ	ÞÖ	ÞÖ	ÞÖ	ÞÖ	ÞÖ
Ôæ ā }•								
OE[{[}ãæÁQPPHDÁæÁP	Ë		ĺ	€ÈI	FË	Н	ìÈ	ŒĬ
OĘ { [}ãæÁÇPHD	FÈFÎ		ÎÈ	€ÈÏ	FÈÍ	HĒÍ	F€È€J	HÈ€I
Ôækã { ÁÇÔæD	Ë		F€€€	GÎ	I€ÈE	HH€	IH€	ď€
Tæ*}^•ã{ ÁÇT*D	Ë		FÌ	ΙH	HÎ	ÍŒ	Ğ	ÍH€
Ù[åã{ÁÇÞæĐ	Ë		HÎ €€	J΀	H€€	I G€€	нï €€	€€
Ú[œe∙ã{ÁÇSD	Ë		FÍ€	FF	ÎĒ	HH	ÍН	HF
V[cæ‡ÁOE;ā[}•Ásc)åÁÔæaā[}•	Ë		FFÌ H€	GÌ€H	FIHH	FHÎ Î	F G Í JÏ	FIIÌÌ
V[œ#/Öã [ç^åAÛ[ãå•ÁÇVÖÙD	€ÌÏ		JÎÌ€E	G΀	Ì€Œ	F€Î€€E	FFÍ €Œ	FŒ
Ü^ ææç^ÁÚ^;&^} œŐã-^;^} &^ÁÇÜÚÖD	Ë		F€Ã	ΪÃ	GÃ	FGÃ	ĺÃ	JÃ

Notes:

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ŁÁRÁ, IÁP ÖÁMÁÐ æ CO DÁ [ơÁ ^ O & O ÁÁ Á Á Á Ó O Á Ó Á Á Á Æ É I Æ É I Á Ó] [læ *Á ã ãc

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Table 1 : Summary of Groundwater Analytical Data - Anions and Cations

Detailed Site Investigation

Project No.: 1901048

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	Conversion	Sample ID	MW102	GW04	MW108	MW201	MW202	MW203
	Factor	Zone	Alluvial	Alluvial	Alluvial	Bedrock	Bedrock	Bedrock
		Date	27/09/2019	27/09/2019	27/09/2019	27/09/2019	27/09/2019	27/09/2019
Concentrations in mEq/L								
CF 看 } •								
Ô@[: 88^ÁÇÔ D	€È€GÌ G		FÏΙÈÌI€	G ÈÁ I	FÈFÌ	FJIĚÌ€	FJÏ È €€	GFÏÈFI€
ÞãtævÁÞUHD	€ÈFÎ F		ÞÖ	€ÈEÏF	ÞÖ	ÞÖ	ÞÖ	ÞÖ
Ù [] @æ ÁÇÙUI D	€Ì€G€Ì		ï È€Ï	I ÈJG	€ÈF	€ËJ	ÞÖ	JÈÍ
Ó&&eàa[}æe^ÁQPÔUHD	€ÈEFÎI		ÞÖ	ÌÈJÌ	FÍ ÈJÏ	GFÈJÎ	FÌ Ě JÎ	FÌ Ě JÎ
Ôælà[] æe^ÁÇÔUHD	€ÈHH		FÏÈTÏ€	ÞÖ	ÞÖ	ÞÖ	ÞÖ	ÞÖ
Ôæ ã }•								
Œ{{[}ãæÁDPHD	€ÈÉÍI		€ÌHÏ	€È€J	€ÌF€Ì	€ÈG€G	€ĚÍJ	€ÈÎÌ
Ôælsã { ÁÇÔæD	€ÌĒ JJ		IJÈ€	FĖĠJÏ	FÈJÎ	FÎÈÎΪ	GFÈÍÏ	FŒÌÏÍ
Tæ*}^•ã{ ÁÇT*D	€ÌĒÌ GH		FÈÌF	HĚHJ	ΗÎŒ	ΙŒΪJÎ	GG Ì GGF	IHĒFJ
Ù[åã{ÁÇÞæÐ	€Ì€IHÍ		FÍÎÈ€€	IFË΀	FHÈEÍ€	F̌π€	F΀ÈÍ€	FJFÈ€€
Ú[œ••ã{ÁÇSD	€ÈEGÍÎ		HÈl€	€ÈÈÌ G	€ÈÎJ	€ÈlÍ	FÈHÍÏ	€ËJI
V[cæþÓð; á; } •	Ë		FJJÈÈ	l FÈ G	FÌ È€G	ŒÏ ÈHÏ	ŒÎÈ€	GIÈJ
V[cæ∮∕Ôæaa } •	Ë		GFG Ì FÎ	ΙÎĖ̈́J	FÌ ÈGJ	G HÈEF	G€ÎĚI	GÌÈÎ
Ü^ æãç^ÁÚ^ &^} ơŐã-^\^} &^ÁQÜÚÖD	Ë		HÈGÃ	ÎÈSÃ	€ÈÃ	ÍÈÃ	ŒÃ	€ÈÃ

Notes:

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 $\text{$ L \hat{A} \hat{A}_i \mid \hat{A} \circ \hat{O} \hat{A} \hat{A} = \hat{A} \circ \hat{A} = \hat{A} \circ \hat{A} = \hat{A} \circ \hat{A} = \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} = \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} = \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} = \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} \circ \hat{A} = \hat{A} \circ \hat{A}$

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	Criteria 1	Criteria 2	Criteria 3						
	HSLs - D	HSLs - D	Management	Sample ID	MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7	MW109/1.2-1.4
	Sand	Sand	Limits	Depth (m)	0.2-0.3	1.6-1.8	0.8-1.0	1.6-1.7	1.2-1.4
	0 to <1 m	1 to <2 m	Comm/Ind	Date	30/05/2019	30/05/2019	31/05/2019	3/06/2019	3/06/2019
TRH C ₆ -C ₁₀	-	-	800		< 20	< 20	< 20	< 20	< 20
TRH C ₆ -C ₁₀ less BTEX (F1)	260	370	-		< 20	< 20	< 20	< 20	< 20
TRH >C ₁₀ -C ₁₆	-	-	1,000		< 50	< 50	< 50	< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	NL	-		< 50	< 50	< 50	< 50	< 50
TRH >C ₁₆ -C ₃₄	-	-	5,000		260	< 100	490	120	390
TRH >C ₃₄ -C ₄₀	-	-	10,000		330	< 100	160	< 100	< 100
Benzene	3	3	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	NL	NL	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	NL	NL	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	-	-	-		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	-	-	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	230	NL	-		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene (MAH method)	NL	NL	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

 $\label{eq:criteria} \textit{Criteria 1} = \textit{NEPC (1999)} \ \textit{Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m. \\$

Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m.

Criteria 3 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, fine material.

Total concentrations in mg/kg

- = assessment criteria not available

NL = not limiting

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3		
	HSLs - D	HSLs - D	Management	Sample ID	MW110/0.2-0.3
	Sand	Sand	Limits	Depth (m)	0.2-0.3
	0 to <1 m	1 to <2 m	Comm/Ind	Date	3/06/2019
TRH C ₆ -C ₁₀	-	-	800		< 20
TRH C ₆ -C ₁₀ less BTEX (F1)	260	370	-		< 20
TRH >C ₁₀ -C ₁₆	-	-	1,000		< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	NL	-		< 50
TRH >C ₁₆ -C ₃₄	-	-	5,000		< 100
TRH >C ₃₄ -C ₄₀	-	-	10,000		< 100
Benzene	3	3	-		< 0.1
Toluene	NL	NL	-		< 0.1
Ethylbenzene	NL	NL	-		< 0.1
m&p-Xylenes	-	-	-		< 0.2
o-Xylene	-	-	-		< 0.1
Xylenes - Total	230	NL	-		< 0.3
Naphthalene (MAH method)	NL	NL	-		< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m.

Criteria 3 = NEPC (1999) Amended, Commercial/industrial Management Limits for TPH fractions in soil, fine material.

Total concentrations in mg/kg

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HSLs - D	Sample ID	MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7	MW109/1.2-1.4
	Sand	Sand	Depth (m)	0.2-0.3	1.6-1.8	0.8-1.0	1.6-1.7	1.2-1.4
	0 to <1 m	1 to <2 m	Date	30/05/2019	30/05/2019	31/05/2019	3/06/2019	3/06/2019
1.1-Dichloroethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m. Total concentrations in mg/kg

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HSLs - D	Sample ID	MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7	MW109/1.2-1.4
	Sand	Sand	Depth (m)	0.2-0.3	1.6-1.8	0.8-1.0	1.6-1.7	1.2-1.4
	0 to <1 m	1 to <2 m	Date	30/05/2019	30/05/2019	31/05/2019	3/06/2019	3/06/2019
4-Methyl-2-pentanone (MIBK)	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	3	3		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m.

Total concentrations in mg/kg

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11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HSLs - D	Sample ID	MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7	MW109/1.2-1.4
	Sand	Sand	Depth (m)	0.2-0.3	1.6-1.8	0.8-1.0	1.6-1.7	1.2-1.4
	0 to <1 m	1 to <2 m	Date	30/05/2019	30/05/2019	31/05/2019	3/06/2019	3/06/2019
Ethylbenzene	NL	NL		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	-	-		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	-	-		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	NL	NL		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total	230	NL		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m. Total concentrations in mg/kg

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-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2		
	HSLs - D	HSLs - D	Sample ID	MW110/0.2-0.3
	Sand	Sand	Depth (m)	0.2-0.3
	0 to <1 m	1 to <2 m	Date	3/06/2019
1.1-Dichloroethane	-	-		< 0.5
1.1-Dichloroethene	-	-		< 0.5
1.1.1-Trichloroethane	-	-		< 0.5
1.1.1.2-Tetrachloroethane	-	-		< 0.5
1.1.2-Trichloroethane	-	-		< 0.5
1.1.2.2-Tetrachloroethane	-	-		< 0.5
1.2-Dibromoethane	-	-		< 0.5
1.2-Dichlorobenzene	-	-		< 0.5
1.2-Dichloroethane	-	-		< 0.5
1.2-Dichloropropane	-	-		< 0.5
1.2.3-Trichloropropane	-	-		< 0.5
1.2.4-Trimethylbenzene	-	-		< 0.5
1.3-Dichlorobenzene	-	-		< 0.5
1.3-Dichloropropane	-	-		< 0.5
1.3.5-Trimethylbenzene	-	-		< 0.5
1.4-Dichlorobenzene	-	-		< 0.5
2-Butanone (MEK)	-	-		< 0.5
2-Propanone (Acetone)	-	-		< 0.5
4-Chlorotoluene	-	-		< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m. Total concentrations in mg/kg

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-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	
	HSLs - D	HSLs - D	Sample ID MW110/0.2-0.3
	Sand	Sand	Depth (m) 0.2-0.3
	0 to <1 m	1 to <2 m	Date 3/06/2019
1-Methyl-2-pentanone (MIBK)	-	-	< 0.5
Allyl chloride	-	-	< 0.5
Benzene	3	3	< 0.1
Bromobenzene	-	-	< 0.5
Bromochloromethane	-	-	< 0.5
Bromodichloromethane	-	-	< 0.5
Bromoform	-	-	< 0.5
Bromomethane	-	-	< 0.5
Carbon disulfide	-	-	< 0.5
Carbon Tetrachloride	-	-	< 0.5
Chlorobenzene	-	-	< 0.5
Chloroethane	-	-	< 0.5
Chloroform	-	-	< 0.5
chloromethane	-	-	< 0.5
is-1.2-Dichloroethene	-	-	< 0.5
s-1.3-Dichloropropene	-	-	< 0.5
ibromochloromethane	-	-	< 0.5
ibromomethane	-	-	< 0.5
ichlorodifluoromethane	-	-	< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m. Total concentrations in mg/kg

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-- = sample not analysed



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11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2		
	HSLs - D	HSLs - D	Sample ID	MW110/0.2-0.3
	Sand	Sand	Depth (m)	0.2-0.3
	0 to <1 m	1 to <2 m	Date	3/06/2019
Ethylbenzene	NL	NL		< 0.1
lodomethane	-	-		< 0.5
Isopropyl benzene (Cumene)	-	-		< 0.5
m&p-Xylenes	-	-		< 0.2
Methylene Chloride	-	-		< 0.5
o-Xylene	-	-		< 0.1
Styrene	-	-		< 0.5
Tetrachloroethene	-	-		< 0.5
Toluene	NL	NL		< 0.1
trans-1.2-Dichloroethene	-	-		< 0.5
trans-1.3-Dichloropropene	-	-		< 0.5
Trichloroethene	-	-		< 0.5
Trichlorofluoromethane	-	-		< 0.5
Vinyl chloride	-	-		< 0.5
Xylenes - Total	230	NL		< 0.3

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m. Total concentrations in mg/kg

- = assessment criteria not available

NL = not limiting

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Table 4: Summary of Soil Analytical Data - Polyaromatic Hydrocarbons

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

Criteria 1	Criteria 2	Criteria 3						
	HSLs - D	HSLs - D	Sample ID	MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7	MW109/1.2-1.4
HILs - D	Sand	Sand	Depth (m)	0.2-0.3	1.6-1.8	0.8-1.0	1.6-1.7	1.2-1.4
	0 to <1 m	1 to <2 m	Date	30/05/2019	30/05/2019	31/05/2019	3/06/2019	3/06/2019
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	0.6
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	2
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	2
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	2.3
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	1.2
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	0.9
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	1.7
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	4.1
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	1.1
-	NL	NL		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	2.1
-	-	-		< 0.5	< 0.5	< 0.5	< 0.5	3.6
40	-	-		0.6	0.6	0.6	0.6	2.9
4,000	-	-		< 0.5	< 0.5	< 0.5	< 0.5	21.6
	HILs - D	HSLs - D HILs - D Sand 0 to <1 m	HSLs - D	HSLs - D	HSLs - D HSLs - D Sample ID MW103/0.2-0.3 HILs - D Sand Depth (m) 0.2-0.3 O to <1 m 1 to <2 m Date 30/05/2019 - - - <0.5	HSLs - D Sand Sand Depth (m) 0.2-0.3 1.6-1.8 O to <1 m 1 to <2 m Date 30/05/2019 30/05/2019 < <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0	HSLs - D	HSLs - D

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 3 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m.

Total concentrations in mg/kg

- = assessment criteria not available

NL = not limiting

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Table 4: Summary of Soil Analytical Data - Polyaromatic Hydrocarbons

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3		
		HSLs - D	HSLs - D	Sample ID	MW110/0.2-0.3
	HILs - D	Sand	Sand	Depth (m)	0.2-0.3
		0 to <1 m	1 to <2 m	Date	3/06/2019
Acenaphthene	-	-	-		< 0.5
Acenaphthylene	-	-	-		< 0.5
Anthracene	-	-	-		< 0.5
Benz(a)anthracene	-	-	-		< 0.5
Benzo(a)pyrene	-	-	-		< 0.5
Benzo(b&j)fluoranthene	-	-	-		< 0.5
Benzo(g.h.i)perylene	-	-	-		< 0.5
Benzo(k)fluoranthene	-	-	-		< 0.5
Chrysene	-	-	-		< 0.5
Dibenz(a.h)anthracene	-	-	-		< 0.5
Fluoranthene	-	-	-		< 0.5
Fluorene	-	-	-		< 0.5
Indeno(1.2.3-cd)pyrene	-	-	-		< 0.5
Naphthalene (PAH method)	-	NL	NL		< 0.5
Phenanthrene	-	-	-		< 0.5
Pyrene	-	-	-		< 0.5
Benzo(a)pyrene TEQ	40	-	-		0.6
Total PAH	4,000	-	-		< 0.5

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 0 to <1m.

Criteria 3 = NEPC (1999) Amended, 'D' Commercial/industrial Soil Health Screening Levels for vapour intrusion, sand 1 to <2m.

Total concentrations in mg/kg

- = assessment criteria not available

NL = not limiting

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Table 5 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

Criteria 1						
	Sample ID	MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7	MW109/1.2-1.4
HILs - D	Depth (m)	0.2-0.3	1.6-1.8	0.8-1.0	1.6-1.7	1.2-1.4
	Date	30/05/2019	30/05/2019	31/05/2019	3/06/2019	3/06/2019
3.000		< 2	8.5	2.5	17	15
						0.5
		23	17	76	34	24
240,000		78	22	170	830	890
1,500		7.4	34	44	260	170
730		< 0.1	< 0.1	0.4	0.1	< 0.1
6,000		100	10	18	79	28
400,000		80	80	95	980	670
	3,000 900 3,600¹ 240,000 1,500 730 6,000	Sample ID HILs - D Depth (m) Date 3,000 900 3,600¹ 240,000 1,500 730 6,000	Sample ID MW103/0.2-0.3 Depth (m) 0.2-0.3 Date 30/05/2019 3,000 < 2 900 < 0.4 3,600¹ 23 240,000 78 1,500 7.4 730 < 0.1 6,000 100	Sample ID MW103/0.2-0.3 MW103/1.6-1.8 Depth (m) 0.2-0.3 1.6-1.8 Date 30/05/2019 30/05/2019 3,000 < 2	Sample ID MW103/0.2-0.3 MW103/1.6-1.8 MW105/0.8-1.0 Depth (m) 0.2-0.3 1.6-1.8 0.8-1.0 Date 30/05/2019 30/05/2019 31/05/2019 3,000 < 2	HILs - D Depth (m) 0.2-0.3 MW103/0.2-0.3 MW105/0.8-1.0 MW108/1.6-1.7 Date 30/05/2019 30/05/2019 31/05/2019 31/05/2019 3/06/2019 3,000 < 2

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

¹Guideline for chromium (VI) used conservatively.

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Table 5 : Summary of Soil Analytical Data - Heavy Metals

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	
		Sample ID MW110/0.2-0.3
	HILs - D	Depth (m) 0.2-0.3
		Date 3/06/2019
Arsenic	3,000	3.7
Cadmium	900	< 0.4
Chromium	3,600¹	90
Copper	240,000	27
Lead	1,500	11
Mercury	730	< 0.1
Nickel	6,000	78
Zinc	400,000	71

Notes:

Criteria 1 = NEPC (1999) Amended, Health-based Investigation Levels for soil contaminants.

Total concentrations in mg/kg

- = assessment criteria not available

¹Guideline for chromium (VI) used conservatively.

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1						
	HSLs - D						
	Sand	Sample ID	SV1	DV1	RPD_DV1	SV2	SV3
	0 to <1 m	Date	3/06/2019	3/06/2019	-	3/06/2019	3/06/2019
TRH C ₆ -C ₁₀	-		210	220	5%	370	1,600
TRH C ₆ -C ₁₀ less BTEX (F1)	680,000		< 10	< 10	nc	< 10	< 10
TRH >C ₁₀ -C ₁₆	-						
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	500,000		< 10	< 10	nc	< 10	< 10
TRH >C ₁₆ -C ₃₄	-						
TRH >C ₃₄ -C ₄₀	-						
Benzene	4,000		< 27	< 27	пс	< 27	< 27
Toluene	4,800,000		210	220	5%	370	1,600
Ethylbenzene	1,300,000		< 3.5	< 3.5	nc	< 3.5	< 3.5
m&p-Xylenes	-						
o-Xylene	-		< 3.3	< 3.3	nc	< 3.3	< 3.3
Xylenes - Total	840,000		ND	ND	nc	ND	ND
Naphthalene (MAH method)	3,000						

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1						
	HSLs - D						
	Sand	Sample ID	SV4	SV5	SV6	SV7	SV8
	0 to <1 m	Date	3/06/2019	3/06/2019	3/06/2019	3/06/2019	3/06/2019
TRH C ₆ -C ₁₀			11 000	2 700	250	110	900
	-		11,000	2,700			
TRH C ₆ -C ₁₀ less BTEX (F1)	680,000		< 10	< 10	< 10	< 10	< 10
TRH >C ₁₀ -C ₁₆	-						
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	500,000		< 10	< 10	< 10	< 10	< 10
TRH >C ₁₆ -C ₃₄	-						
TRH >C ₃₄ -C ₄₀	-						
Benzene	4,000		< 27	< 27	< 27	< 27	< 27
Toluene	4,800,000		11,000	2,600	250	110	900
Ethylbenzene	1,300,000		< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
m&p-Xylenes	-						
o-Xylene	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
Xylenes - Total	840,000		ND	ND	ND	ND	ND
Naphthalene (MAH method)	3,000						

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1						
	HSLs - D						
	Sand	Sample ID	SV9	SV10	SV11	SV12	SV13
	0 to <1 m	Date	3/06/2019	3/06/2019	3/06/2019	3/06/2019	3/06/2019
TRH C ₆ -C ₁₀	-		250	340	3,800	220	250
TRH C ₆ -C ₁₀ less BTEX (F1)	680,000		< 10	< 10	< 10	< 10	< 10
TRH >C10-C16	-						
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	500,000		< 10	< 10	< 10	< 10	< 10
TRH >C ₁₆ -C ₃₄	-						
TRH >C ₃₄ -C ₄₀	-						
Benzene	4,000		< 27	< 27	< 27	< 27	< 27
Toluene	4,800,000		180	340	3,800	220	190
Ethylbenzene	1,300,000		< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
m&p-Xylenes	-						
o-Xylene	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
Xylenes - Total	840,000		ND	ND	ND	ND	ND
Naphthalene (MAH method)	3,000						

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1				
	HSLs - D				
	Sand	Sample ID	SV14	SV15	BLANK
	0 to <1 m	Date	3/06/2019	3/06/2019	3/06/2019
TRH C ₆ -C ₁₀	-		500	97	< 10
TRH C ₆ -C ₁₀ less BTEX (F1)	680,000		< 10	< 10	< 10
TRH >C ₁₀ -C ₁₆	-				
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	500,000		< 10	< 10	< 10
TRH >C ₁₆ -C ₃₄	-				
TRH >C ₃₄ -C ₄₀	-				
Benzene	4,000		< 27	< 27	< 27
Toluene	4,800,000		500	97	< 5
Ethylbenzene	1,300,000		< 3.5	< 3.5	< 3.5
m&p-Xylenes	-				
o-Xylene	-		< 3.3	< 3.3	< 3.3
Xylenes - Total	840,000		ND	ND	ND
Naphthalene (MAH method)	3,000				

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HILs - D						
	Sand	Interim	Sample ID	SV1	DV1	RPD_DV1	SV2	SV3
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	-	3/06/2019	3/06/2019
1.1-Dichloroethane	-	-		< 9.5	< 9.5	nc	< 9.5	< 9.5
1.1-Dichloroethene	-	-		< 43	< 43	nc	< 43	< 43
1.1.1-Trichloroethane	-	230,000		< 9.9	< 9.9	nc	< 9.9	< 9.9
1.1.2-Trichloroethane	-	-		< 5.7	< 5.7	nc	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	-	-		< 3.3	< 3.3	nc	< 3.3	< 3.3
1.2-Dichlorobenzene	-	-		< 1.8	< 1.8	nc	< 1.8	< 1.8
1.2-Dichloroethane	-	-		< 6.6	< 6.6	nc	< 6.6	< 6.6
1.2.4-Trimethylbenzene	-	-		< 2.2	< 2.2	nc	< 2.2	< 2.2
1.3-Dichlorobenzene	-	-		< 2.1	< 2.1	nc	< 2.1	< 2.1
1.3.5-Trimethylbenzene	-	-		< 2.4	< 2.4	nc	< 2.4	< 2.4
1.4-Dichlorobenzene	-	-		< 2	< 2	nc	< 2	< 2
Benzene	4,000	-		< 27	< 27	nc	< 27	< 27
Carbon Tetrachloride	-	-		< 8.4	< 8.4	nc	< 8.4	< 8.4
Chlorobenzene	-	-		< 4.1	< 4.1	nc	< 4.1	< 4.1
Chloroform	-	-		< 7.6	< 7.6	nc	< 7.6	< 7.6
Chloromethane	-	-		< 50	< 50	nc	< 50	< 50
cis-1.2-Dichloroethene	-	300		< 7.8	< 7.8	nc	< 7.8	< 7.8
Ethylbenzene	1,300,000	-		< 3.5	< 3.5	nc	< 3.5	< 3.5
Isopropyl benzene (Cumene)	-	-		< 2.6	< 2.6	пс	< 2.6	< 2.6

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HILs - D						
	Sand	Interim	Sample ID	SV1	DV1	RPD_DV1	SV2	SV3
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	-	3/06/2019	3/06/2019
o-Xylene	-	-		< 3.3	< 3.3	nc	< 3.3	< 3.3
Styrene	-	-		< 3.3	< 3.3	nc	< 3.3	< 3.3
Tetrachloroethene	-	8,000		< 3.8	< 3.8	nc	< 3.8	< 3.8
Toluene	4,800,000	-		210	220	5%	370	1,600
trans-1.2-Dichloroethene	-	-		< 18	< 18	nc	< 18	< 18
Trichloroethene	-	80		< 5.6	< 5.6	nc	< 5.6	< 5.6
Vinyl chloride	-	100		< 48	< 48	nc	< 48	< 48
Xylenes - Total	840,000	-		ND	ND	nc	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HILs - D						
	Sand	Interim	Sample ID	SV4	SV5	SV6	SV7	SV8
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	3/06/2019	3/06/2019	3/06/2019
1.1-Dichloroethane	-	-		< 9.5	< 9.5	< 9.5	< 9.5	< 9.5
1.1-Dichloroethene	-	-		< 43	< 43	< 43	< 43	< 43
1.1.1-Trichloroethane	-	230,000		< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
1.1.2-Trichloroethane	-	-		< 5.7	< 5.7	< 5.7	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	-	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
1.2-Dichlorobenzene	-	-		< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1.2-Dichloroethane	-	-		< 6.6	< 6.6	< 6.6	< 6.6	< 6.6
1.2.4-Trimethylbenzene	-	-		< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1.3-Dichlorobenzene	-	-		< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
1.3.5-Trimethylbenzene	-	-		< 2.4	< 2.4	< 2.4	< 2.4	< 2.4
1.4-Dichlorobenzene	-	-		< 2	< 2	< 2	< 2	< 2
Benzene	4,000	-		< 27	< 27	< 27	< 27	< 27
Carbon Tetrachloride	-	-		< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
Chlorobenzene	-	-		< 4.1	< 4.1	< 4.1	< 4.1	< 4.1
Chloroform	-	-		< 7.6	< 7.6	< 7.6	< 7.6	< 7.6
Chloromethane	-	-		< 50	< 50	< 50	< 50	< 50
cis-1.2-Dichloroethene	-	300		< 7.8	< 7.8	< 7.8	< 7.8	< 7.8
Ethylbenzene	1,300,000	-		< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
Isopropyl benzene (Cumene)	-	-		< 2.6	< 2.6	< 2.6	< 2.6	< 2.6

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HILs - D						
	Sand	Interim	Sample ID	SV4	SV5	SV6	SV7	SV8
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	3/06/2019	3/06/2019	3/06/2019
o-Xylene	-	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
Styrene	-	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
Tetrachloroethene	-	8,000		< 3.8	< 3.8	< 3.8	< 3.8	< 3.8
Toluene	4,800,000	-		11,000	2,600	250	110	900
rans-1.2-Dichloroethene	-	-		< 18	< 18	< 18	< 18	< 18
Trichloroethene	-	80		< 5.6	< 5.6	< 5.6	< 5.6	< 5.6
/inyl chloride	-	100		< 48	< 48	< 48	< 48	< 48
Xylenes - Total	840,000	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HILs - D						
	Sand	Interim	Sample ID	SV9	SV10	SV11	SV12	SV13
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	3/06/2019	3/06/2019	3/06/2019
1.1-Dichloroethane	-	-		< 9.5	< 9.5	< 9.5	< 9.5	< 9.5
1.1-Dichloroethene	-	-		< 43	< 43	< 43	< 43	< 43
1.1.1-Trichloroethane	-	230,000		< 9.9	< 9.9	< 9.9	< 9.9	< 9.9
1.1.2-Trichloroethane	-	-		< 5.7	< 5.7	< 5.7	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	-	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
1.2-Dichlorobenzene	-	-		< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
1.2-Dichloroethane	-	-		< 6.6	< 6.6	< 6.6	< 6.6	< 6.6
1.2.4-Trimethylbenzene	-	-		< 2.2	< 2.2	< 2.2	< 2.2	< 2.2
1.3-Dichlorobenzene	-	-		< 2.1	< 2.1	< 2.1	< 2.1	< 2.1
1.3.5-Trimethylbenzene	-	-		< 2.4	< 2.4	< 2.4	< 2.4	< 2.4
1.4-Dichlorobenzene	-	-		< 2	< 2	< 2	< 2	< 2
Benzene	4,000	-		< 27	< 27	< 27	< 27	< 27
Carbon Tetrachloride	-	-		< 8.4	< 8.4	< 8.4	< 8.4	< 8.4
Chlorobenzene	-	-		< 4.1	< 4.1	< 4.1	< 4.1	< 4.1
Chloroform	-	-		< 7.6	< 7.6	< 7.6	< 7.6	< 7.6
Chloromethane	-	-		< 50	< 50	< 50	< 50	< 50
cis-1.2-Dichloroethene	-	300		< 7.8	< 7.8	< 7.8	< 7.8	< 7.8
Ethylbenzene	1,300,000	-		< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
Isopropyl benzene (Cumene)	-	-		< 2.6	< 2.6	< 2.6	< 2.6	< 2.6

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street

Auburn NSW

	Criteria 1	Criteria 2						
	HSLs - D	HILs - D						
	Sand	Interim	Sample ID	SV9	SV10	SV11	SV12	SV13
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	3/06/2019	3/06/2019	3/06/2019
o-Xylene	-	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
Styrene	-	-		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
Tetrachloroethene	-	8,000		< 3.8	< 3.8	< 3.8	< 3.8	< 3.8
Toluene	4,800,000	-		180	340	3,800	220	190
trans-1.2-Dichloroethene	-	-		< 18	< 18	< 18	< 18	< 18
Trichloroethene	-	80		< 5.6	< 5.6	< 5.6	< 5.6	< 5.6
Vinyl chloride	-	100		< 48	< 48	< 48	< 48	< 48
Xylenes - Total	840,000	-		ND	ND	ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2				
	HSLs - D	HILs - D				
	Sand	Interim	Sample ID	SV14	SV15	BLANK
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	3/06/2019
1.1-Dichloroethane	-	-		< 9.5	< 9.5	< 9.5
1.1-Dichloroethene	-	-		< 43	< 43	< 43
1.1.1-Trichloroethane	-	230,000		< 9.9	< 9.9	< 9.9
1.1.2-Trichloroethane	-	-		< 5.7	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	-	-		< 3.3	< 3.3	< 3.3
1.2-Dichlorobenzene	-	-		< 1.8	< 1.8	< 1.8
1.2-Dichloroethane	-	-		< 6.6	< 6.6	< 6.6
1.2.4-Trimethylbenzene	-	-		< 2.2	< 2.2	< 2.2
1.3-Dichlorobenzene	-	-		< 2.1	< 2.1	< 2.1
1.3.5-Trimethylbenzene	-	-		< 2.4	< 2.4	< 2.4
1.4-Dichlorobenzene	-	-		< 2	< 2	< 2
Benzene	4,000	-		< 27	< 27	< 27
Carbon Tetrachloride	-	-		< 8.4	< 8.4	< 8.4
Chlorobenzene	-	-		< 4.1	< 4.1	< 4.1
Chloroform	-	-		< 7.6	< 7.6	< 7.6
Chloromethane	-	-		< 50	< 50	< 50
cis-1.2-Dichloroethene	-	300		< 7.8	< 7.8	< 7.8
Ethylbenzene	1,300,000	-		< 3.5	< 3.5	< 3.5
sopropyl benzene (Cumene)	-	-		< 2.6	< 2.6	< 2.6

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2				
	HSLs - D	HILs - D				
	Sand	Interim	Sample ID	SV14	SV15	BLANK
	0 to <1 m	Soil Vapour	Date	3/06/2019	3/06/2019	3/06/2019
o-Xylene	-	-		< 3.3	< 3.3	< 3.3
Styrene	-	-		< 3.3	< 3.3	< 3.3
Tetrachloroethene	-	8,000		< 3.8	< 3.8	< 3.8
Toluene	4,800,000	-		500	97	< 5
trans-1.2-Dichloroethene	-	-		< 18	< 18	< 18
Trichloroethene	-	80		< 5.6	< 5.6	< 5.6
Vinyl chloride	-	100		< 48	< 48	< 48
Xylenes - Total	840,000	-		ND	ND	ND

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Soil vapour Health Screening Levels for vapour intrusion, sand 0 to <1m. Criteria 2 = NEPC (1999) Amended, 'D' Commercial/industrial Interim soil vapour Health Investigation Levels for VOCCs.

Total concentrations in µg/m³

- = assessment criteria not available

DV1 = duplicate of SV1

BLANK = blank sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	GW1	GW2	GW4	MW101	MW102
	2 to <4 m	Guidelines	95%	95%	Date	6/06/2019	6/06/2019	5/06/2019	5/06/2019	5/06/2019
TRH C ₆ -C ₁₀	-	-	-	-		30	80	1,400	< 20	13,000
TRH C ₆ -C ₁₀ less BTEX (F1)	6,000	-	-	-		30	80	1,400	< 20	13,000
TRH >C ₁₀ -C ₁₆	-	-	-	-		< 50	70	< 50	< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-	-	-		< 50	70	< 50	< 50	< 50
TRH >C ₁₆ -C ₃₄	-	-	-	-		< 100	< 100	< 100	< 100	< 100
TRH >C ₃₄ -C ₄₀	-	-	-	-		< 100	< 100	< 100	< 100	< 100
Benzene	5,000	1	950	700		< 1	< 1	< 20	< 1	< 200
Toluene	NL	800	180	180		< 1	< 1	< 20	< 1	< 200
Ethylbenzene	NL	300	80	5		< 1	< 1	< 20	< 1	< 200
m&p-Xylenes	-	-	75¹	75¹		3	< 2	< 40	< 2	< 400
o-Xylene	-	-	350	350		1	< 1	< 20	< 1	< 200
Xylenes - Total	NL	600	-	-		5	< 3	< 60	< 3	< 600
Naphthalene (MAH method)	NL	-	16	70		< 10	< 10	< 200	< 10	< 2,000

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m. Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

¹Guideline for m-Xylene used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit < # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	MW102	MW103	MW103	MW104	DW1
	2 to <4 m	Guidelines	95%	95%	Date	18/06/2019	5/06/2019	18/06/2019	5/06/2019	5/06/2019
TRH C ₆ -C ₁₀	-	-	-	-			< 20		170	160
TRH C ₆ -C ₁₀ less BTEX (F1)	6,000	-	-	-			< 20		170	160
TRH >C ₁₀ -C ₁₆	-	-	-	-			< 50		< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-	-	-			< 50		< 50	< 50
TRH >C ₁₆ -C ₃₄	-	-	-	-			< 100		< 100	< 100
TRH >C ₃₄ -C ₄₀	-	-	-	-			< 100		< 100	< 100
Benzene	5,000	1	950	700		< 100	< 1	< 1	< 1	< 1
Toluene	NL	800	180	180		< 100	< 1	< 1	5	5
Ethylbenzene	NL	300	80	5		< 100	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	75¹	75¹		< 200	< 2	< 2	< 2	< 2
o-Xylene	-	-	350	350		< 100	< 1	< 1	< 1	< 1
Xylenes - Total	NL	600	-	-		< 300	< 3	< 3	< 3	< 3
Naphthalene (MAH method)	NL	-	16	70			< 10		< 10	< 10

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m. Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

¹Guideline for m-Xylene used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit < # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	RPD_DW1	TW1	RPD_TW1	MW106	MW107
	2 to <4 m	Guidelines	95%	95%	Date	-	5/06/2019	-	5/06/2019	5/06/2019
TRH C ₆ -C ₁₀						6%	160	6%	< 20	< 20
	-	-	-	-						
TRH C ₆ -C ₁₀ less BTEX (F1)	6,000	-	-	-		6%	160	6%	< 20	< 20
TRH >C ₁₀ -C ₁₆	-	-	-	-		nc	< 50	nc	< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-	-	-		nc	< 50	nc	< 50	< 50
TRH >C ₁₆ -C ₃₄	-	-	-	-		nc	< 100	nc	< 100	< 100
TRH >C ₃₄ -C ₄₀	-	-	-	-		nc	< 100	nc	< 100	< 100
Benzene	5,000	1	950	700		nc	< 1	пс	< 1	< 1
Toluene	NL NL	800	180	180		0%	5	0%	< 1	< 1
Ethylbenzene	NL	300	80	5		nc	< 1	nc	< 1	< 1
m&p-Xylenes	-	-	75¹	75¹		nc	< 2	nc	< 2	< 2
o-Xylene	-	-	350	350		nc	< 1	nc	< 1	< 1
Xylenes - Total	NL	600	-	-		nc	< 3	nc	< 3	< 3
Naphthalene (MAH method)	NL	-	16	70		nc	< 10	nc	< 10	< 10

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m. Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

¹Guideline for m-Xylene used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit < # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	MW108	MW109	MW110	MW111	R1
	2 to <4 m	Guidelines	95%	95%	Date	5/06/2019	6/06/2019	5/06/2019	5/06/2019	5/06/2019
TRH C ₆ -C ₁₀	-	-	-	-		< 20	< 20	< 20	40	< 20
TRH C ₆ -C ₁₀ less BTEX (F1)	6,000	-	-	-		< 20	< 20	< 20	40	< 20
TRH >C ₁₀ -C ₁₆	-	-	-	-		< 50	90	< 50	< 50	< 50
TRH >C ₁₀ -C ₁₆ less Naphthalene (F2)	NL	-	-	-		< 50	90	< 50	< 50	< 50
TRH >C ₁₆ -C ₃₄	-	-	-	-		< 100	200	< 100	< 100	< 100
TRH >C ₃₄ -C ₄₀	-	-	-	-		< 100	< 100	< 100	< 100	< 100
Benzene	5,000	1	950	700		< 1	< 1	< 1	< 1	< 1
Toluene	NL	800	180	180		< 1	< 1	< 1	< 1	< 1
Ethylbenzene	NL	300	80	5		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	75¹	75¹		< 2	< 2	< 2	< 2	< 2
o-Xylene	-	-	350	350		< 1	< 1	< 1	< 1	< 1
Xylenes - Total	NL	600	-	-		< 3	< 3	< 3	< 3	< 3
Naphthalene (MAH method)	NL	-	16	70		< 10	< 10	< 10	< 10	< 10

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m. Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

¹Guideline for m-Xylene used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit < # or ND = analyte(s) not detected in excess of laboratory reporting limit

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	HP1	HP2	HP3	HP4	GW1
	Guidelines	95%	95%	Tapwater	Date	22-Aug-19	22-Aug-19	22-Aug-19	22-Aug-19	06-Jun-19
1.1-Dichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1-Dichloroethene	30	700	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	6
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	3
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
2-Propanone (Acetone)	-	-	-	-		< 1	9	< 1	< 1	< 1
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

<# or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	HP1	HP2	HP3	HP4	GW1
	Guidelines	95%	95%	Tapwater	Date	22-Aug-19	22-Aug-19	22-Aug-19	22-Aug-19	06-Jun-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	< 1	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	< 5	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	6	< 1
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	HP1	HP2	HP3	HP4	GW1
	Guidelines	95%	95%	Tapwater	Date	22-Aug-19	22-Aug-19	22-Aug-19	22-Aug-19	06-Jun-19
Ethylbenzene	300	-	-	-		< 1	< 1	< 1	< 1	< 1
lodomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 2	3
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 1	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 1	1
Styrene	30	-	-	-		< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 1	< 1
Toluene	800	-	-	-		1	< 1	1	< 1	< 1
trans-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Trichloroethene	-	330	-	2.8		< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Vinyl chloride	0.3	100	-	-		< 1	< 1	< 1	< 1	< 1
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 3	5

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	GW1	GW2	GW2	GW4	GW4
	Guidelines	95%	95%	Tapwater	Date	06-Jun-19	06-Jun-19	06-Jun-19	05-Jun-19	05-Jun-19
1.1-Dichloroethane	-	-	-	-		< 1	< 1	< 1	750	820
1.1-Dichloroethene	30	700	-	-		< 1	< 1	< 1	260	180
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	< 20	2
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 20	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 20	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 20	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 20	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 20	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 20	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 20	< 1
2-Propanone (Acetone)	-	-	-	-		< 1	< 1	< 1	< 20	< 1
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 20	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	GW1	GW2	GW2	GW4	GW4
	Guidelines	95%	95%	Tapwater	Date	06-Jun-19	06-Jun-19	06-Jun-19	05-Jun-19	05-Jun-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	< 20	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 20	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	< 100	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
cis-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	1,300	910
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19) T1 = triplicate of MW104 (20/08/19) DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	GW1	GW2	GW2	GW4	GW4
	Guidelines	95%	95%	Tapwater	Date	06-Jun-19	06-Jun-19	06-Jun-19	05-Jun-19	05-Jun-19
Ethylbenzene	300	_	_	-		< 1	< 1	< 1	< 20	< 1
Iodomethane	-	_	_	-		< 1	< 1	< 1	< 20	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	2	< 20	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 40	< 2
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 200	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 20	< 1
Styrene	30	-	-	-		< 1	< 1	< 1	< 20	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 20	< 1
Toluene	800	-	-	-		< 1	< 1	< 1	< 20	< 1
trans-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	25	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Trichloroethene	-	330	-	2.8		< 1	< 1	< 1	310	280
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 20	< 1
Vinyl chloride	0.3	100	-	-		< 1	< 1	< 1	410	680
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 60	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	GW4	MW101	MW101	MW102	MW102
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	05-Jun-19	26-Aug-19	05-Jun-19	18-Jun-19
1.1-Dichloroethane	-	-	-	-		330	< 1	< 1	< 200	< 100
1.1-Dichloroethene	30	700	-	-		110	< 1	< 1	< 200	< 100
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	< 200	< 100
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 200	< 100
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 200	< 100
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 200	< 100
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 200	< 100
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 200	< 100
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 200	< 100
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 200	< 100
2-Propanone (Acetone)	-	-	-	-		< 1	< 1	< 1	< 200	< 100
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 200	< 100

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	GW4	MW101	MW101	MW102	MW102
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	05-Jun-19	26-Aug-19	05-Jun-19	18-Jun-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Benzene	1	950	700	-		< 1	< 1	< 1	< 200	< 100
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Bromoform	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 200	< 100
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Chloroform	-	-	-	-		< 5	< 5	< 5	< 1,000	< 500
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
cis-1.2-Dichloroethene	-	-	-	-		380	< 1	< 1	2,000	1,900
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	GW4	MW101	MW101	MW102	MW102
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	05-Jun-19	26-Aug-19	05-Jun-19	18-Jun-19
Ethylbenzene	300	-	-	-		< 1	< 1	< 1	< 200	< 100
Iodomethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	< 200	< 100
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 400	< 200
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 2,000	< 1,000
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 200	< 100
Styrene	30	-	-	-		< 1	< 1	< 1	< 200	< 100
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 200	< 100
Toluene	800	-	-	-		< 1	< 1	< 1	< 200	< 100
trans-1.2-Dichloroethene	-	-	-	-		9	< 1	< 1	< 200	< 100
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Trichloroethene	-	330	-	2.8		170	< 1	< 1	8,300	6,100
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 200	< 100
Vinyl chloride	0.3	100	-	-		160	< 1	< 1	< 200	< 100
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 600	< 300

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW102	D2	RPD_D2	T2	RPD_T2
	Guidelines	95%	95%	Tapwater	Date	26-Aug-19	26-Aug-19	-	26-Aug-19	-
1.1-Dichloroethane	-	-	-	-		< 50	< 50	nc	5	nc
1.1-Dichloroethene	30	700	-	-		< 50	< 50	nc	6	пс
1.1.1-Trichloroethane	-	-	-	-		< 50	< 50	nc	< 1	nc
1.1.1.2-Tetrachloroethane	-	-	-	-		< 50	< 50	nc	< 1	nc
1.1.2-Trichloroethane	-	6,500	1,900	-		< 50	< 50	nc	14	nc
1.1.2.2-Tetrachloroethane	-	-	-	-		< 50	< 50	nc	< 1	nc
1.2-Dibromoethane	1	-	-	-		< 50	< 50	nc	< 1	nc
1.2-Dichlorobenzene	1,500	160	-	-		< 50	< 50	nc	< 1	nc
1.2-Dichloroethane	3	-	-	-		< 50	< 50	nc	< 1	nc
1.2-Dichloropropane	-	-	-	-		< 50	< 50	nc	< 1	nc
1.2.3-Trichloropropane	-	-	-	-		< 50	< 50	nc	< 1	nc
1.2.4-Trimethylbenzene	-	-	-	-		< 50	< 50	nc	< 1	nc
1.3-Dichlorobenzene	-	260	-	-		< 50	< 50	nc	< 1	nc
1.3-Dichloropropane	-	-	-	-		< 50	< 50	nc	< 1	nc
1.3.5-Trimethylbenzene	-	-	-	-		< 50	< 50	nc	< 1	nc
1.4-Dichlorobenzene	40	60	-	-		< 50	< 50	nc	< 1	nc
2-Butanone (MEK)	-	-	-	-		< 50	< 50	nc	< 1	nc
2-Propanone (Acetone)	-	-	-	-		< 50	< 50	nc	< 1	nc
4-Chlorotoluene	-	-	-	-		< 50	< 50	nc	< 1	nc

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW102	D2	RPD_D2	T2	RPD_T2
	Guidelines	95%	95%	Tapwater	Date	26-Aug-19	26-Aug-19	-	26-Aug-19	-
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 50	< 50	nc	< 1	nc
Allyl chloride	-	-	-	-		< 50	< 50	nc	< 1	nc
Benzene	1	950	700	-		< 50	< 50	nc	< 1	nc
Bromobenzene	-	-	-	-		< 50	< 50	nc	< 1	nc
Bromochloromethane	-	-	-	-		< 50	< 50	nc	< 1	nc
Bromodichloromethane	-	-	-	-		< 50	< 50	nc	< 1	nc
Bromoform	-	-	-	-		< 50	< 50	nc	< 1	nc
Bromomethane	1	-	-	-		< 50	< 50	nc	< 1	nc
Carbon disulfide	-	-	-	-		< 50	< 50	nc	< 1	nc
Carbon Tetrachloride	-	-	-	-		< 50	< 50	nc	< 1	nc
Chlorobenzene	-	-	-	-		< 50	< 50	nc	< 1	nc
Chloroethane	-	-	-	-		< 50	< 50	nc	< 1	nc
Chloroform	-	-	-	-		< 50	< 50	nc	< 5	nc
Chloromethane	-	-	-	-		< 50	< 50	nc	< 1	nc
cis-1.2-Dichloroethene	-	-	-	-		1,000	860	15%	1,000	0%
cis-1.3-Dichloropropene	-	-	-	-		< 50	< 50	nc	< 1	nc
Dibromochloromethane	-	-	-	-		< 50	< 50	nc	< 1	nc
Dibromomethane	-	-	-	-		< 50	< 50	nc	< 1	nc
Dichlorodifluoromethane	-	-	-	-		< 50	< 50	nc	< 1	nc

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW102	D2	RPD_D2	T2	RPD_T2
	Guidelines	95%	95%	Tapwater	Date	26-Aug-19	26-Aug-19	-	26-Aug-19	-
Ethylbenzene	300	-	-	-		< 50	< 50	nc	< 1	пс
Iodomethane	-	-	-	-		< 50	< 50	nc	< 1	пс
Isopropyl benzene (Cumene)	-	-	-	-		< 50	< 50	nc	< 1	nc
m&p-Xylenes	-	-	-	-		< 100	< 100	nc	< 2	пс
Methylene Chloride	4	-	-	-		< 50	< 50	nc	< 1	nc
o-Xylene	-	350	-	-		< 50	< 50	nc	< 1	nc
Styrene	30	-	-	-		< 50	< 50	nc	< 1	nc
Tetrachloroethene	50	-	-	-		< 50	< 50	nc	< 1	nc
Toluene	800	-	-	-		< 50	< 50	nc	< 1	nc
trans-1.2-Dichloroethene	-	-	-	-		< 50	< 50	nc	28	nc
trans-1.3-Dichloropropene	-	-	-	-		< 50	< 50	nc	< 1	nc
Trichloroethene	-	330	-	2.8		2,800	2,100	29%	3,500	22%
Trichlorofluoromethane	-	-	-	-		< 50	< 50	nc	< 1	nc
Vinyl chloride	0.3	100	-	-		< 50	< 50	nc	45	nc
Xylenes - Total	600	-	-	-		< 150	< 150	nc	< 3	nc

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19) T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW102	MW103	MW103	MW103	MW104
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	05-Jun-19	18-Jun-19	20-Aug-19	05-Jun-19
1.1-Dichloroethane	-	-	-	-		5	< 1	< 1	< 1	29
1.1-Dichloroethene	30	700	-	-		19	< 1	< 1	< 1	22
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		10	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
2-Propanone (Acetone)	-	-	-	-		< 1	< 1	< 1	< 10	< 1
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW102	MW103	MW103	MW103	MW104
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	05-Jun-19	18-Jun-19	20-Aug-19	05-Jun-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	< 1	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	< 5	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-	-	-	-		1,200	< 1	< 1	< 1	170
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW102	MW103	MW103	MW103	MW104
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	05-Jun-19	18-Jun-19	20-Aug-19	05-Jun-19
Ethylbenzene	300	_	_	-		< 1	< 1	< 1	< 1	< 1
Iodomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 2	< 2
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 1	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 1	< 1
Styrene	30	-	-	-		< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 1	< 1
Toluene	800	-	-	-		3	< 1	< 1	< 1	5
trans-1.2-Dichloroethene	-	-	-	-		34	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Trichloroethene	-	330	-	2.8		5,500	< 1	< 1	< 1	< 1
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Vinyl chloride	0.3	100	-	-		33	< 1	< 1	< 1	26
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	DW1	RPD_DW1	TW1	RPD_TW1	MW104
	Guidelines	95%	95%	Tapwater	Date	05-Jun-19	-	05-Jun-19	-	20-Aug-19
1.1-Dichloroethane	-	-	-	-		31	7%	37	24%	28
1.1-Dichloroethene	30	700	-	-		24	9%	30	31%	20
1.1.1-Trichloroethane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	пс	< 1	nc	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	пс	< 1	nc	< 1
1.2-Dibromoethane	1	-	-	-		< 1	пс	< 1	nc	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	nc	< 1	nc	< 1
1.2-Dichloroethane	3	-	-	-		< 1	nc	< 1	nc	< 1
1.2-Dichloropropane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	nc	< 1	nc	< 1
1.3-Dichloropropane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	nc	< 1	nc	< 1
2-Butanone (MEK)	-	-	-	-		< 1	пс	< 1	nc	< 1
2-Propanone (Acetone)	-	-	-	-		< 1	nc	< 5	nc	< 2
4-Chlorotoluene	-	-	_	-		< 1	пс	< 1	nc	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	DW1	RPD_DW1	TW1	RPD_TW1	MW104
	Guidelines	95%	95%	Tapwater	Date	05-Jun-19	-	05-Jun-19	-	20-Aug-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	nc	< 1	nc	< 1
Allyl chloride	-	-	-	-		< 1	пс	< 1	nc	< 1
Benzene	1	950	700	-		< 1	nc	< 1	nc	< 1
Bromobenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromochloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromodichloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromoform	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromomethane	1	-	-	-		< 1	nc	< 1	nc	< 1
Carbon disulfide	-	-	-	-		< 1	nc	< 1	nc	< 1
Carbon Tetrachloride	-	-	-	-		< 1	nc	< 1	nc	< 1
Chlorobenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
Chloroethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Chloroform	-	-	-	-		< 5	nc	< 5	nc	< 5
Chloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
cis-1.2-Dichloroethene	-	-	-	-		160	6%	210	21%	160
cis-1.3-Dichloropropene	-	-	-	-		< 1	nc	< 1	nc	< 1
Dibromochloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Dibromomethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	nc	< 1	nc	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	DW1	RPD_DW1	TW1	RPD_TW1	MW104
	Guidelines	95%	95%	Tapwater	Date	05-Jun-19	-	05-Jun-19	-	20-Aug-19
Ethylbenzene	300	_	-	-		< 1	пс	< 1	nc	< 1
Iodomethane	-	-	-	-		< 1	пс	< 1	nc	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	nc	< 1	nc	< 1
m&p-Xylenes	-	-	-	-		< 2	nc	< 2	nc	< 2
Methylene Chloride	4	-	-	-		< 1	nc	< 1	nc	< 1
o-Xylene	-	350	-	-		< 1	nc	< 1	nc	< 1
Styrene	30	-	-	-		< 1	nc	< 1	nc	< 1
Tetrachloroethene	50	-	-	-		< 1	nc	< 1	nc	< 1
Toluene	800	-	-	-		5	0%	5	0%	< 1
trans-1.2-Dichloroethene	-	-	-	-		3	nc	3	nc	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	nc	< 1	nc	< 1
Trichloroethene	-	330	-	2.8		< 1	nc	< 1	nc	< 1
Trichlorofluoromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Vinyl chloride	0.3	100	-	-		26	0%	48	59%	22
Xylenes - Total	600	-	-	-		< 3	nc	< 3	nc	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	D1	RPD_D1	T1	RPD_T1	MW106
	Guidelines	95%	95%	Tapwater	Date	20-Aug-19	-	20-Aug-19	-	05-Jun-19
1.1-Dichloroethane	-	-	-	-		28	0%	28	0%	< 1
1.1-Dichloroethene	30	700	-	-		19	5%	21	5%	< 1
1.1.1-Trichloroethane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	nc	< 1	nc	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.2-Dibromoethane	1	-	-	-		< 1	nc	< 1	nc	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	nc	< 1	nc	< 1
1.2-Dichloroethane	3	-	-	-		< 1	nc	< 1	nc	< 1
1.2-Dichloropropane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	nc	< 1	nc	< 1
1.3-Dichloropropane	-	-	-	-		< 1	nc	< 1	nc	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	nc	< 1	nc	< 1
2-Butanone (MEK)	-	-	-	-		< 1	nc	< 1	nc	< 1
2-Propanone (Acetone)	-	-	-	-		< 2	nc	< 1	nc	< 1
4-Chlorotoluene	-	-	-	-		< 1	nc	< 1	nc	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	D1	RPD_D1	T1	RPD_T1	MW106
	Guidelines	95%	95%	Tapwater	Date	20-Aug-19	-	20-Aug-19	-	05-Jun-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	nc	< 1	nc	< 1
Allyl chloride	-	-	-	-		< 1	nc	< 1	nc	< 1
Benzene	1	950	700	-		< 1	nc	< 1	nc	< 1
Bromobenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromochloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromodichloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromoform	-	-	-	-		< 1	nc	< 1	nc	< 1
Bromomethane	1	-	-	-		< 1	nc	< 1	nc	< 1
Carbon disulfide	-	-	-	-		< 1	nc	< 1	nc	< 1
Carbon Tetrachloride	-	-	-	-		< 1	nc	< 1	nc	< 1
Chlorobenzene	-	-	-	-		< 1	nc	< 1	nc	< 1
Chloroethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Chloroform	-	-	-	-		< 5	nc	< 5	nc	< 5
Chloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
cis-1.2-Dichloroethene	-	-	-	-		150	6%	140	13%	< 1
cis-1.3-Dichloropropene	-	-	-	-		< 1	nc	< 1	nc	< 1
Dibromochloromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Dibromomethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	nc	< 1	nc	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	D1	RPD_D1	T1	RPD_T1	MW106
	Guidelines	95%	95%	Tapwater	Date	20-Aug-19	-	20-Aug-19	-	05-Jun-19
Ethylbenzene	300	-	-	-		< 1	nc	< 1	nc	< 1
Iodomethane	-	-	-	-		< 1	пс	< 1	nc	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	nc	< 1	nc	< 1
m&p-Xylenes	-	-	-	-		< 2	nc	< 2	nc	< 2
Methylene Chloride	4	-	-	-		< 1	nc	< 1	nc	< 1
o-Xylene	-	350	-	-		< 1	nc	< 1	nc	< 1
Styrene	30	-	-	-		< 1	nc	< 1	nc	< 1
Tetrachloroethene	50	-	-	-		< 1	nc	< 1	nc	< 1
Toluene	800	-	-	-		< 1	nc	< 1	nc	< 1
trans-1.2-Dichloroethene	-	-	-	-		< 1	nc	3	nc	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	nc	< 1	nc	< 1
Trichloroethene	-	330	-	2.8		< 1	nc	< 1	nc	< 1
Trichlorofluoromethane	-	-	-	-		< 1	nc	< 1	nc	< 1
Vinyl chloride	0.3	100	-	-		21	5%	21	5%	< 1
Xylenes - Total	600	-	-	-		< 3	nc	< 3	nc	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW106	MW107	MW107	MW108	MW108
	Guidelines	95%	95%	Tapwater	Date	20-Aug-19	05-Jun-19	27-Aug-19	05-Jun-19	28-Aug-19
1.1-Dichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1-Dichloroethene	30	700	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
2-Propanone (Acetone)	-	-	-	-		< 5	< 1	< 1	< 1	< 1
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19) T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW106	MW107	MW107	MW108	MW108
	Guidelines	95%	95%	Tapwater	Date	20-Aug-19	05-Jun-19	27-Aug-19	05-Jun-19	28-Aug-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	< 1	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	< 5	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW106	MW107	MW107	MW108	MW108
	Guidelines	95%	95%	Tapwater	Date	20-Aug-19	05-Jun-19	27-Aug-19	05-Jun-19	28-Aug-19
Ethylbenzene	300	_	-	_		< 1	< 1	< 1	< 1	< 1
lodomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 2	< 2
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 1	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 1	< 1
Styrene	30	-	-	-		< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 1	< 1
Toluene	800	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Trichloroethene	-	330	-	2.8		< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Vinyl chloride	0.3	100	-	-		< 1	< 1	< 1	< 1	< 1
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW108	MW109	MW109	MW110	MW110
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	06-Jun-19	28-Aug-19	05-Jun-19	27-Aug-19
1.1-Dichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1-Dichloroethene	30	700	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
2-Propanone (Acetone)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW108	MW109	MW109	MW110	MW110
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	06-Jun-19	28-Aug-19	05-Jun-19	27-Aug-19
4-Methyl-2-pentanone (MIBK)	-	_	-	-		< 1	< 1	< 1	< 1	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	< 1	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	< 5	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

<# or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW108	MW109	MW109	MW110	MW110
	Guidelines	95%	95%	Tapwater	Date	27-Sep-19	06-Jun-19	28-Aug-19	05-Jun-19	27-Aug-19
Ethylbenzene	300	-	-	-		< 1	< 1	< 1	< 1	< 1
Iodomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 2	< 2
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 1	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 1	< 1
Styrene	30	-	-	-		< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 1	< 1
Toluene	800	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Trichloroethene	-	330	-	2.8		< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Vinyl chloride	0.3	100	-	-		< 1	< 1	< 1	< 1	< 1
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19) T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW111	MW111	MW112	MW113	MW114
	Guidelines	95%	95%	Tapwater	Date	05-Jun-19	20-Aug-19	26-Aug-19	27-Aug-19	27-Aug-19
1.1-Dichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1-Dichloroethene	30	700	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
2-Propanone (Acetone)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW111	MW111	MW112	MW113	MW114
	Guidelines	95%	95%	Tapwater	Date	05-Jun-19	20-Aug-19	26-Aug-19	27-Aug-19	27-Aug-19
4-Methyl-2-pentanone (MIBK)	-	_	-	-		< 1	< 1	< 1	< 1	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	< 1	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	< 5	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-	-	-	-		24	22	< 1	< 1	< 1
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW111	MW111	MW112	MW113	MW114
	Guidelines	95%	95%	Tapwater	Date	05-Jun-19	20-Aug-19	26-Aug-19	27-Aug-19	27-Aug-19
Ethylbenzene	300	-	-	-		< 1	< 1	< 1	< 1	< 1
Iodomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 2	< 2
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 1	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 1	< 1
Styrene	30	-	-	-		< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 1	< 1
Toluene	800	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.2-Dichloroethene	-	-	-	-		2	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Trichloroethene	-	330	-	2.8		13	11	< 1	< 1	< 1
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Vinyl chloride	0.3	100	-	-		9	7	< 1	< 1	< 1
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW115	MW116	MW117	MW118	MW119
	Guidelines	95%	95%	Tapwater	Date	27-Aug-19	26-Aug-19	08-Oct-19	08-Oct-19	08-Oct-19
1.1-Dichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1-Dichloroethene	30	700	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
2-Propanone (Acetone)	-	-	-	-		4	13	1	16	3
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW115	MW116	MW117	MW118	MW119
	Guidelines	95%	95%	Tapwater	Date	27-Aug-19	26-Aug-19	08-Oct-19	08-Oct-19	08-Oct-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	< 1	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	< 5	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</p>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW115	MW116	MW117	MW118	MW119
	Guidelines	95%	95%	Tapwater	Date	27-Aug-19	26-Aug-19	08-Oct-19	08-Oct-19	08-Oct-19
Ethylbenzene	300	_	-	-		< 1	< 1	< 1	< 1	< 1
Iodomethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	< 2	< 2
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	< 1	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	< 1	< 1
Styrene	30	-	-	-		< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	< 1	< 1
Toluene	800	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Trichloroethene	-	330	-	2.8		< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Vinyl chloride	0.3	100	-	-		< 1	< 1	< 1	< 1	< 1
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW120	DW3	RPD_DW3	TW3	RPD_TW3
	Guidelines	95%	95%	Tapwater	Date	08-Oct-19	08-Oct-19	-	08-Oct-19	-
1.1-Dichloroethane	-	-	-	-		< 1	< 1	nc	< 1	пс
1.1-Dichloroethene	30	700	-	-		< 1	< 1	nc	< 1	nc
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	nc	< 1	пс
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	nc	< 1	пс
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	nc	< 1	nc
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	nc	< 1	nc
1.2-Dibromoethane	1	-	-	-		< 1	< 1	nc	< 1	nc
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	nc	< 1	nc
1.2-Dichloroethane	3	-	-	-		< 1	< 1	nc	< 1	nc
1.2-Dichloropropane	-	-	-	-		< 1	< 1	nc	< 1	nc
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	nc	< 1	nc
1.2.4-Trimethylbenzene	-	-	-	-		2	2	0%	1	67%
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	nc	< 1	nc
1.3-Dichloropropane	-	-	-	-		< 1	< 1	nc	< 1	nc
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	nc	< 1	nc
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	nc	< 1	nc
2-Butanone (MEK)	-	-	-	-		< 1	< 1	nc	< 1	nc
2-Propanone (Acetone)	-	-	-	-		3	3	0%	< 1	nc
4-Chlorotoluene	-	-	-	-		< 1	< 1	nc	< 1	nc

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

TW3 = triplicate of MW120 (08/10/19)

DW3 = duplicate of MW120 (08/10/19) DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW120	DW3	RPD_DW3	TW3	RPD_TW3
	Guidelines	95%	95%	Tapwater	Date	08-Oct-19	08-Oct-19	-	08-Oct-19	-
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	nc	< 1	пс
Allyl chloride	-	-	-	-		< 1	< 1	nc	< 1	пс
Benzene	1	950	700	-		< 1	< 1	nc	< 1	nc
Bromobenzene	-	-	-	-		< 1	< 1	nc	< 1	nc
Bromochloromethane	-	-	-	-		< 1	< 1	nc	< 1	nc
Bromodichloromethane	-	-	-	-		< 1	< 1	nc	< 1	nc
Bromoform	-	-	-	-		< 1	< 1	nc	< 1	nc
Bromomethane	1	-	-	-		< 1	< 1	nc	< 1	nc
Carbon disulfide	-	-	-	-		< 1	< 1	nc	< 1	nc
Carbon Tetrachloride	-	-	-	-		< 1	< 1	nc	< 1	nc
Chlorobenzene	-	-	-	-		< 1	< 1	nc	< 1	nc
Chloroethane	-	-	-	-		< 1	< 1	nc	< 1	nc
Chloroform	-	-	-	-		< 5	< 5	nc	< 5	nc
Chloromethane	-	-	-	-		< 1	< 1	nc	< 1	nc
cis-1.2-Dichloroethene	-	-	-	-		< 1	< 1	nc	< 1	пс
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	nc	< 1	nc
Dibromochloromethane	-	-	-	-		< 1	< 1	nc	< 1	nc
Dibromomethane	-	-	-	-		< 1	< 1	nc	< 1	nc
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	nc	< 1	nc

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW120	DW3	RPD_DW3	TW3	RPD_TW3
	Guidelines	95%	95%	Tapwater	Date	08-Oct-19	08-Oct-19	-	08-Oct-19	-
Ethylbenzene	300	-	-	-		1	2	67%	< 1	пс
Iodomethane	-	-	-	-		< 1	< 1	nc	< 1	пс
Isopropyl benzene (Cumene)	-	-	-	-		5	5	0%	3	50%
m&p-Xylenes	-	-	-	-		< 2	< 2	nc	< 2	nc
Methylene Chloride	4	-	-	-		< 1	< 1	nc	< 1	nc
o-Xylene	-	350	-	-		1	1	0%	< 1	пс
Styrene	30	-	-	-		< 1	< 1	nc	< 1	nc
Tetrachloroethene	50	-	-	-		< 1	< 1	nc	< 1	nc
Toluene	800	-	-	-		< 1	< 1	nc	< 1	nc
trans-1.2-Dichloroethene	-	-	-	-		< 1	< 1	nc	< 1	nc
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	nc	< 1	nc
Trichloroethene	-	330	-	2.8		< 1	< 1	nc	< 1	nc
Trichlorofluoromethane	-	-	-	-		< 1	< 1	nc	< 1	nc
Vinyl chloride	0.3	100	-	-		< 1	< 1	nc	< 1	nc
Xylenes - Total	600	-	-	-		< 3	3	nc	< 3	nc

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

D1 - duplicate of MW 104 (20/00/18

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW121	MW201	DW2	RPD_DW2	TW2
	Guidelines	95%	95%	Tapwater	Date	08-Oct-19	27-Sep-19	27-Sep-19	-	27-Sep-19
1.1-Dichloroethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.1-Dichloroethene	30	700	-	-		< 1	< 1	< 1	nc	< 1
1.1.1-Trichloroethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		< 1	< 1	< 1	nc	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.2-Dibromoethane	1	-	-	-		< 1	< 1	< 1	nc	< 1
1.2-Dichlorobenzene	1,500	160	-	-		< 1	< 1	< 1	nc	< 1
1.2-Dichloroethane	3	-	-	-		< 1	< 1	< 1	nc	< 1
1.2-Dichloropropane	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.2.3-Trichloropropane	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.2.4-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.3-Dichlorobenzene	-	260	-	-		< 1	< 1	< 1	nc	< 1
1.3-Dichloropropane	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.3.5-Trimethylbenzene	-	-	-	-		< 1	< 1	< 1	nc	< 1
1.4-Dichlorobenzene	40	60	-	-		< 1	< 1	< 1	nc	< 1
2-Butanone (MEK)	-	-	-	-		< 1	< 1	< 1	nc	< 1
2-Propanone (Acetone)	-	-	-	-		< 1	< 1	< 1	nc	< 1
4-Chlorotoluene	-	-	-	-		< 1	< 1	< 1	nc	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW121	MW201	DW2	RPD_DW2	TW2
	Guidelines	95%	95%	Tapwater	Date	08-Oct-19	27-Sep-19	27-Sep-19	-	27-Sep-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		< 1	< 1	< 1	nc	< 1
Allyl chloride	-	-	-	-		< 1	< 1	< 1	пс	< 1
Benzene	1	950	700	-		< 1	< 1	< 1	nc	< 1
Bromobenzene	-	-	-	-		< 1	< 1	< 1	nc	< 1
Bromochloromethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
Bromodichloromethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
Bromoform	-	-	-	-		< 1	< 1	< 1	nc	< 1
Bromomethane	1	-	-	-		< 1	< 1	< 1	nc	< 1
Carbon disulfide	-	-	-	-		< 1	< 1	< 1	nc	< 1
Carbon Tetrachloride	-	-	-	-		< 1	< 1	< 1	nc	< 1
Chlorobenzene	-	-	-	-		< 1	< 1	< 1	nc	< 1
Chloroethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
Chloroform	-	-	-	-		< 5	< 5	< 5	nc	< 5
Chloromethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
cis-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	nc	< 1
cis-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	nc	< 1
Dibromochloromethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
Dibromomethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
Dichlorodifluoromethane	-	-	-	-		< 1	< 1	< 1	nc	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	MW121	MW201	DW2	RPD_DW2	TW2
	Guidelines	95%	95%	Tapwater	Date	08-Oct-19	27-Sep-19	27-Sep-19	-	27-Sep-19
Ethylbenzene	300	-	-	-		< 1	< 1	< 1	пс	< 1
Iodomethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
Isopropyl benzene (Cumene)	-	-	-	-		< 1	< 1	< 1	nc	< 1
m&p-Xylenes	-	-	-	-		< 2	< 2	< 2	nc	< 2
Methylene Chloride	4	-	-	-		< 1	< 1	< 1	nc	< 1
o-Xylene	-	350	-	-		< 1	< 1	< 1	nc	< 1
Styrene	30	-	-	-		< 1	< 1	< 1	nc	< 1
Tetrachloroethene	50	-	-	-		< 1	< 1	< 1	nc	< 1
Toluene	800	-	-	-		< 1	< 1	< 1	nc	< 1
trans-1.2-Dichloroethene	-	-	-	-		< 1	< 1	< 1	nc	< 1
trans-1.3-Dichloropropene	-	-	-	-		< 1	< 1	< 1	nc	< 1
Trichloroethene	-	330	-	2.8		< 1	< 1	< 1	nc	< 1
Trichlorofluoromethane	-	-	-	-		< 1	< 1	< 1	nc	< 1
Vinyl chloride	0.3	100	-	-		< 1	< 1	< 1	nc	< 1
Xylenes - Total	600	-	-	-		< 3	< 3	< 3	nc	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	RPD_TW2	MW202	MW203	MW204	MW205
	Guidelines	95%	95%	Tapwater	Date	-	27-Sep-19	27-Sep-19	08-Oct-19	08-Oct-19
1.1-Dichloroethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.1-Dichloroethene	30	700	-	-		nc	< 1	< 1	< 1	< 1
1.1.1-Trichloroethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-	6,500	1,900	-		nc	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.2-Dibromoethane	1	-	-	-		nc	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	1,500	160	-	-		nc	< 1	< 1	< 1	< 1
1.2-Dichloroethane	3	-	-	-		nc	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.3-Dichlorobenzene	-	260	-	-		nc	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-	-	-	-		nc	< 1	< 1	< 1	< 1
1.4-Dichlorobenzene	40	60	-	-		nc	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-	-	-	-		nc	< 1	< 1	< 1	< 4
2-Propanone (Acetone)	-	-	-	-		nc	< 1	< 1	9	< 10
4-Chlorotoluene	-	-	-	-		nc	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	RPD_TW2	MW202	MW203	MW204	MW205
	Guidelines	95%	95%	Tapwater	Date	-	27-Sep-19	27-Sep-19	08-Oct-19	08-Oct-19
4-Methyl-2-pentanone (MIBK)	-	-	-	-		nc	< 1	< 1	< 1	< 1
Allyl chloride	-	-	-	-		пс	< 1	< 1	< 1	< 1
Benzene	1	950	700	-		nc	< 1	< 1	< 1	< 1
Bromobenzene	-	-	-	-		nc	< 1	< 1	< 1	< 1
Bromochloromethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
Bromodichloromethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
Bromoform	-	-	-	-		nc	< 1	< 1	< 1	< 1
Bromomethane	1	-	-	-		nc	< 1	< 1	< 1	< 1
Carbon disulfide	-	-	-	-		nc	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-	-	-	-		nc	< 1	< 1	< 1	< 1
Chlorobenzene	-	-	-	-		nc	< 1	< 1	< 1	< 1
Chloroethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
Chloroform	-	-	-	-		nc	< 5	< 5	< 5	< 5
Chloromethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-	-	-	-		nc	< 1	< 1	< 1	< 1
cis-1.3-Dichloropropene	-	-	-	-		nc	< 1	< 1	< 1	< 1
Dibromochloromethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
Dibromomethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-	-	-	-		nc	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 2 = ANZECC 2000 FW 95%

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

DW3 = duplicate of MW120 (08/10/19)

TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	Drinking	ANZECC	ANZECC	RSL						
	Water	Freshwater	Marine Water	Resident	Sample ID	RPD_TW2	MW202	MW203	MW204	MW205
	Guidelines	95%	95%	Tapwater	Date	-	27-Sep-19	27-Sep-19	08-Oct-19	08-Oct-19
Ethylbenzene	300	-	-	-		пс	< 1	< 1	< 1	< 1
Iodomethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-	-	-	-		nc	< 1	< 1	< 1	< 1
m&p-Xylenes	-	-	-	-		пс	< 2	< 2	< 2	< 2
Methylene Chloride	4	-	-	-		nc	< 1	< 1	< 1	< 1
o-Xylene	-	350	-	-		nc	< 1	< 1	1	1
Styrene	30	-	-	-		nc	< 1	< 1	< 1	< 1
Tetrachloroethene	50	-	-	-		nc	< 1	< 1	< 1	< 1
Toluene	800	-	-	-		nc	< 1	< 1	2	2
trans-1.2-Dichloroethene	-	-	-	-		nc	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-	-	-	-		nc	< 1	< 1	< 1	< 1
Trichloroethene	-	330	-	2.8		nc	< 1	< 1	< 1	< 1
Trichlorofluoromethane	-	-	-	-		nc	< 1	< 1	< 1	< 1
Vinyl chloride	0.3	100	-	-		nc	< 1	< 1	< 1	< 1
Xylenes - Total	600	-	-	-		nc	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011

Criteria 3 = ANZECC 2000 MW 95%

Criteria 4 = US EPA (2019) Regional Screening Level (RSL), Generic Tables, Resident Tapwater

Total concentrations in µg/L

- = assessment criteria not available

D2 = duplicate of MW102 (26/08/19)

T2 = triplicate of MW102 (26/08/19)

DW1 = duplicate of MW104 (05/06/19)

TW1 = triplicate of MW104 (05/06/19)

D1 = duplicate of MW104 (20/08/19)

T1 = triplicate of MW104 (20/08/19)

Criteria 2 = ANZECC 2000 FW 95%

DW3 = duplicate of MW120 (08/10/19) TW3 = triplicate of MW120 (08/10/19)

DW2 = duplicate of MW201 (27/09/19)

TW2 = triplicate of MW201 (27/09/19)

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	GW1	GW2	GW4	MW101	MW102
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	5/06/2019	5/06/2019
2-Chloronaphthalene	_	-	-		< 5	< 5	< 5	< 5	< 5
2-Chlorophenol	300	490	340		< 3	< 3	< 3	< 3	< 3
2-Methylnaphthalene	-	-	-		< 5	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	-	-	-		< 3	< 3	< 3	< 3	< 3
2-Naphthylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
2-Nitroaniline	-	-	-		< 5	< 5	< 5	< 5	< 5
2-Nitrophenol	-	-	-		< 10	< 10	< 10	< 10	< 10
3&4-Methylphenol (m&p-Cresol)	-	-	-		< 6	< 6	< 6	< 6	< 6
3-Methylcholanthrene	-	-	-		< 5	< 5	< 5	< 5	< 5
4.4'-DDD	-	-	-		< 5	< 5	< 5	< 5	< 5
4.4'-DDE	-	-	-		< 5	< 5	< 5	< 5	< 5
4.4'-DDT	9	0.01	0.0004		< 5	< 5	< 5	< 5	< 5
4-Aminobiphenyl	-	-	-		< 5	< 5	< 5	< 5	< 5
4-Bromophenyl phenyl ether	-	-	-		< 5	< 5	< 5	< 5	< 5
4-Chloro-3-methylphenol	-	-	-		< 10	< 10	< 10	< 10	< 10
4-Chlorophenyl phenyl ether	-	-	-		< 5	< 5	< 5	< 5	< 5
4-Nitrophenol	-	-	-		< 30	< 30	< 30	< 30	< 30
Acetophenone	-	-	-		< 5	< 5	< 5	< 5	< 5
Aldrin	-	-	-		< 5	< 5	< 5	< 5	< 5

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available
- < # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>
- -- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	GW1	GW2	GW4	MW101	MW102
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	5/06/2019	5/06/2019
Aniline	-	250	8		< 5	< 5	< 5	< 5	< 5
Bis(2-chloroethoxy)methane	-	-	-		< 5	< 5	< 5	< 5	< 5
Bis(2-ethylhexyl)phthalate	10	-	-		< 5	< 5	< 5	< 5	< 5
Butyl benzyl phthalate	-	-	-		< 5	< 5	< 5	< 5	< 5
d-BHC	-	-	-		< 5	< 5	< 5	< 5	< 5
Dibenzofuran	-	-	-		< 5	< 5	< 5	< 5	< 5
Dieldrin	-	-	-		< 5	< 5	< 5	< 5	< 5
Diethyl phthalate	-	1,000	-		< 5	< 5	< 5	< 5	< 5
Dimethyl phthalate	-	3,700	-		< 5	< 5	< 5	< 5	< 5
Di-n-butyl phthalate	-	26	-		< 5	< 5	< 5	< 5	< 5
Di-n-octyl phthalate	-	-	-		< 5	< 5	< 5	< 5	< 5
Diphenylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
Endosulfan sulphate	-	-	-		< 5	< 5	< 5	< 5	< 5
Endrin	-	0.02	0.008		< 5	< 5	< 5	< 5	< 5
Endrin aldehyde	-	-	-		< 5	< 5	< 5	< 5	< 5
Endrin ketone	-	-	-		< 5	< 5	< 5	< 5	< 5
g-BHC (Lindane)	10	0.2	0.007		< 5	< 5	< 5	< 5	< 5
Heptachlor	0.3	0.09	0.0004		< 5	< 5	< 5	< 5	< 5
Heptachlor epoxide	-	-	-		< 5	< 5	< 5	< 5	< 5

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available
- < # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>
- -- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	GW1	GW2	GW4	MW101	MW102
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	5/06/2019	5/06/2019
Hexachlorobenzene	-	-	-		< 5	< 5	< 5	< 5	< 5
Hexachlorobutadiene	0.7	-	-		< 5	< 5	< 5	< 5	< 5
Hexachlorocyclopentadiene	-	-	-		< 5	< 5	< 5	< 5	< 5
Hexachloroethane	-	360	290		< 5	< 5	< 5	< 5	< 5
Methoxychlor	300	0.005	0.004		< 5	< 5	< 5	< 5	< 5
Nitrobenzene	-	550	550		< 50	< 50	< 50	< 50	< 50
N-Nitrosodibutylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
N-Nitrosodipropylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
N-Nitrosopiperidine	-	-	-		< 5	< 5	< 5	< 5	< 5
Pentachlorobenzene	-	-	-		< 5	< 5	< 5	< 5	< 5
Pentachloronitrobenzene	30	-	-		< 5	< 5	< 5	< 5	< 5
Pentachlorophenol	10	10	22		< 10	< 10	< 10	< 10	< 10
Phenol	-	320	400		< 3	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available
- < # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>
- -- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	MW103	MW104	MW106	MW107	MW108
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	5/06/2019	5/06/2019
2-Chloronaphthalene	-	-	-		< 5	< 5	< 5	< 5	< 5
2-Chlorophenol	300	490	340		< 3	< 3	< 3	< 3	< 3
2-Methylnaphthalene	-	-	-		< 5	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	-	-	-		< 3	< 3	< 3	< 3	< 3
2-Naphthylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
2-Nitroaniline	-	-	-		< 5	< 5	< 5	< 5	< 5
2-Nitrophenol	-	-	-		< 10	< 10	< 10	< 10	< 10
3&4-Methylphenol (m&p-Cresol)	-	-	-		< 6	< 6	< 6	< 6	< 6
3-Methylcholanthrene	-	-	-		< 5	< 5	< 5	< 5	< 5
4.4'-DDD	-	-	-		< 5	< 5	< 5	< 5	< 5
4.4'-DDE	-	-	-		< 5	< 5	< 5	< 5	< 5
4.4'-DDT	9	0.01	0.0004		< 5	< 5	< 5	< 5	< 5
4-Aminobiphenyl	-	-	-		< 5	< 5	< 5	< 5	< 5
4-Bromophenyl phenyl ether	-	-	-		< 5	< 5	< 5	< 5	< 5
4-Chloro-3-methylphenol	-	-	-		< 10	< 10	< 10	< 10	< 10
4-Chlorophenyl phenyl ether	-	-	-		< 5	< 5	< 5	< 5	< 5
4-Nitrophenol	-	-	-		< 30	< 30	< 30	< 30	< 30
Acetophenone	-	-	-		< 5	< 5	< 5	< 5	< 5
Aldrin	-	-	-		< 5	< 5	< 5	< 5	< 5

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	MW103	MW104	MW106	MW107	MW108
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	5/06/2019	5/06/2019
Aniline	_	250	8		< 5	< 5	< 5	< 5	< 5
Bis(2-chloroethoxy)methane	-	-	-		< 5	< 5	< 5	< 5	< 5
Bis(2-ethylhexyl)phthalate	10	-	-		< 5	< 5	< 5	< 5	< 5
Butyl benzyl phthalate	-	-	-		< 5	< 5	< 5	< 5	< 5
d-BHC	-	-	-		< 5	< 5	< 5	< 5	< 5
Dibenzofuran	-	-	-		< 5	< 5	< 5	< 5	< 5
Dieldrin	-	-	-		< 5	< 5	< 5	< 5	< 5
Diethyl phthalate	-	1,000	-		< 5	< 5	< 5	< 5	< 5
Dimethyl phthalate	-	3,700	-		< 5	< 5	< 5	< 5	< 5
Di-n-butyl phthalate	-	26	-		< 5	< 5	< 5	< 5	< 5
Di-n-octyl phthalate	-	-	-		< 5	< 5	< 5	< 5	< 5
Diphenylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
Endosulfan sulphate	-	-	-		< 5	< 5	< 5	< 5	< 5
Endrin	-	0.02	0.008		< 5	< 5	< 5	< 5	< 5
Endrin aldehyde	-	-	-		< 5	< 5	< 5	< 5	< 5
Endrin ketone	-	-	-		< 5	< 5	< 5	< 5	< 5
g-BHC (Lindane)	10	0.2	0.007		< 5	< 5	< 5	< 5	< 5
Heptachlor	0.3	0.09	0.0004		< 5	< 5	< 5	< 5	< 5
Heptachlor epoxide	-	-	-		< 5	< 5	< 5	< 5	< 5

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	MW103	MW104	MW106	MW107	MW108
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	5/06/2019	5/06/2019
Hexachlorobenzene	-	-	-		< 5	< 5	< 5	< 5	< 5
Hexachlorobutadiene	0.7	-	-		< 5	< 5	< 5	< 5	< 5
Hexachlorocyclopentadiene	-	-	-		< 5	< 5	< 5	< 5	< 5
Hexachloroethane	-	360	290		< 5	< 5	< 5	< 5	< 5
Methoxychlor	300	0.005	0.004		< 5	< 5	< 5	< 5	< 5
Nitrobenzene	-	550	550		< 50	< 50	< 50	< 50	< 50
N-Nitrosodibutylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
N-Nitrosodipropylamine	-	-	-		< 5	< 5	< 5	< 5	< 5
N-Nitrosopiperidine	-	-	-		< 5	< 5	< 5	< 5	< 5
Pentachlorobenzene	-	-	-		< 5	< 5	< 5	< 5	< 5
Pentachloronitrobenzene	30	-	-		< 5	< 5	< 5	< 5	< 5
Pentachlorophenol	10	10	22		< 10	< 10	< 10	< 10	< 10
Phenol	-	320	400		< 3	< 3	< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available
- < # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>
- -- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3					
	Drinking	ANZECC	ANZECC					
	Water	Freshwater	Marine Water	Sample ID	MW109	MW110	MW111	
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	
2-Chloronaphthalene	-	-	-		< 5	< 5	< 5	
2-Chlorophenol	300	490	340		< 3	< 3	< 3	
2-Methylnaphthalene	-	-	-		< 5	< 5	< 5	
2-Methylphenol (o-Cresol)	-	-	-		< 3	< 3	< 3	
2-Naphthylamine	-	-	-		< 5	< 5	< 5	
2-Nitroaniline	-	-	-		< 5	< 5	< 5	
2-Nitrophenol	-	-	-		< 10	< 10	< 10	
3&4-Methylphenol (m&p-Cresol)	-	-	-		< 6	< 6	< 6	
3-Methylcholanthrene	-	-	-		< 5	< 5	< 5	
1.4'-DDD	-	-	-		< 5	< 5	< 5	
1.4'-DDE	-	-	-		< 5	< 5	< 5	
4.4'-DDT	9	0.01	0.0004		< 5	< 5	< 5	
1-Aminobiphenyl	-	-	-		< 5	< 5	< 5	
1-Bromophenyl phenyl ether	-	-	-		< 5	< 5	< 5	
1-Chloro-3-methylphenol	-	-	-		< 10	< 10	< 10	
1-Chlorophenyl phenyl ether	-	-	-		< 5	< 5	< 5	
1-Nitrophenol	-	-	-		< 30	< 30	< 30	
Acetophenone	-	-	-		< 5	< 5	< 5	
Aldrin	-	-	-		< 5	< 5	< 5	

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available
- < # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>
- -- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3					
	Drinking	ANZECC	ANZECC					
	Water	Freshwater	Marine Water	Sample ID	MW109	MW110	MW111	
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019	
Aniline	-	250	8		< 5	< 5	< 5	
Bis(2-chloroethoxy)methane	-	-	-		< 5	< 5	< 5	
Bis(2-ethylhexyl)phthalate	10	-	-		< 5	< 5	< 5	
Butyl benzyl phthalate	-	-	-		< 5	< 5	< 5	
d-BHC	-	-	-		< 5	< 5	< 5	
Dibenzofuran	-	-	-		< 5	< 5	< 5	
Dieldrin	-	-	-		< 5	< 5	< 5	
Diethyl phthalate	-	1,000	-		< 5	< 5	< 5	
Dimethyl phthalate	-	3,700	-		< 5	< 5	< 5	
Di-n-butyl phthalate	-	26	-		< 5	< 5	< 5	
Di-n-octyl phthalate	-	-	-		< 5	< 5	< 5	
Diphenylamine	-	-	-		< 5	< 5	< 5	
Endosulfan sulphate	-	-	-		< 5	< 5	< 5	
Endrin	-	0.02	0.008		< 5	< 5	< 5	
Endrin aldehyde	-	-	-		< 5	< 5	< 5	
Endrin ketone	-	-	-		< 5	< 5	< 5	
g-BHC (Lindane)	10	0.2	0.007		< 5	< 5	< 5	
Heptachlor	0.3	0.09	0.0004		< 5	< 5	< 5	
Heptachlor epoxide	-	-	-		< 5	< 5	< 5	

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available
- < # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>
- -- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3				
	Drinking	ANZECC	ANZECC				
	Water	Freshwater	Marine Water	Sample ID	MW109	MW110	MW111
	Guidelines	95%	95%	Date	5/06/2019	5/06/2019	5/06/2019
Hexachlorobenzene	-	-	-		< 5	< 5	< 5
Hexachlorobutadiene	0.7	-	-		< 5	< 5	< 5
Hexachlorocyclopentadiene	-	-	-		< 5	< 5	< 5
Hexachloroethane	-	360	290		< 5	< 5	< 5
Methoxychlor	300	0.005	0.004		< 5	< 5	< 5
Nitrobenzene	-	550	550		< 50	< 50	< 50
N-Nitrosodibutylamine	-	-	-		< 5	< 5	< 5
N-Nitrosodipropylamine	-	-	-		< 5	< 5	< 5
N-Nitrosopiperidine	-	-	-		< 5	< 5	< 5
Pentachlorobenzene	-	-	-		< 5	< 5	< 5
Pentachloronitrobenzene	30	-	-		< 5	< 5	< 5
Pentachlorophenol	10	10	22		< 10	< 10	< 10
Phenol	-	320	400		< 3	< 3	< 3

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values.

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available
- < # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>
- -- = sample not analysed



Table 11: Summary of Groundwater Analytical Data - Polyaromatic Hydrocarbons

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	GW1	GW2	GW4	MW101	MW102
	2 to <4 m	Guidelines	95%	95%	Date	6/06/2019	6/06/2019	5/06/2019	5/06/2019	5/06/2019
Acenaphthene	_	_	_	_		< 1	< 1	< 1	< 1	< 1
Acenaphthylene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Anthracene	-	-	0.4	0.1		< 1	< 1	< 1	< 1	< 1
Benz(a)anthracene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzo(a)pyrene	-	0.01	-	-		< 1	< 1	< 1	< 1	< 1
Benzo(b&j)fluoranthene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzo(g.h.i)perylene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzo(k)fluoranthene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Chrysene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Dibenz(a.h)anthracene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Fluoranthene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Fluorene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Indeno(1.2.3-cd)pyrene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Naphthalene (PAH method)	NL	-	16	70		< 1	< 1	< 1	< 1	< 1
Phenanthrene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Pyrene	-	-	-	-		< 1	< 1	< 1	< 1	< 1
Benzo(a)pyrene TEQ	-	-	-	-						
Total PAH	-	-	-	-		< 1	< 1	< 1	< 1	< 1

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m. Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Table 11 : Summary of Groundwater Analytical Data - Polyaromatic Hydrocarbons

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	MW102	MW103	MW103	MW104	DW1
	2 to <4 m	Guidelines	95%	95%	Date	18/06/2019	5/06/2019	18/06/2019	5/06/2019	5/06/2019
Acenaphthene	-	-	-	_			< 1		< 1	< 1
Acenaphthylene	-	-	-	-			< 1		< 1	< 1
Anthracene	-	-	0.4	0.1			< 1		< 1	< 1
Benz(a)anthracene	-	-	-	-			< 1		< 1	< 1
Benzo(a)pyrene	-	0.01	-	-			< 1		< 1	< 1
Benzo(b&j)fluoranthene	-	-	-	-			< 1		< 1	< 1
Benzo(g.h.i)perylene	-	-	-	-			< 1		< 1	< 1
Benzo(k)fluoranthene	-	-	-	-			< 1		< 1	< 1
Chrysene	-	-	-	-			< 1		< 1	< 1
Dibenz(a.h)anthracene	-	-	-	-			< 1		< 1	< 1
Fluoranthene	-	-	-	-			< 1		< 1	< 1
Fluorene	-	-	-	-			< 1		< 1	< 1
Indeno(1.2.3-cd)pyrene	-	-	-	-			< 1		< 1	< 1
Naphthalene (PAH method)	NL	-	16	70			< 1		< 1	< 1
Phenanthrene	-	-	-	-			< 1		< 1	< 1
Pyrene	-	-	-	-			< 1		< 1	< 1
Benzo(a)pyrene TEQ	-	-	-	-						
Total PAH	-	-	-	-			< 1		< 1	< 1

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m. Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Table 11 : Summary of Groundwater Analytical Data - Polyaromatic Hydrocarbons

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	RPD_DW1	TW1	RPD_TW1	MW106	MW107
	2 to <4 m	Guidelines	95%	95%	Date	-	5/06/2019	-	5/06/2019	5/06/2019
Acenaphthene	-	-	_	_		пс	< 1	nc	< 1	< 1
Acenaphthylene	-	-	-	-		пс	< 1	nc	< 1	< 1
Anthracene	-	-	0.4	0.1		пс	< 1	nc	< 1	< 1
Benz(a)anthracene	-	-	-	-		пс	< 1	nc	< 1	< 1
Benzo(a)pyrene	-	0.01	-	-		пс	< 1	nc	< 1	< 1
Benzo(b&j)fluoranthene	-	-	-	-		nc	< 1	nc	< 1	< 1
Benzo(g.h.i)perylene	-	-	-	-		nc	< 1	nc	< 1	< 1
Benzo(k)fluoranthene	-	-	-	-		nc	< 1	nc	< 1	< 1
Chrysene	-	-	-	-		nc	< 1	nc	< 1	< 1
Dibenz(a.h)anthracene	-	-	-	-		nc	< 1	nc	< 1	< 1
Fluoranthene	-	-	-	-		nc	< 1	nc	< 1	< 1
Fluorene	-	-	-	-		nc	< 1	nc	< 1	< 1
Indeno(1.2.3-cd)pyrene	-	-	-	-		nc	< 1	nc	< 1	< 1
Naphthalene (PAH method)	NL	-	16	70		nc	< 1	nc	< 1	< 1
Phenanthrene	-	-	-	-		nc	< 1	nc	< 1	< 1
Pyrene	-	-	-	-		nc	< 1	nc	< 1	< 1
Benzo(a)pyrene TEQ	-	-	-	-						
Total PAH	-	-	-	-		nc	< 1	nc	< 1	< 1

Notes:

 $\label{eq:criteria} \textit{1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m.}$

Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Table 11: Summary of Groundwater Analytical Data - Polyaromatic Hydrocarbons

Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3	Criteria 4						
	HSLs - D	Drinking	ANZECC	ANZECC						
	Sand	Water	Freshwater	Marine Water	Sample ID	MW108	MW109	MW110	MW111	R1
	2 to <4 m	Guidelines	95%	95%	Date	5/06/2019	6/06/2019	5/06/2019	5/06/2019	5/06/2019
Acenaphthene	_	-	_	_		< 1	< 1	< 1	< 1	
Acenaphthylene	-	_	-	_		< 1	< 1	< 1	< 1	
Anthracene	-	-	0.4	0.1		< 1	< 1	< 1	< 1	
Benz(a)anthracene	-	-	-	-		< 1	< 1	< 1	< 1	
Benzo(a)pyrene	-	0.01	-	-		< 1	< 1	< 1	< 1	
Benzo(b&j)fluoranthene	-	-	-	-		< 1	< 1	< 1	< 1	
Benzo(g.h.i)perylene	-	-	-	-		< 1	< 1	< 1	< 1	
Benzo(k)fluoranthene	-	-	-	-		< 1	< 1	< 1	< 1	
Chrysene	-	-	-	-		< 1	< 1	< 1	< 1	
Dibenz(a.h)anthracene	-	-	-	-		< 1	< 1	< 1	< 1	
Fluoranthene	-	-	-	-		< 1	< 1	< 1	< 1	
Fluorene	-	-	-	-		< 1	< 1	< 1	< 1	
Indeno(1.2.3-cd)pyrene	-	-	-	-		< 1	< 1	< 1	< 1	
Naphthalene (PAH method)	NL	-	16	70		< 1	< 1	< 1	< 1	
Phenanthrene	-	-	-	-		< 1	< 1	< 1	< 1	
Pyrene	-	-	-	-		< 1	< 1	< 1	< 1	
Benzo(a)pyrene TEQ	-	-	-	-						
Total PAH	-	-	-	-		< 1	< 1	< 1	< 1	

Notes:

Criteria 1 = NEPC (1999) Amended, 'D' Comm./ind. Groundwater Health Screening Levels for vapour intrusion, sand 2 to <4m. Criteria 2 = Australian Drinking Water Guidelines, 2011.

Criteria 3 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 4 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

NL = not limiting

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	GW1	GW2	GW4	MW101	MW102
	Guidelines	95%	95%	Date	6/06/2019	6/06/2019	5/06/2019	5/06/2019	5/06/2019
Arsenic	10	13¹	-		< 1	2	1	1	6
Cadmium	2	0.2	5.5		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium	50²	1 ²	4.4 ²		< 1	< 1	1	< 1	< 1
Copper	2,000	1.4	1.3		5	4	3	2	1
Lead	10	3.4	4.4		< 1	< 1	< 1	< 1	< 1
Mercury	1	0.6	0.4		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	20	11	70		1	< 1	2	2	16
Zinc	-	8	15		10	31	< 5	9	11

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

¹Guideline for arsenic (V) used conservatively.

²Guideline for chromium (VI) used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	MW102	MW103	MW103	MW104	DW1
	Guidelines	95%	95%	Date	18/06/2019	5/06/2019	18/06/2019	5/06/2019	5/06/2019
Arsenic	10	13¹	-			4		< 1	< 1
Cadmium	2	0.2	5.5			< 0.2		< 0.2	< 0.2
Chromium	50²	1 ²	4.4 ²			2		< 1	< 1
Copper	2,000	1.4	1.3			< 1		< 1	1
Lead	10	3.4	4.4			< 1		< 1	< 1
Mercury	1	0.6	0.4			< 0.1		< 0.1	< 0.1
Nickel	20	11	70			1		15	15
Zinc	-	8	15			6		47	46

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

¹Guideline for arsenic (V) used conservatively.

²Guideline for chromium (VI) used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	RPD_DW1	TW1	RPD_TW1	MW106	MW107
	Guidelines	95%	95%	Date	-	5/06/2019	-	5/06/2019	5/06/2019
Arsenic	10	13¹	-		nc	< 1	пс	6	2
Cadmium	2	0.2	5.5		nc	< 0.2	nc	< 0.2	< 0.2
Chromium	50²	1 ²	4.4 ²		nc	< 1	nc	1	4
Copper	2,000	1.4	1.3		nc	< 1	nc	< 1	4
Lead	10	3.4	4.4		nc	< 1	nc	< 1	< 1
Mercury	1	0.6	0.4		nc	< 0.1	nc	< 0.1	< 0.1
Nickel	20	11	70		0%	13	14%	7	1
Zinc	-	8	15		2%	40	16%	9	< 5

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

¹Guideline for arsenic (V) used conservatively.

²Guideline for chromium (VI) used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2	Criteria 3						
	Drinking	ANZECC	ANZECC						
	Water	Freshwater	Marine Water	Sample ID	MW108	MW109	MW110	MW111	R1
	Guidelines	95%	95%	Date	5/06/2019	6/06/2019	5/06/2019	5/06/2019	5/06/2019
Arsenic	10	13¹	-		7	4	< 1	2	
Cadmium	2	0.2	5.5		< 0.2	< 0.2	< 0.2	< 0.2	
Chromium	50²	1 ²	4.4 ²		< 1	4	< 1	< 1	
Copper	2,000	1.4	1.3		4	11	2	1	
Lead	10	3.4	4.4		< 1	5	< 1	< 1	
Mercury	1	0.6	0.4		< 0.1	< 0.1	< 0.1	< 0.1	
Nickel	20	11	70		10	5	13	3	
Zinc	-	8	15		9	20	34	7	

Notes:

Criteria 1 = Australian Drinking Water Guidelines, 2011.

Criteria 2 = ANZECC 2000 Guidelines for Freshwater - 95% Species Protection Trigger Values

Criteria 3 = ANZECC 2000 Guidelines for Marine Water - 95% Species Protection Trigger Values

Total concentrations in µg/L

- = assessment criteria not available

¹Guideline for arsenic (V) used conservatively.

²Guideline for chromium (VI) used conservatively.

DW1 = duplicate of MW104

TW1 = triplicate of MW104

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	Drinking	Recreational	Sample ID	MW115	MW116	GW1	MW106	MW110
	Water	Water	Date	27/08/2019	26/08/2019	12/11/2019	12/11/2019	12/11/2019
Perfluoropropanesulfonic acid-PFPrS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorobutanesulfonic acid-PFBS	-	-		< 0.01	< 0.01	0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid-PFPeS	-	-		< 0.01	< 0.01	0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid-PFHxS	-	-		< 0.01	< 0.01	0.09	< 0.01	< 0.01
Perfluoroheptanesulfonic acid-PFHpS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid-PFOS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid-PFNS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid-PFDS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorobutanoic acid-PFBA	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid-PFPeA	-	-		< 0.01	< 0.01	< 0.01	0.02	< 0.01
Perfluorohexanoic acid-PFHxA	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid-PFHpA	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid-PFOA	0.56	5.6		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid-PFNA	-	-		< 0.01	< 0.01	< 0.01	0.01	< 0.01
Perfluorodecanoic acid-PFDA	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid-PFUnDA	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid-PFDoDA	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid-PFTrDA	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Notes:

Criteria 1 = PFAS NEMP (HEPA 2018) Drinking Water Guidelines, Australian Government Department of Health 2017. Criteria 2 = PFAS NEMP (HEPA 2018) Recreational Water Guidelines, Australian Government Department of Health 2017.

Total concentrations in µg/L

- = assessment criteria not available

DW1 = duplicate of MW114

TW1 = triplicate of MW114

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

MeFOSA = N-methyl-perfluorooctanesulfonamide

EtFOSA = N-ethyl-perfluorooctanesulfonamide

MeFOSE = N-Methyl perfluorooctane sulfonamidoethanol

EtFOSE = N-Ethyl perfluorooctane sulfonamidoethanol

MeFOSAA = N-methyl-perfluorooctanesulfonamidoacetic acid

EtFOSAA = N-ethyl-perfluorooctanesulfonamidoacetic acid

4:2 FTS = 1H.1H.2H.2H-perfluorohexanesulfonic acid

6:2 FTS = 1H.1H.2H.2H-perfluorooctanesulfonic acid

8:2 FTS = 1H.1H.2H.2H-perfluorodecanesulfonic acid



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	Drinking	Recreational	Sample ID	MW115	MW116	GW1	MW106	MW110
	Water	Water	Date	27/08/2019	26/08/2019	12/11/2019	12/11/2019	12/11/2019
	774101	TT CLOT	Date	2770072010	20/00/2010	12/11/2010	12/11/2010	12,11,2010
Perfluorotetradecanoic acid-PFTeDA	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonamide-FOSA	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
MeFOSA	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EtFOSA	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
MeFOSE	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EtFOSE	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
MeFOSAA	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
EtFOSAA	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4:2 FTS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
6:2 FTS	-	-		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
8:2 FTS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
10:2 FTS	-	-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PFOA + PFOS	-	-		ND	ND	ND	ND	ND
PFHxS + PFOS	0.07	0.7		< 0.01	< 0.01	0.09	< 0.01	< 0.01
Total PFAS	-	-		< 0.1	< 0.1	0.11	< 0.1	< 0.1

Notes:

Criteria 1 = PFAS NEMP (HEPA 2018) Drinking Water Guidelines, Australian Government Department of Health 2017. Criteria 2 = PFAS NEMP (HEPA 2018) Recreational Water Guidelines, Australian Government Department of Health 2017. Total concentrations in µg/L

- = assessment criteria not available

DW1 = duplicate of MW114

TW1 = triplicate of MW114

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

MeFOSA = N-methyl-perfluorooctanesulfonamide EtFOSA = N-ethyl-perfluorooctanesulfonamide MeFOSE = N-Methyl perfluorooctane sulfonamidoethanol

EtFOSE = N-Ethyl perfluorooctane sulfonamidoethanol MeFOSAA = N-methyl-perfluorooctanesulfonamidoacetic acid

EtFOSAA = N-ethyl-perfluorooctanesulfonamidoacetic acid 4:2 FTS = 1H.1H.2H.2H-perfluorohexanesulfonic acid

4:2 FTS = 1H.1H.2H.2H-perfluoronexanesulfonic acid 6:2 FTS = 1H.1H.2H.2H-perfluorooctanesulfonic acid

8:2 FTS = 1H.1H.2H.2H-perfluorodecanesulfonic acid



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	Drinking	Recreational	Sample ID	MW114	DW1	RPD_DW1	TW1	RPD_TW1
	Water	Water	Date	12/11/2019	12/11/2019		12/11/2019	-
Perfluoropropanesulfonic acid-PFPrS	-	-		< 0.01	< 0.01	nc		
Perfluorobutanesulfonic acid-PFBS	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluoropentanesulfonic acid-PFPeS	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorohexanesulfonic acid-PFHxS	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluoroheptanesulfonic acid-PFHpS	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorooctanesulfonic acid-PFOS	-	-		< 0.01	< 0.01	nc	< 0.01	пс
Perfluorononanesulfonic acid-PFNS	-	-		< 0.01	< 0.01	nc		
Perfluorodecanesulfonic acid-PFDS	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorobutanoic acid-PFBA	-	-		< 0.05	< 0.05	nc	< 0.1	пс
Perfluoropentanoic acid-PFPeA	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorohexanoic acid-PFHxA	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluoroheptanoic acid-PFHpA	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorooctanoic acid-PFOA	0.56	5.6		< 0.01	< 0.01	nc	< 0.01	nc
Perfluorononanoic acid-PFNA	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorodecanoic acid-PFDA	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluoroundecanoic acid-PFUnDA	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorododecanoic acid-PFDoDA	-	-		< 0.01	< 0.01	nc	< 0.02	nc
Perfluorotridecanoic acid-PFTrDA	-	-		< 0.01	< 0.01	nc	< 0.02	nc

Notes:

Criteria 1 = PFAS NEMP (HEPA 2018) Drinking Water Guidelines, Australian Government Department of Health 2017. Criteria 2 = PFAS NEMP (HEPA 2018) Recreational Water Guidelines, Australian Government Department of Health 2017.

Total concentrations in $\mu g/L$

- = assessment criteria not available

DW1 = duplicate of MW114

TW1 = triplicate of MW114

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

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< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

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Bold/red indicates exceedance of assessment criteria

MeFOSA = N-methyl-perfluorooctanesulfonamide

EtFOSA = N-ethyl-perfluorooctanesulfonamide

MeFOSE = N-Methyl perfluorooctane sulfonamidoethanol

EtFOSE = N-Ethyl perfluorooctane sulfonamidoethanol

MeFOSAA = N-methyl-perfluorooctanesulfonamidoacetic acid

EtFOSAA = N-ethyl-perfluorooctanesulfonamidoacetic acid

4:2 FTS = 1H.1H.2H.2H-perfluorohexanesulfonic acid

6:2 FTS = 1H.1H.2H.2H-perfluorooctanesulfonic acid

8:2 FTS = 1H.1H.2H.2H-perfluorodecanesulfonic acid



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2						
	Drinking	Recreational	Sample ID	MW114	DW1	RPD_DW1	TW1	RPD_TW1
	Water	Water	Date	12/11/2019	12/11/2019	-	12/11/2019	-
Perfluorotetradecanoic acid-PFTeDA	-	-		< 0.01	< 0.01	nc	< 0.05	nc
Perfluorooctanesulfonamide-FOSA	-	-		< 0.05	< 0.05	пс	< 0.02	nc
MeFOSA	-	-		< 0.05	< 0.05	nc	< 0.05	nc
EtFOSA	-	-		< 0.05	< 0.05	nc	< 0.05	nc
MeFOSE	-	-		< 0.05	< 0.05	nc	< 0.05	nc
EtFOSE	-	-		< 0.05	< 0.05	nc	< 0.05	nc
MeFOSAA	-	-		< 0.05	< 0.05	nc	< 0.02	nc
EtFOSAA	-	-		< 0.05	< 0.05	nc	< 0.02	nc
4:2 FTS	-	-		< 0.01	< 0.01	nc	< 0.05	nc
6:2 FTS	-	-		< 0.05	< 0.05	nc	< 0.05	nc
8:2 FTS	-	-		< 0.01	< 0.01	nc	< 0.05	nc
10:2 FTS	-	-		< 0.01	< 0.01	nc	< 0.05	nc
PFOA + PFOS	-	-		ND	ND	nc	ND	nc
PFHxS + PFOS	0.07	0.7		< 0.01	< 0.01	nc	ND	nc
Total PFAS	-	-		< 0.1	< 0.1	nc	< 0.01	nc

Notes:

Criteria 1 = PFAS NEMP (HEPA 2018) Drinking Water Guidelines, Australian Government Department of Health 2017. Criteria 2 = PFAS NEMP (HEPA 2018) Recreational Water Guidelines, Australian Government Department of Health 2017. Total concentrations in µg/L

- = assessment criteria not available

DW1 = duplicate of MW114

TW1 = triplicate of MW114

R1 = triplicate of MVV

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

MeFOSA = N-methyl-perfluorooctanesulfonamide

EtFOSA = N-ethyl-perfluorooctanesulfonamide

MeFOSE = N-Methyl perfluorooctane sulfonamidoethanol

EtFOSE = N-Ethyl perfluorooctane sulfonamidoethanol

MeFOSAA = N-methyl-perfluorooctanesulfonamidoacetic acid

EtFOSAA = N-ethyl-perfluorooctanesulfonamidoacetic acid

4:2 FTS = 1H.1H.2H.2H-perfluorohexanesulfonic acid

6:2 FTS = 1H.1H.2H.2H-perfluorooctanesulfonic acid

8:2 FTS = 1H.1H.2H.2H-perfluorodecanesulfonic acid



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street

Auburn NSW

	Criteria 1	Criteria 2			
	Drinking	Recreational	Sample ID	R1	
	Water	Water	Date	12/11/2019	
Perfluoropropanesulfonic acid-PFPrS	-	-		< 0.01	
Perfluorobutanesulfonic acid-PFBS	-	-		< 0.01	
Perfluoropentanesulfonic acid-PFPeS	-	-		< 0.01	
Perfluorohexanesulfonic acid-PFHxS	-	-		< 0.01	
Perfluoroheptanesulfonic acid-PFHpS	-	-		< 0.01	
Perfluorooctanesulfonic acid-PFOS	-	-		< 0.01	
Perfluorononanesulfonic acid-PFNS	-	-		< 0.01	
Perfluorodecanesulfonic acid-PFDS	-	-		< 0.01	
Perfluorobutanoic acid-PFBA	-	-		< 0.05	
Perfluoropentanoic acid-PFPeA	-	-		< 0.01	
Perfluorohexanoic acid-PFHxA	-	-		< 0.01	
Perfluoroheptanoic acid-PFHpA	-	-		< 0.01	
Perfluorooctanoic acid-PFOA	0.56	5.6		< 0.01	
Perfluorononanoic acid-PFNA	-	-		< 0.01	
Perfluorodecanoic acid-PFDA	-	-		< 0.01	
Perfluoroundecanoic acid-PFUnDA	-	-		< 0.01	
Perfluorododecanoic acid-PFDoDA	-	-		< 0.01	
Perfluorotridecanoic acid-PFTrDA	-	-		< 0.01	

Notes:

Criteria 1 = PFAS NEMP (HEPA 2018) Drinking Water Guidelines, Australian Government Department of Health 2017. Criteria 2 = PFAS NEMP (HEPA 2018) Recreational Water Guidelines, Australian Government Department of Health 2017.

Total concentrations in ug/L

- = assessment criteria not available

DW1 = duplicate of MW114

TW1 = triplicate of MW114

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

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MeFOSA = N-methyl-perfluorooctanesulfonamide EtFOSA = N-ethyl-perfluorooctanesulfonamide

MeFOSE = N-Methyl perfluorooctane sulfonamidoethanol

EtFOSE = N-Ethyl perfluorooctane sulfonamidoethanol MeFOSAA = N-methyl-perfluorooctanesulfonamidoacetic acid

EtFOSAA = N-ethyl-perfluorooctanesulfonamidoacetic acid

4:2 FTS = 1H.1H.2H.2H-perfluorohexanesulfonic acid

6:2 FTS = 1H.1H.2H.2H-perfluorooctanesulfonic acid

8:2 FTS = 1H.1H.2H.2H-perfluorodecanesulfonic acid



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	Criteria 2			
	Drinking	Recreational	Sample ID	R1	
	Water	Water	Date	12/11/2019	
Perfluorotetradecanoic acid-PFTeDA	-	-		< 0.01	
Perfluorooctanesulfonamide-FOSA	-	-		< 0.05	
MeFOSA	-	-		< 0.05	
EtFOSA	-	-		< 0.05	
MeFOSE	-	-		< 0.05	
EtFOSE	-	-		< 0.05	
MeFOSAA	-	-		< 0.05	
EtFOSAA	-	-		< 0.05	
4:2 FTS	-	-		< 0.01	
6:2 FTS	-	-		< 0.05	
8:2 FTS	-	-		< 0.01	
10:2 FTS	-	-		< 0.01	
PFOA + PFOS	-	-		ND	
PFHxS + PFOS	0.07	0.7		< 0.01	
Total PFAS	-	-		< 0.1	

Notes:

Criteria 1 = PFAS NEMP (HEPA 2018) Drinking Water Guidelines, Australian Government Department of Health 2017. Criteria 2 = PFAS NEMP (HEPA 2018) Recreational Water Guidelines, Australian Government Department of Health 2017.

Total concentrations in µg/L

- = assessment criteria not available

DW1 = duplicate of MW114

TW1 = triplicate of MW114

R1 = rinsate sample

RPD = relative percent difference of duplicate/triplicate

nc = RPD not calculated, one or both samples below laboratory reporting limit

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

MeFOSA = N-methyl-perfluorooctanesulfonamide EtFOSA = N-ethyl-perfluorooctanesulfonamide

MeFOSE = N-Methyl perfluorooctane sulfonamidoethanol

EtFOSE = N-Ethyl perfluorooctane sulfonamidoethanol
MeFOSAA = N-methyl-perfluorooctanesulfonamidoacetic acid

EtFOSAA = N-ethyl-perfluorooctanesulfonamidoacetic acid

4:2 FTS = 1H.1H.2H.2H-perfluorohexanesulfonic acid

6:2 FTS = 1H.1H.2H.2H-perfluorooctanesulfonic acid

8:2 FTS = 1H.1H.2H.2H-perfluorodecanesulfonic acid



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1						
		Sample ID	R1	R1-	R3	R4	R6
		Date	5/06/2019	20/08/2019	22/08/2019	26/08/2019	28/08/2019
1.1-Dichloroethane	-		< 1	< 1	< 1	< 1	< 1
1.1-Dichloroethene	-		< 1	< 1	< 1	< 1	< 1
1.1.1-Trichloroethane	-		< 1	< 1	< 1	< 1	< 1
1.1.1.2-Tetrachloroethane	-		< 1	< 1	< 1	< 1	< 1
1.1.2-Trichloroethane	-		< 1	< 1	< 1	< 1	< 1
1.1.2.2-Tetrachloroethane	-		< 1	< 1	< 1	< 1	< 1
1.2-Dibromoethane	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichlorobenzene	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloroethane	-		< 1	< 1	< 1	< 1	< 1
1.2-Dichloropropane	-		< 1	< 1	< 1	< 1	< 1
1.2.3-Trichloropropane	-		< 1	< 1	< 1	< 1	< 1
1.2.4-Trimethylbenzene	=		< 1	< 1	< 1	< 1	< 1
1.3-Dichlorobenzene	-		< 1	< 1	< 1	< 1	< 1
1.3-Dichloropropane	-		< 1	< 1	< 1	< 1	< 1
1.3.5-Trimethylbenzene	-		< 1	< 1	< 1	< 1	< 1
1.4-Dichlorobenzene	-		< 1	< 1	< 1	< 1	< 1
2-Butanone (MEK)	-		< 1	< 1	< 1	< 1	< 1
2-Propanone (Acetone)	-		< 1	< 3	2.7	< 1	< 1
4-Chlorotoluene	-		< 1	< 1	< 1	< 1	< 1

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

R6 = rinsate sample

R7 = rinsate sample R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1						
		Sample ID	R1	R1-	R3	R4	R6
		Date	5/06/2019	20/08/2019	22/08/2019	26/08/2019	28/08/2019
		Date	3/33/23/17	20/00/2017	22/00/2017	20/00/2017	20/00/2017
4-Methyl-2-pentanone (MIBK)	-		< 1	< 1	< 1	< 1	< 1
Allyl chloride	-		< 1	< 1	< 1	< 1	< 1
Benzene	-		< 1	< 1	< 1	< 1	< 1
Bromobenzene	-		< 1	< 1	< 1	< 1	< 1
Bromochloromethane	-		< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	-		< 1	< 1	< 1	< 1	11
Bromoform	-		< 1	< 1	< 1	< 1	< 1
Bromomethane	-		< 1	< 1	< 1	< 1	< 1
Carbon disulfide	-		< 1	< 1	< 1	< 1	< 1
Carbon Tetrachloride	-		< 1	< 1	< 1	< 1	< 1
Chlorobenzene	-		< 1	< 1	< 1	< 1	< 1
Chloroethane	-		< 1	< 1	< 1	< 1	< 1
Chloroform	-		< 5	< 5	< 5	< 5	19
Chloromethane	-		< 1	< 1	< 1	< 1	< 1
cis-1.2-Dichloroethene	-		< 1	< 1	< 1	< 1	< 1
cis-1.3-Dichloropropene	-		< 1	< 1	< 1	< 1	< 1
Dibromochloromethane	-		< 1	< 1	< 1	< 1	< 1
Dibromomethane	-		< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	-		< 1	< 1	< 1	< 1	< 1

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

R6 = rinsate sample

R7 = rinsate sample

R8 = rinsate sample

TRIP BLANK = blank sample

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Bold/red indicates exceedance of assessment criteria



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1						
		Sample ID	R1	R1-	R3	R4	R6
		Date	5/06/2019	20/08/2019	22/08/2019	26/08/2019	28/08/2019
Ethylbenzene	-		< 1	< 1	< 1	< 1	< 1
Iodomethane	-		< 1	< 1	< 1	< 1	< 1
Isopropyl benzene (Cumene)	-		< 1	< 1	< 1	< 1	< 1
m&p-Xylenes	-		< 2	< 2	< 2	< 2	< 2
Methylene Chloride	-		< 1	< 1	< 1	< 1	< 1
o-Xylene	-		< 1	< 1	< 1	< 1	< 1
Styrene	-		< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	-		< 1	< 1	< 1	< 1	< 1
Toluene	-		< 1	< 1	< 1	< 1	< 1
trans-1.2-Dichloroethene	-		< 1	< 1	< 1	< 1	< 1
trans-1.3-Dichloropropene	-		< 1	< 1	< 1	< 1	< 1
Trichloroethene	-		< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	-		< 1	< 1	< 1	< 1	< 1
Vinyl chloride	-		< 1	< 1	< 1	< 1	< 1
Xylenes - Total	-		< 3	< 3	< 3	< 3	< 3

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

Ter misate sample

R6 = rinsate sample

R7 = rinsate sample

R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

Criteria 1		R7 27/09/2019		TRIP BLANK 20/08/2019	TRIP BLANK 26/08/2019	TRIP SPIKE 20/08/2019
	Sample ID Date		R8 8/10/2019			
-						
-						
-						
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
-		< 1	< 1			
		Sample ID Date	Sample ID R7 Date 27/09/2019 -	Sample ID R7 R8 Date 27/09/2019 8/10/2019 - < 1	Sample ID R7 R8 TRIP BLANK	Sample ID R7 R8 TRIP BLANK TRIP BLANK Date 27/09/2019 8/10/2019 20/08/2019 26/08/2019 2

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

R6 = rinsate sample

R7 = rinsate sample

R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1		R7 27/09/2019	R8 8/10/2019	TRIP BLANK 20/08/2019	TRIP BLANK 26/08/2019	TRIP SPIKE 20/08/2019
		Sample ID Date					
4-Methyl-2-pentanone (MIBK)			< 1	< 1			
Allyl chloride	-		< 1	< 1			
Benzene	-		< 1	< 1	< 1	< 1	100
Bromobenzene	-		< 1	< 1			
Bromochloromethane	-		< 1	< 1			
Bromodichloromethane	-		< 1	< 1			
Bromoform	-		< 1	< 1			
Bromomethane	-		< 1	< 1			
Carbon disulfide	-		< 1	< 1			
Carbon Tetrachloride	-		< 1	< 1			
Chlorobenzene	-		< 1	< 1			
Chloroethane	-		< 1	< 1			
Chloroform	-		9	< 5			
Chloromethane	-		< 1	< 1			
cis-1.2-Dichloroethene	-		< 1	< 1			
cis-1.3-Dichloropropene	-		< 1	< 1			
Dibromochloromethane	-		< 1	< 1			
Dibromomethane	-		< 1	< 1			
Dichlorodifluoromethane	-		< 1	< 1			

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

R6 = rinsate sample

R7 = rinsate sample R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1						
		Sample ID	R7	R8	TRIP BLANK	TRIP BLANK	TRIP SPIKE
		Date	27/09/2019	8/10/2019	20/08/2019	26/08/2019	20/08/2019
Ethylbenzene	_		< 1	< 1	< 1	< 1	100
Iodomethane	-		< 1	< 1			
Isopropyl benzene (Cumene)	-		< 1	< 1			
m&p-Xylenes	-		< 2	< 2	< 2	< 2	95
Methylene Chloride	-		< 1	< 1			
o-Xylene	-		< 1	< 1	< 1	< 1	100
Styrene	-		< 1	< 1			
Tetrachloroethene	-		< 1	< 1			
Toluene	-		< 1	< 1	< 1	< 1	100
trans-1.2-Dichloroethene	-		< 1	< 1			
trans-1.3-Dichloropropene	-		< 1	< 1			
Trichloroethene	-		< 1	< 1			
Trichlorofluoromethane	-		< 1	< 1			
Vinyl chloride	-		< 1	< 1			
Xylenes - Total	-		< 3	< 3	< 3	< 3	97

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

Ter misate sample

R6 = rinsate sample

R7 = rinsate sample

R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

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Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1		
		Sample ID	TRIP SPIKE
		Date	26/08/2019
1.1-Dichloroethane	-		
1.1-Dichloroethene	-		
1.1.1-Trichloroethane	-		
1.1.1.2-Tetrachloroethane	-		
1.1.2-Trichloroethane	-		
1.1.2.2-Tetrachloroethane	-		
1.2-Dibromoethane	-		
1.2-Dichlorobenzene	-		=
1.2-Dichloroethane	-		
1.2-Dichloropropane	-		=
1.2.3-Trichloropropane	-		
1.2.4-Trimethylbenzene	-		
1.3-Dichlorobenzene	-		
1.3-Dichloropropane	-		
1.3.5-Trimethylbenzene	-		
1.4-Dichlorobenzene	-		=
2-Butanone (MEK)	-		
2-Propanone (Acetone)	-		
4-Chlorotoluene	-		

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

Ter misate sample

R6 = rinsate sample

R7 = rinsate sample R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	
		Sample ID TRIP SPIKE
		Date 26/08/2019
4-Methyl-2-pentanone (MIBK)	-	
Allyl chloride	-	
Benzene	-	86
Bromobenzene	-	
Bromochloromethane	-	
Bromodichloromethane	-	
Bromoform	-	
Bromomethane	-	
Carbon disulfide	-	
Carbon Tetrachloride	-	
Chlorobenzene	-	
Chloroethane	-	
Chloroform	-	
Chloromethane	-	
cis-1.2-Dichloroethene	-	
cis-1.3-Dichloropropene	-	
Dibromochloromethane	-	
Dibromomethane	-	
Dichlorodifluoromethane	-	

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

R6 = rinsate sample

R7 = rinsate sample

R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria



Detailed Site Investigation Project No.: 1901048

11-13 Percy Street Auburn NSW

	Criteria 1	
		Sample ID TRIP SPIKE
		Date 26/08/2019
Ethylbenzene	-	91
lodomethane	-	
Isopropyl benzene (Cumene)	-	
m&p-Xylenes	-	89
Methylene Chloride	-	
o-Xylene	-	100
Styrene	-	
Tetrachloroethene	-	
Toluene	-	91
trans-1.2-Dichloroethene	-	
trans-1.3-Dichloropropene	-	
Trichloroethene	-	
Trichlorofluoromethane	-	
Vinyl chloride	-	
Xylenes - Total	-	93

Notes:

Total concentrations in µg/L

- = assessment criteria not available

R1 = rinsate sample

R1- = rinsate sample

R3 = rinsate sample

R4 = rinsate sample

R6 = rinsate sample

R7 = rinsate sample R8 = rinsate sample

TRIP BLANK = blank sample

TRIP SPIKE = spike sample

< # or ND = analyte(s) not detected in excess of laboratory reporting limit</pre>

-- = sample not analysed

Bold/red indicates exceedance of assessment criteria

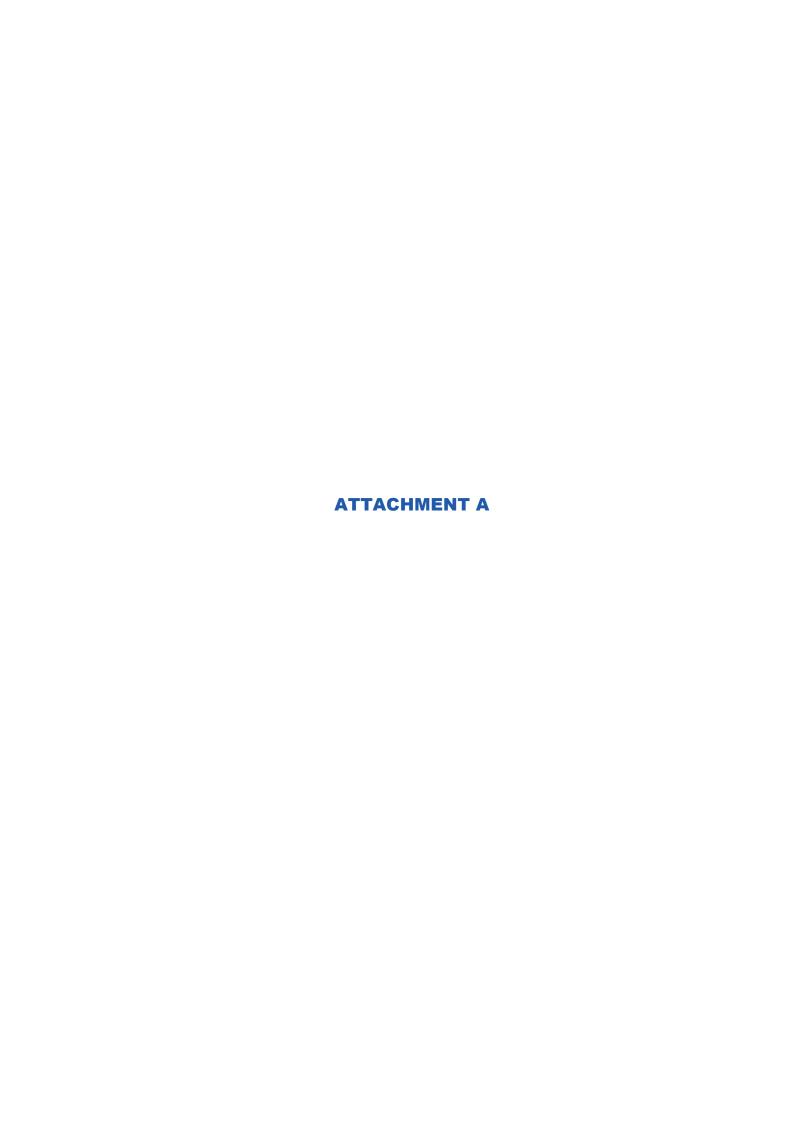




Plate 1 – North gate driveway (looking southeast).



Plate 2 – South gate driveway (looking southeast).



Plate 3 – Centre driveway (looking southwest).

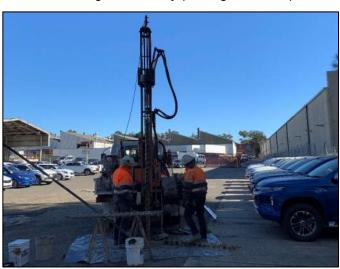


Plate 4 – Lot 2 car park concrete and bitumen hard standing (east corner looking northwest).



Plate 5 – South corner showing undercroft parking and Haslams Creek (looking northeast).



Plate 6 – Former lime dosing unit (south corner).



Plate 7 – Undercroft parking area.



Plate 9 – AST and dispenser pump in the centre of the site.



Plate 11 – Location of decommissioned UST (centre southwest boundary of site).



Plate 8 – General rubbish and building waste in undercroft parking area.



Plate 10 – Location of decommissioned UST (centre of site).



Plate 12 – Former dangerous goods storage (centre of site).

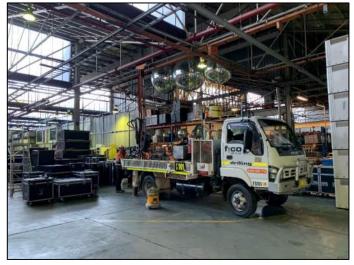


Plate 13 – Drilling of MW110 inside Lot 1 building.



Plate 15 – Entry into Lot 2 building (looking southwest).



Plate 17 – Haslams creek following heavy rainfall (looking northeast).

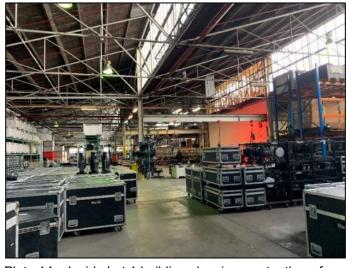


Plate 14 – Inside Lot 1 building showing sawtooth roof, concrete floors and storage of lighting equipment.



Plate 16 - Concrete coring inside Lot 2 building.



Plate 18 – Polyurethane drums in south of site (caged enclosure).



Plate 19 – Hydropunch sampling set up.



Plate 21 – Drilling of MW117 on 15 Percy Street.



Plate 23 – Installation of casing for air hammer drilling at MW205 on 15 Percy Street.



Plate 20 – Asbestos fragments on northeast boundary of 11-13 Percy Street (North gate).



Plate 22 – Installation of MW121 on 15 Percy Street.



Plate 24 – Finished monitoring well.

ATTACHMENT B

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State Overview

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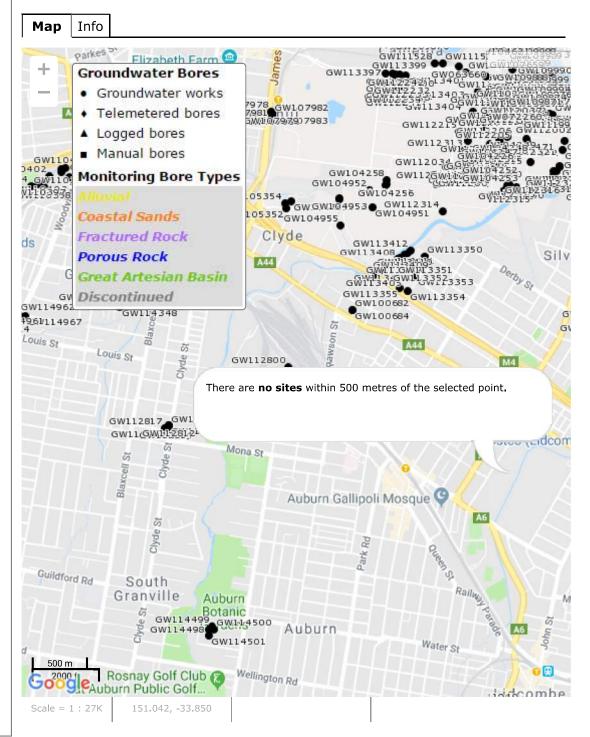
Hunter Integrated Telemetry System

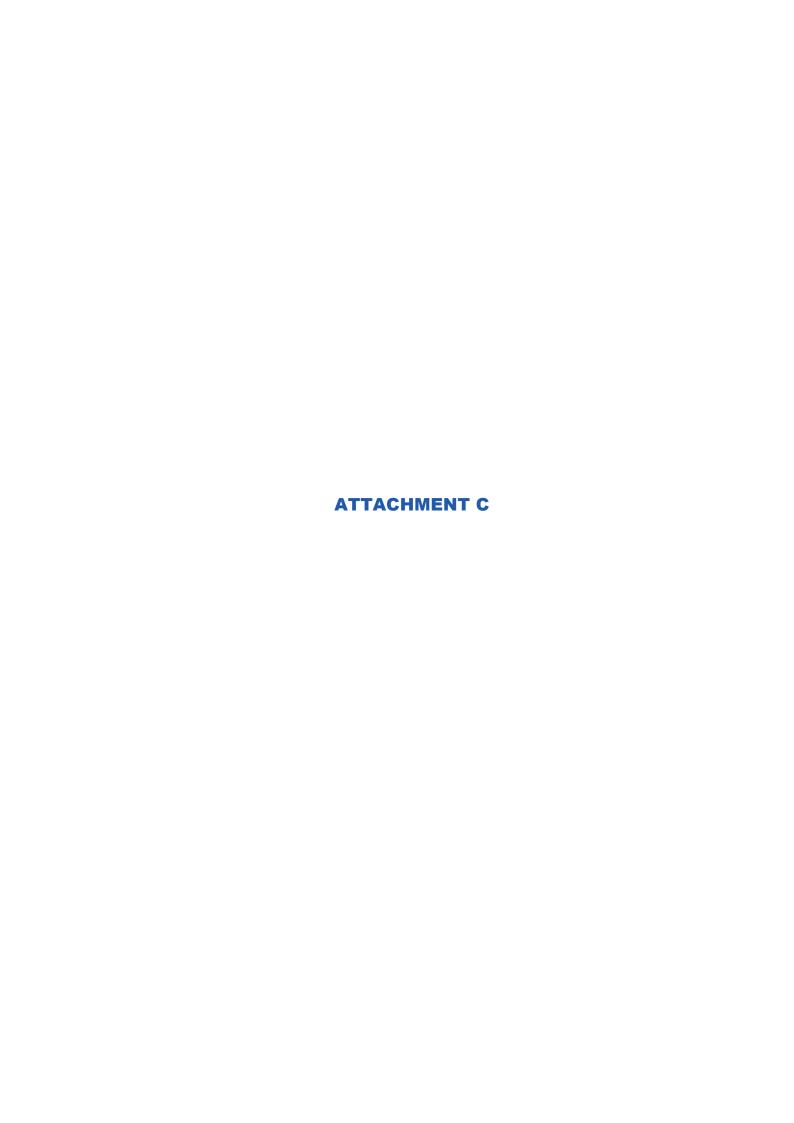
All Groundwater Site Details

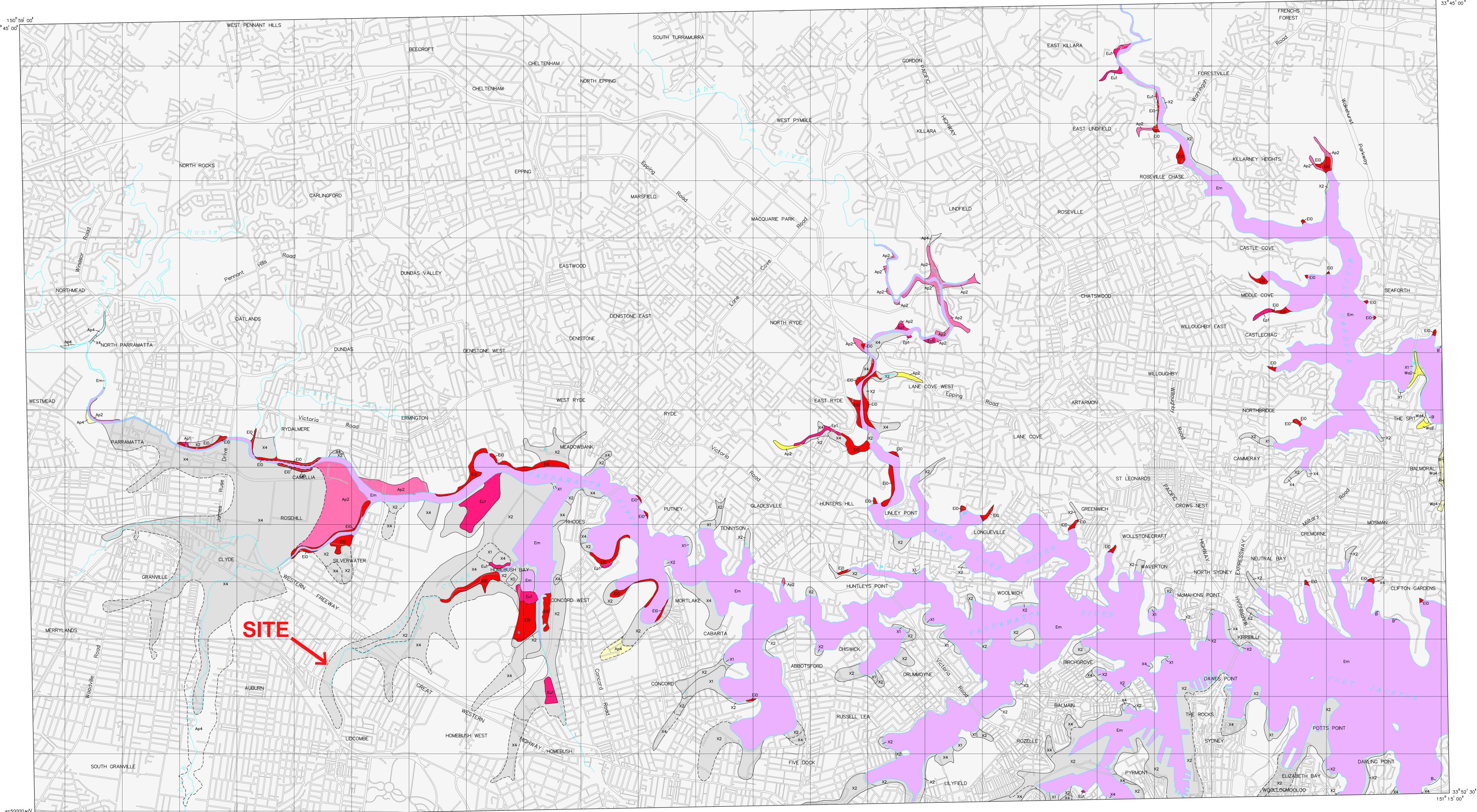
All Groundwater Map

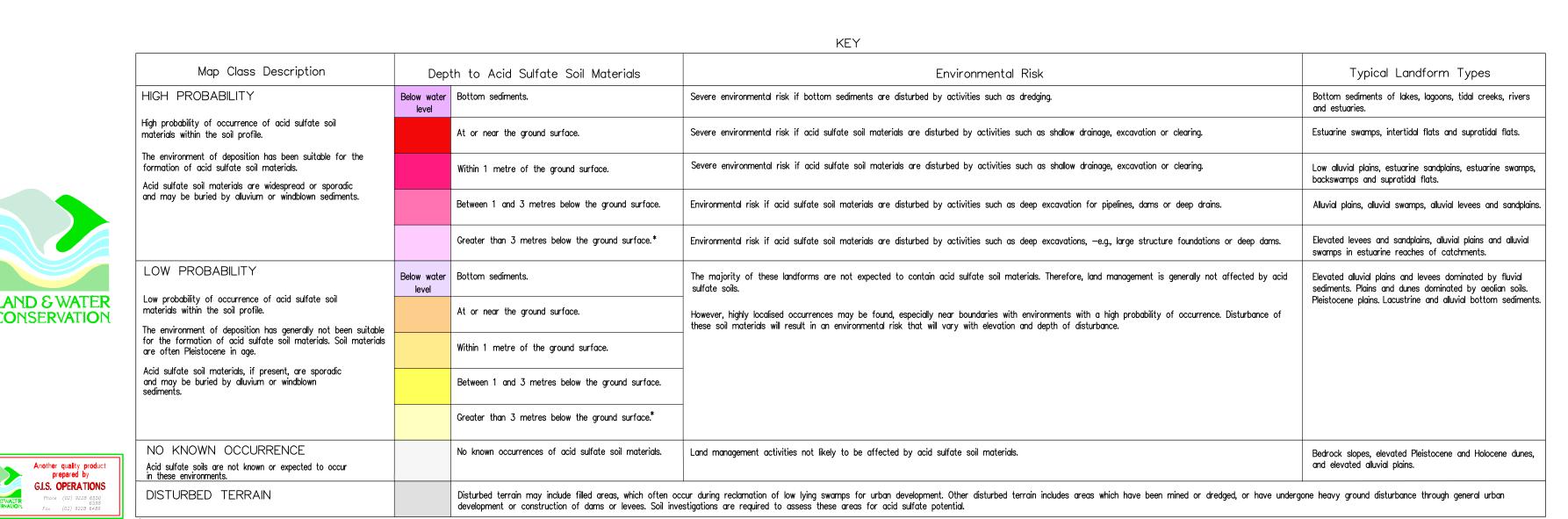
All data times are Eastern Standard Time

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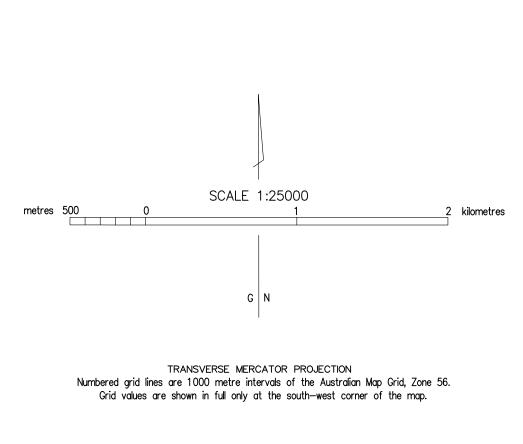






150[°]59[']00["] *314000мЕ*

*Deep occurrences of acid sulfate soil materials not able to be confirmed by field inspection and sampling.



Cadastral information based on the Digital Cadastral Data Base courtesy of

the Surveyor Generals Department of N.S.W. Waterbody boundaries are dynamic and show slight differences between cadastral and topographic information.

THE STATE OF NEW SOUTH WAL	ES, THE DEPT. OF LAND AND WATER CONSERV	ATION ITS EMPLOYEES OFFICERS ACENTS	OR SERVANTS	DEPARTMENT OF LAND AND WATER CONSERVATION
ARE NOT RESPONSIBLE FOR THE FOR ANY ERRORS, OMISSIONS OR OFFICERS, AGENTS OR SERVANTS ANYTHING AND OF THE CONSEQU	RESULT OF ANY ACTIONS TAKEN ON THE BAS INACCURACIES CONTAINED ON THIS MAP. THE S EXPRESSLY DISCLAIM ALL AND ANY LIABILITY ENCES, OF ANYTHING DONE OR OMITTED TO BE E INFORMATION CONTAINED ON THE MAP.	IS OF THE INFORMATION CONTAINED ON TH STATE OF NEW SOUTH WALES AND ITS EM AND RESPONSIBILITY TO ANY PERSON IN F	IS MAP OR IPLOYEES, IESPECT OF	THIS MAP IS PART OF A SERIES OF ACID SULFATE SOIL RISK MAPS ALONG TH BEEN UNDERTAKEN BY A TEAM OF EXPERENCED AND QUALIFIED SOIL SURVEYO GEOMORPHIC PROCESSES AND ENVIRONMENTS. ASSESSMENT METHODS INCLUDE, I IMAGERY, EXTENSIVE FIELD WORK AND LABORATORY SOIL TESTING.
THIS MAP IS ONLY RELIABLE AT	THE PUBLISHED SCALE OF 1:25000			
	LANDFORM C	ODES		
Landform Process Class	Landforn	n Element	Elevation#	
W Aeolian	bBackplain	tLevee Toe	00-1 m	
A Alluvial	kBackswamp	oOx—bow	11–2 m	
B Beach	mBottom Sediments	pPlain	2 2–4 m	
E Estuarine	nChannel	aSandplain	4>4 m	LEGEND
L Lacustrine	dDune	sSwamp		LANDFORM BOUNDARY
S Swamp	rInterbarrier Swamp	ySplay	Additional	APPROXIMATE LANDFORM BOUNDARY
	iIntertidal Flat	uSupratidal Flat	Descriptive Codes	SOIL PROFILE DESCRIPTION SITE
	gLagoon	wSwale	(p)Pleistocene	RIVER or CREEK

*Elevation levels given on the map refer to the elevation of the ground surface at the time of mapping. Depending on the nature of the disturbance, these elevation levels may or may not represent the original ground surface elevation.

(s)..... Acidic Scald

#Approximate AHD

THIS MAP IS TO BE USED AS A GENERAL GUIDE FOR REGIONAL AND LOCAL SCALE LAND USE PLANNING AND LAND MANAGEMENT ONLY AND NOT FOR THE ASSESSMENT OF SPECIFIC SITES WHICH CAN ONLY BE ASSESSED BY A SITE SPECIFIC SOIL INVESTIGATION. THIS MAP HAS BEEN PREPARED ON THE BASIS OF CURRENT INDICATORS WHICH MAY VARY AS THE PROCESS OF DETECTING THE OCCURRENCE OF ACID SULFATE SOILS IS FURTHER DEVELOPED, ACID SULFATE SOILS IS FURTHER DEVELOPED, ACID SULFATE SOILS MAY OCCUR IN AREAS SPECIFICALLY IDENTIFIED ON THE MAP AS NO KNOWN OCCURRENCE.

		EDITION TW
		CROWN © DECEMBER 199
MAP PREPARED BY C.L. MURPHY REVIEWED BY C.L. MURPHY		
MAP COMPILED BY G.I.S. OPERATIONS FROM DIGITISED FIELD INFORMATION AND DATA H DEPARTMENT OF LAND AND WATER CONSERVATION'S GEOGRAPHIC INFORMATION SYSTE THIS MAP SHOULD BE USED IN CONJUNCTION WITH THE GUIDELINES FOR THE USE OF DEPARTMENT OF LAND AND WATER CONSERVATION	EM.	. MAPS S.D. NAYLOR et.al. (1995)
THIS MAP IS PART OF A SERIES OF ACID SULFATE SOIL RISK MAPS ALONG THE ENTII BEEN UNDERTAKEN BY A TEAM OF EXPERIENCED AND QUALIFIED SOIL SURVEYORS. TH GEOMORPHIC PROCESSES AND ENVIRONMENTS. ASSESSMENT METHODS INCLUDE, INTERP IMAGERY, EXTENSIVE FIELD WORK AND LABORATORY SOIL TESTING.	HE MAPPING IS BASED ON	I THE ASSESSMENT OF
	KEY TO	O ADJOINING MAPS IN THIS SERIES
		HORNSBY/
LEGEND		MONA VALE 91 30S1
RM BOUNDARY		DD00DE0T /
(IMATE LANDFORM BOUNDARY		PROSPECT/ PARRAMATTA RIVER SYDNEY HEADS 91 30N2

91 30N3

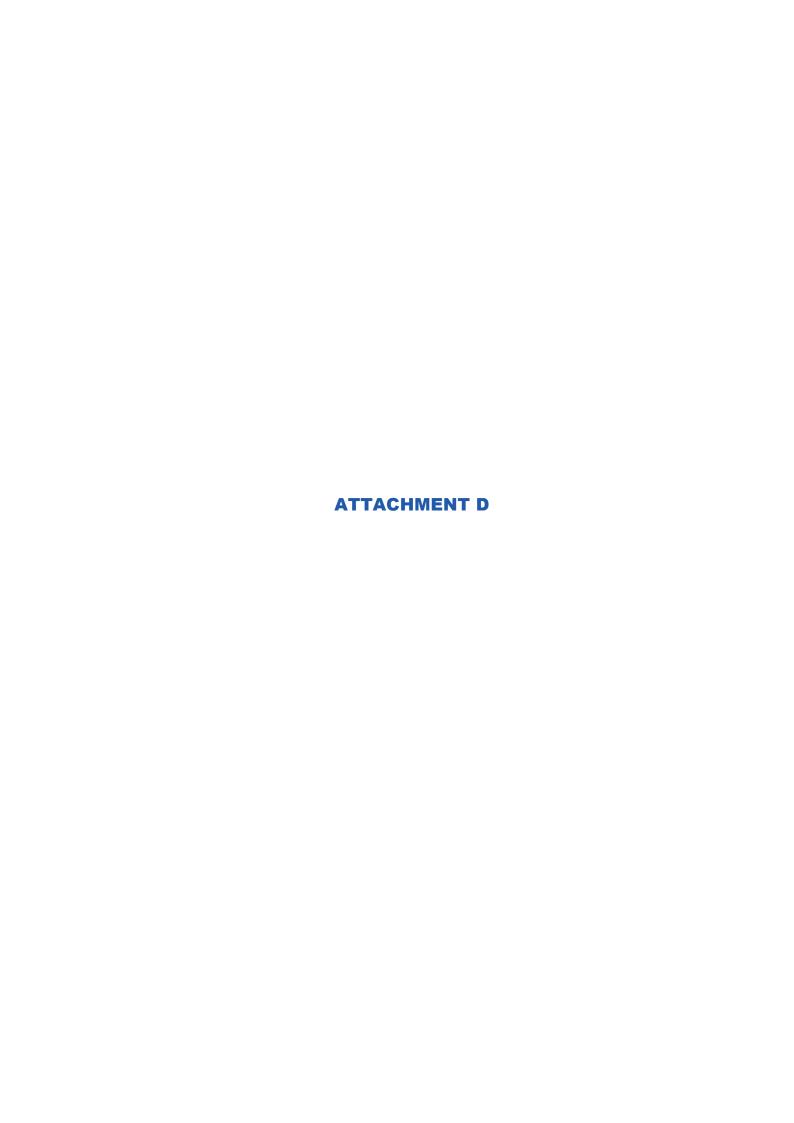
BOTANY BAY

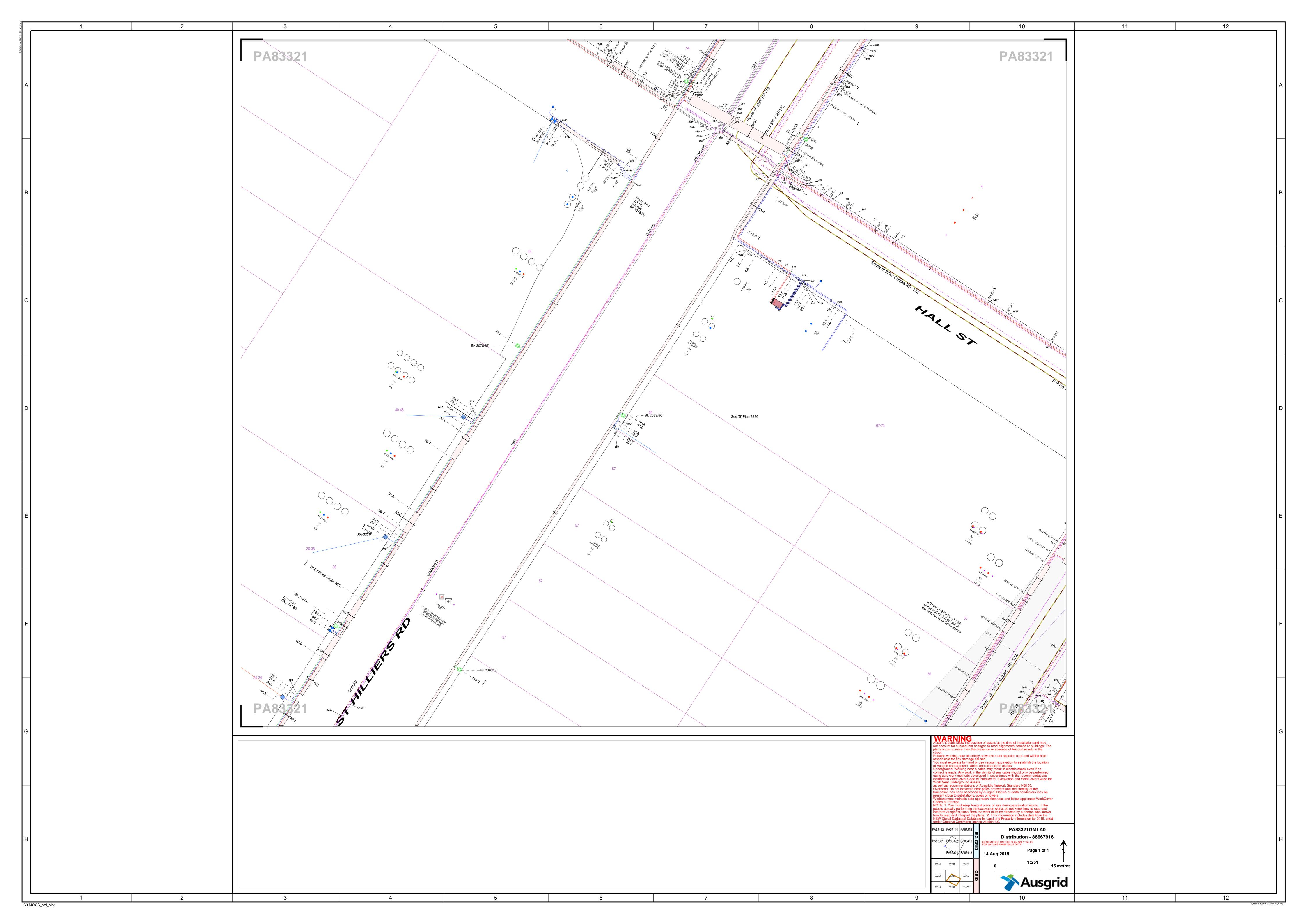
91 30S3

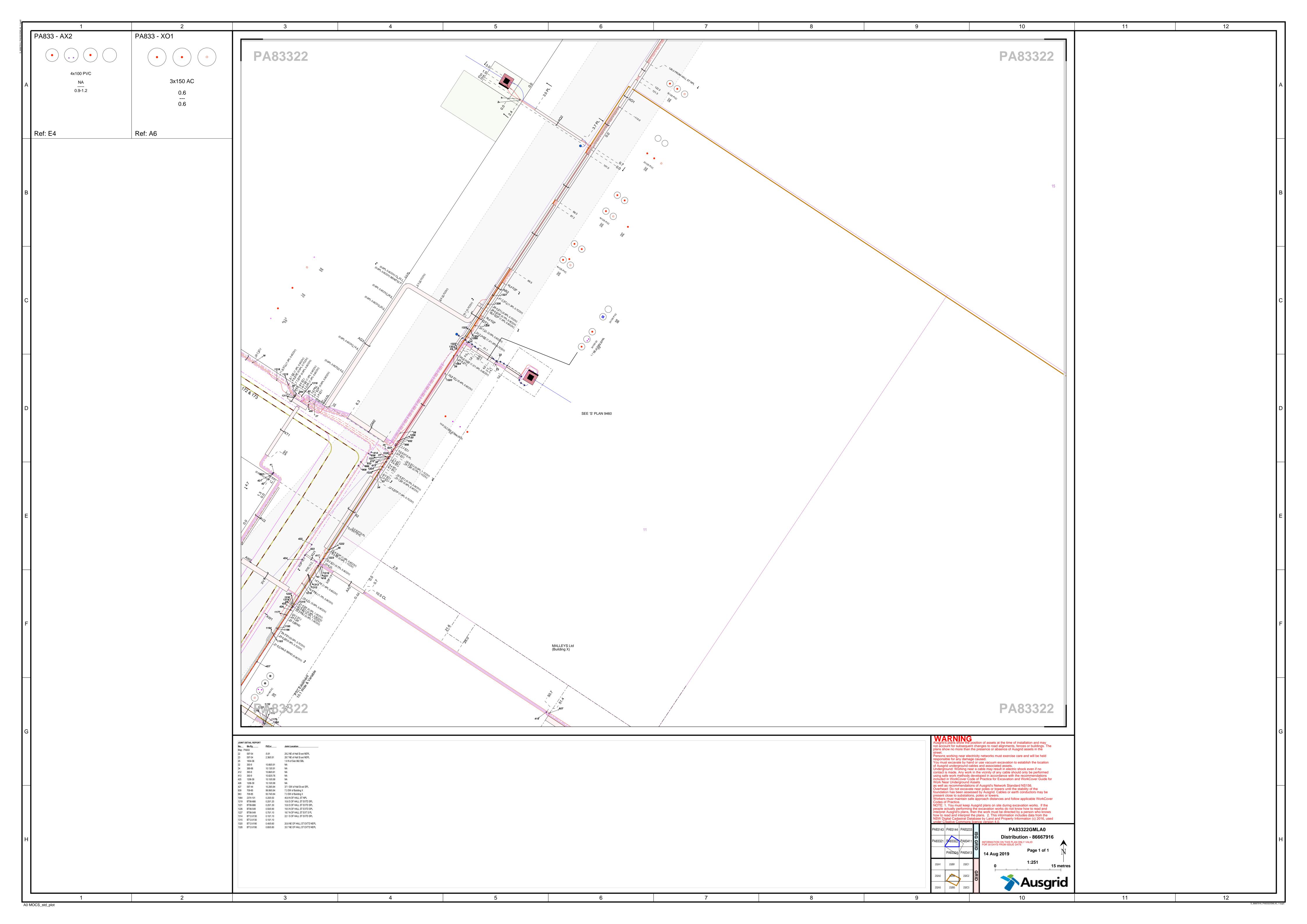
LIVERPOOL

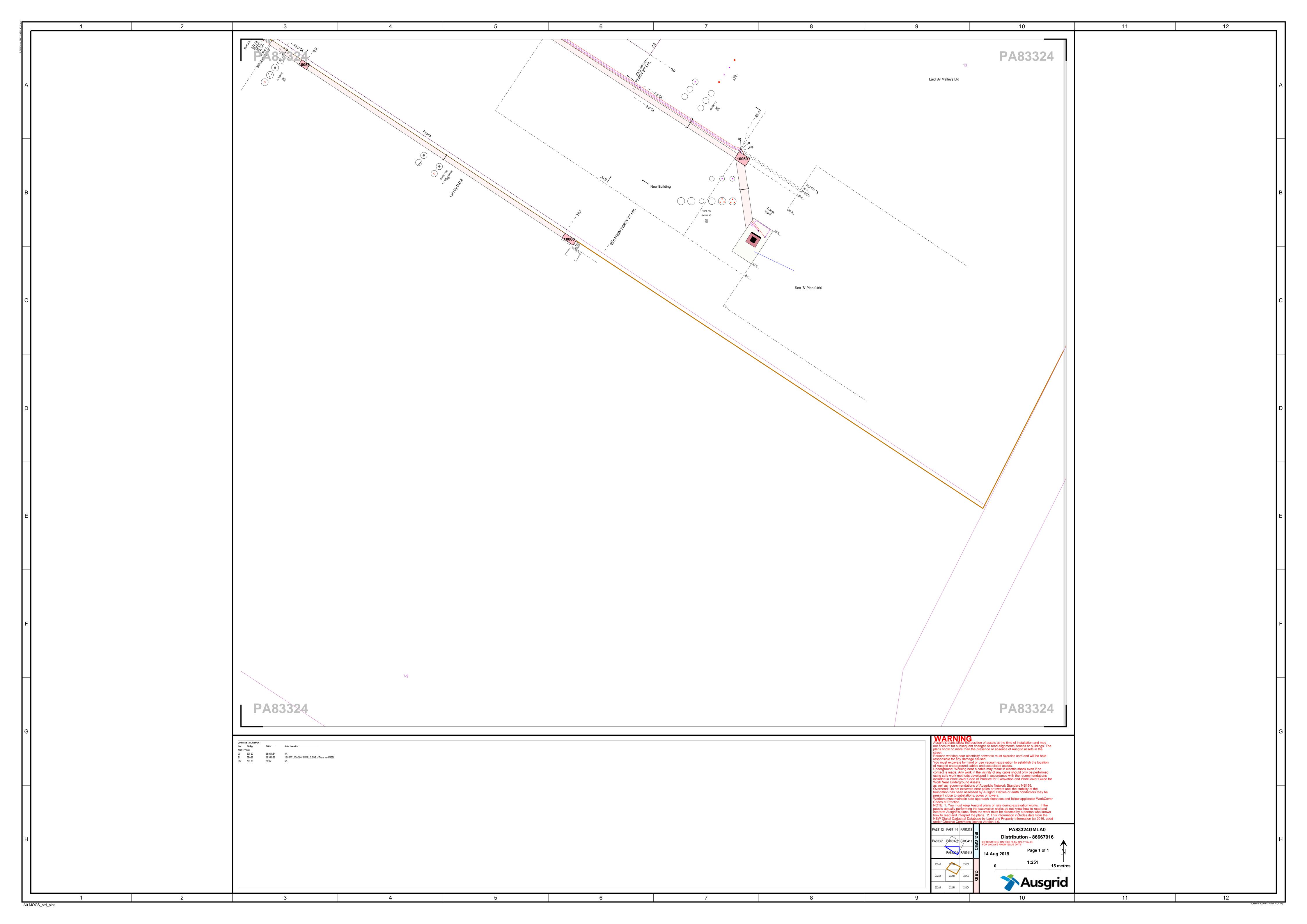
9030S2

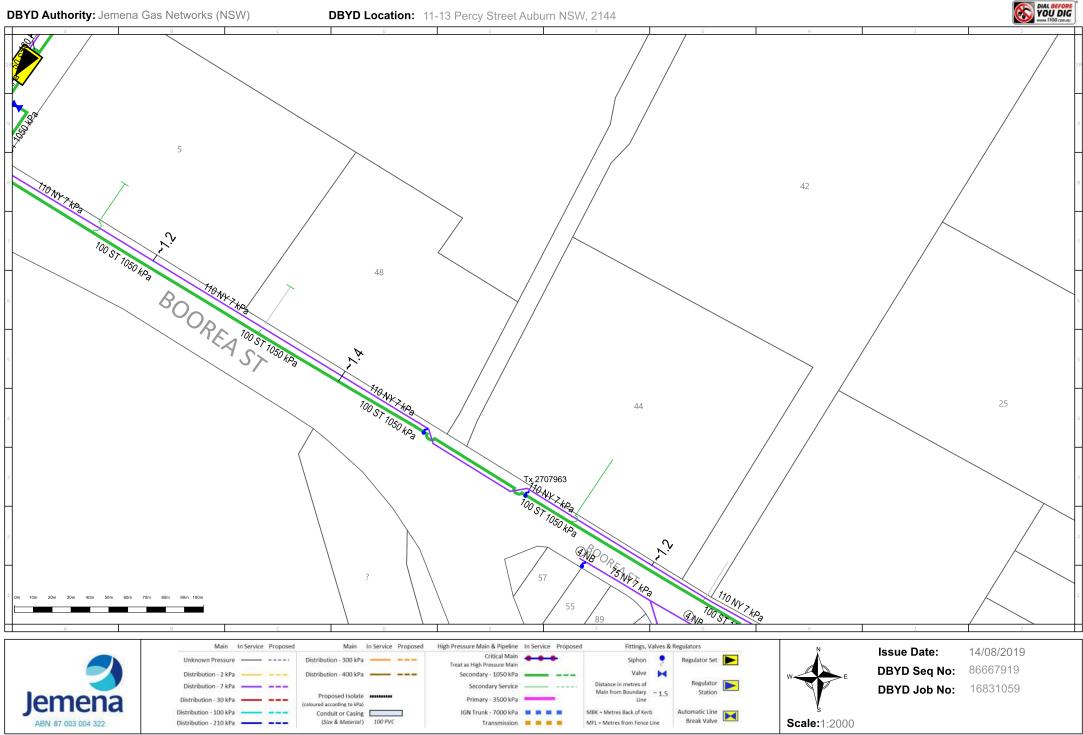
BONDI 91 30S2



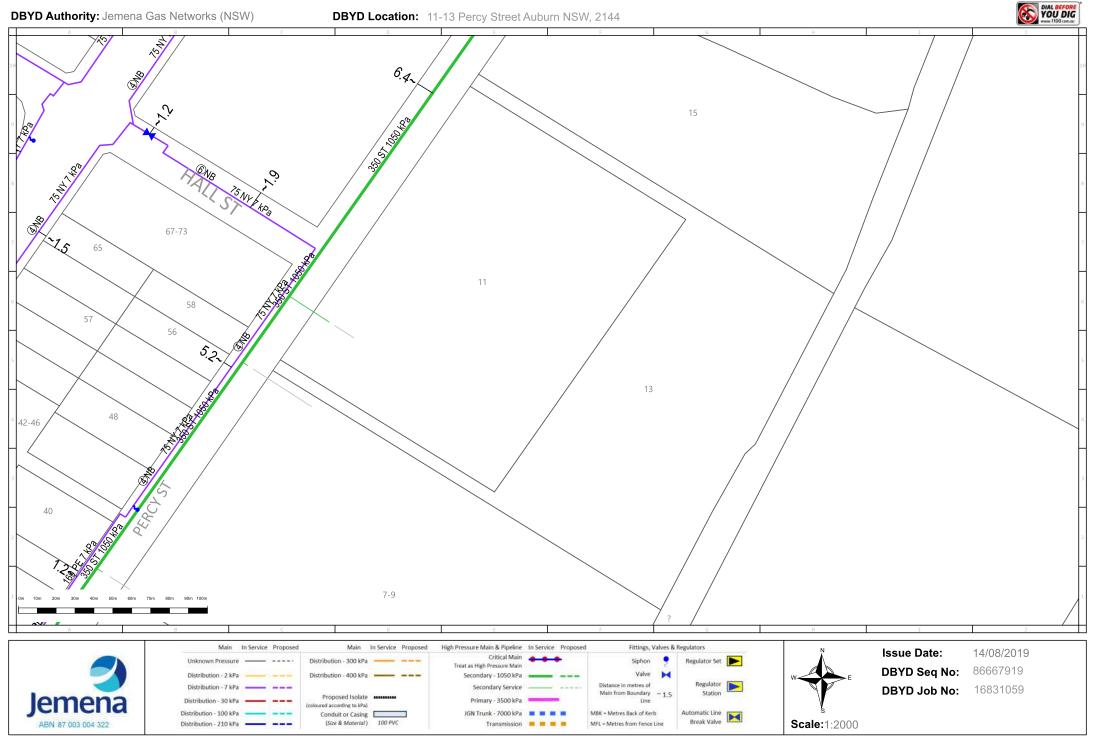




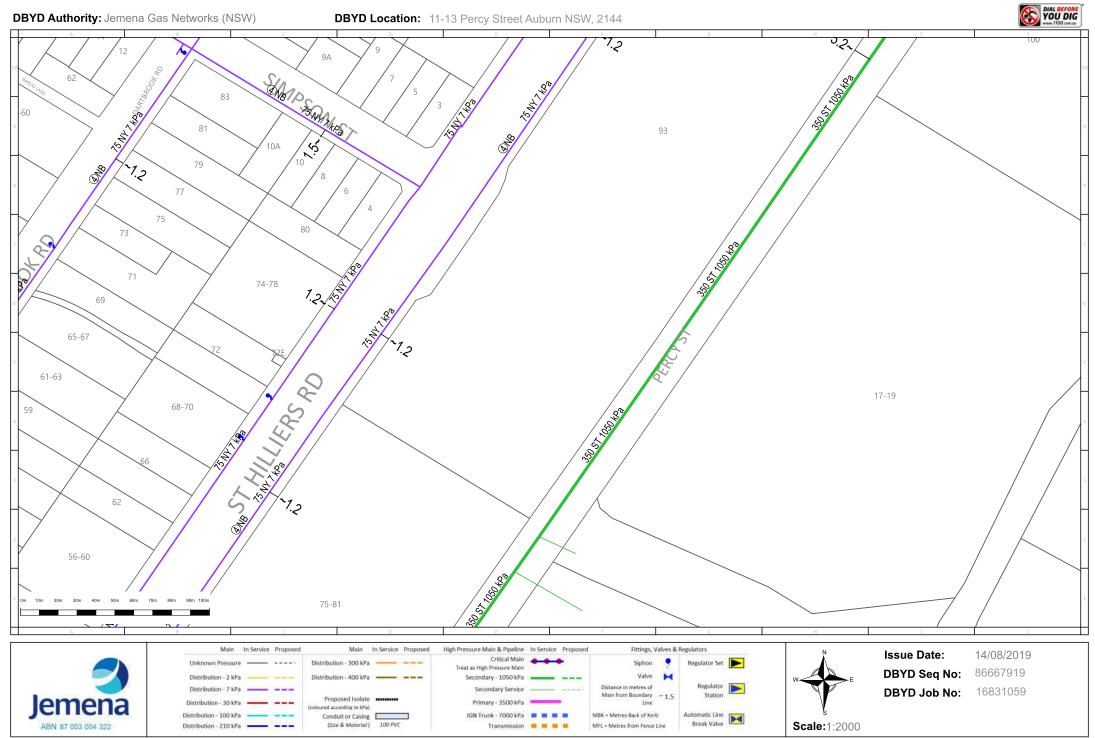




WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagramatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

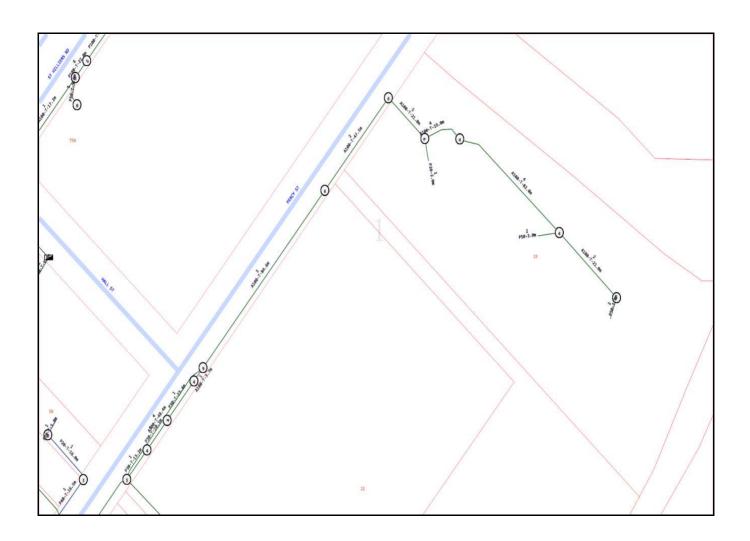


WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagramatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.



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Emergency Contacts

You must immediately report any damage to **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.



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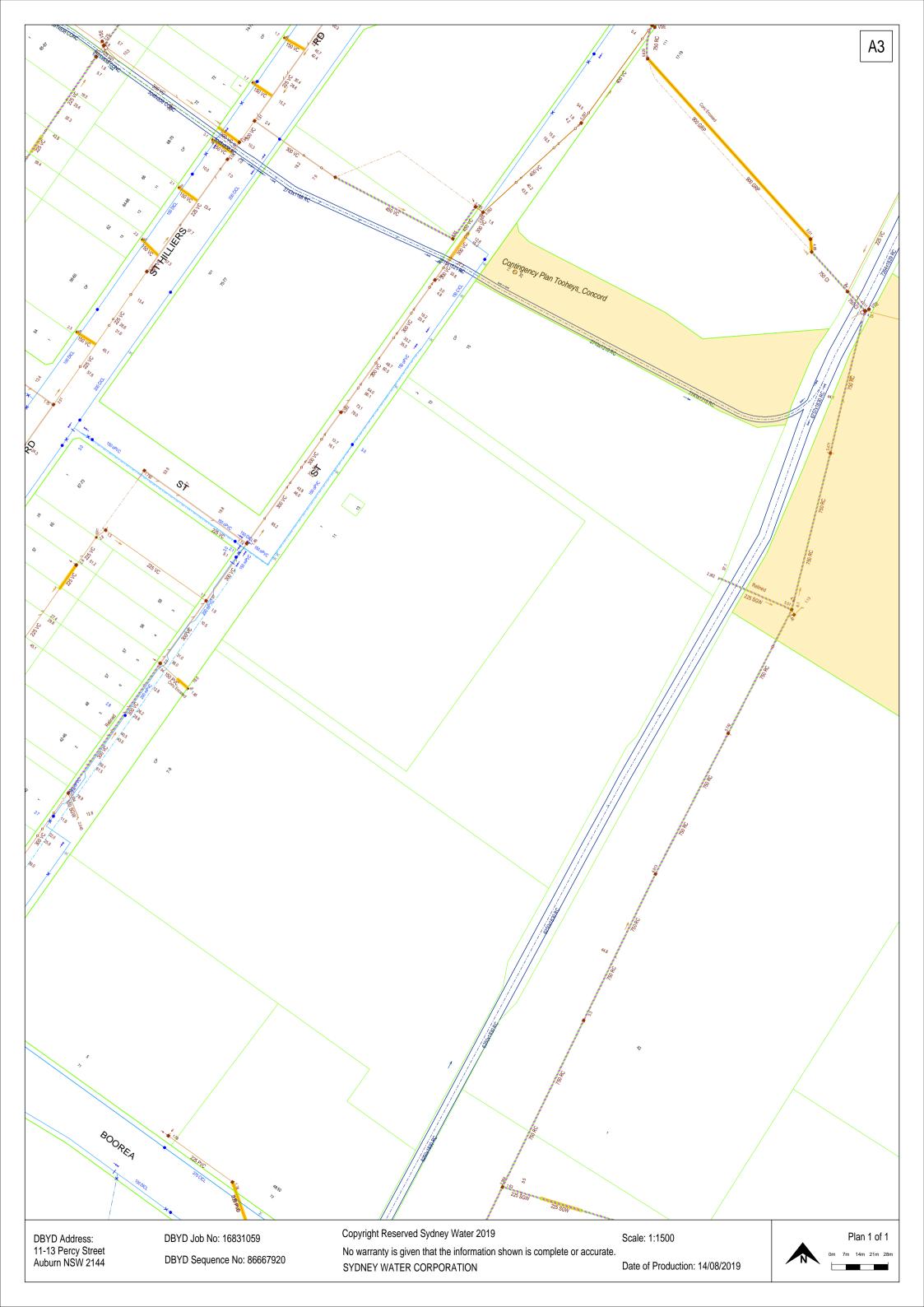


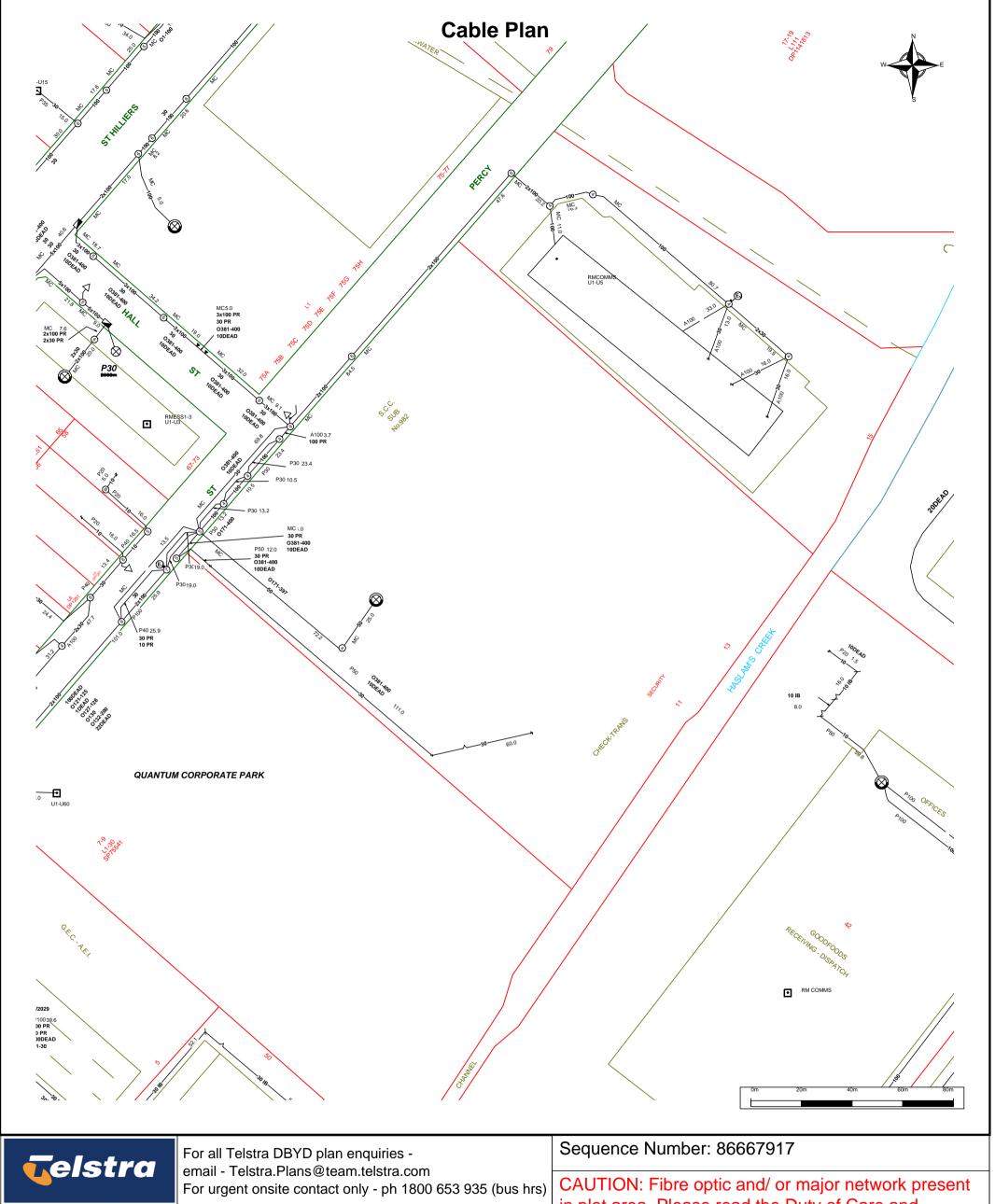
Scale: #INSERT MAP SCALE#

Sequence Number: 86667918 Location: 11-13 Percy Street



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TELSTRA CORPORATION LIMITED A.C.N. 051 775 556

Generated On 14/08/2019 08:55:27

in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

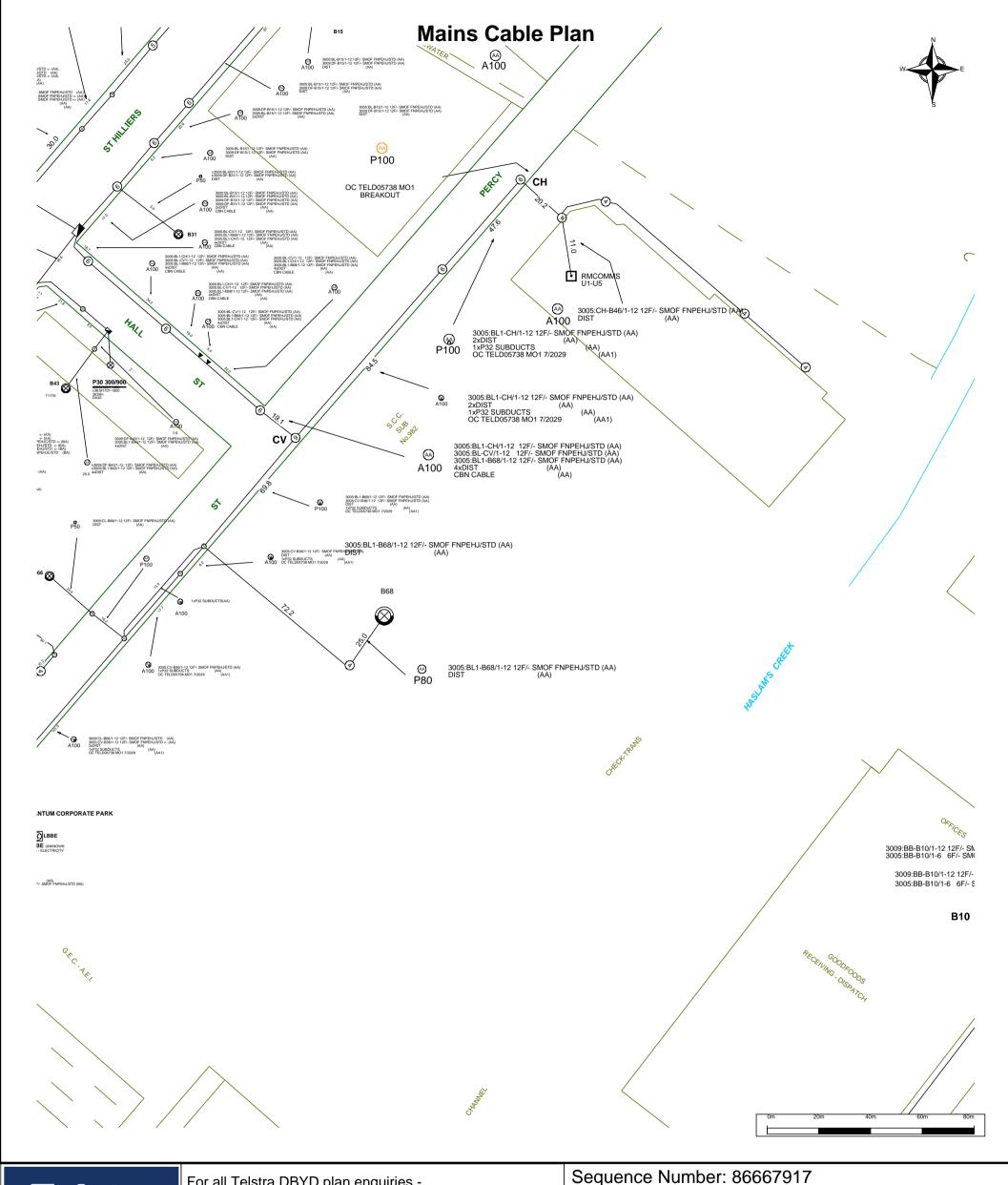
The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

It is your responsibility to locate Telstra's underground plant by careful hand pot-holing prior to any excavation in the vicinity and to exercise due care during that excavation.

Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

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Telstra

For all Telstra DBYD plan enquiries email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)

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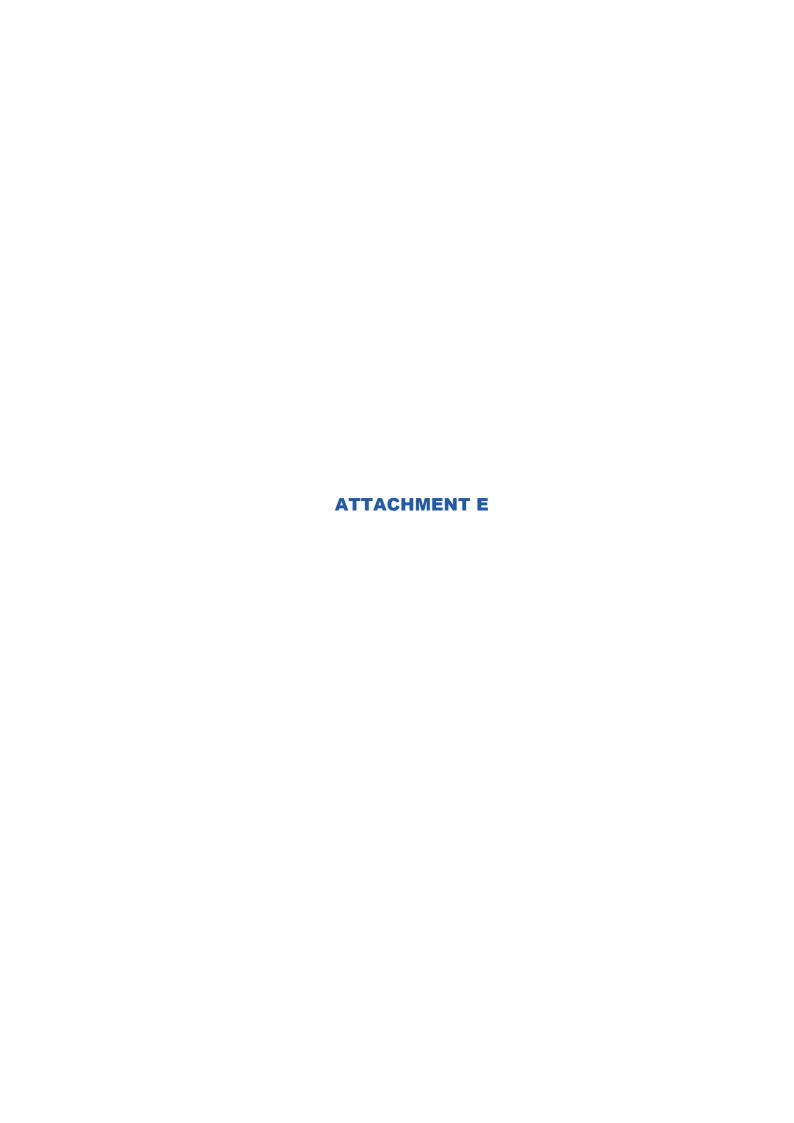
CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

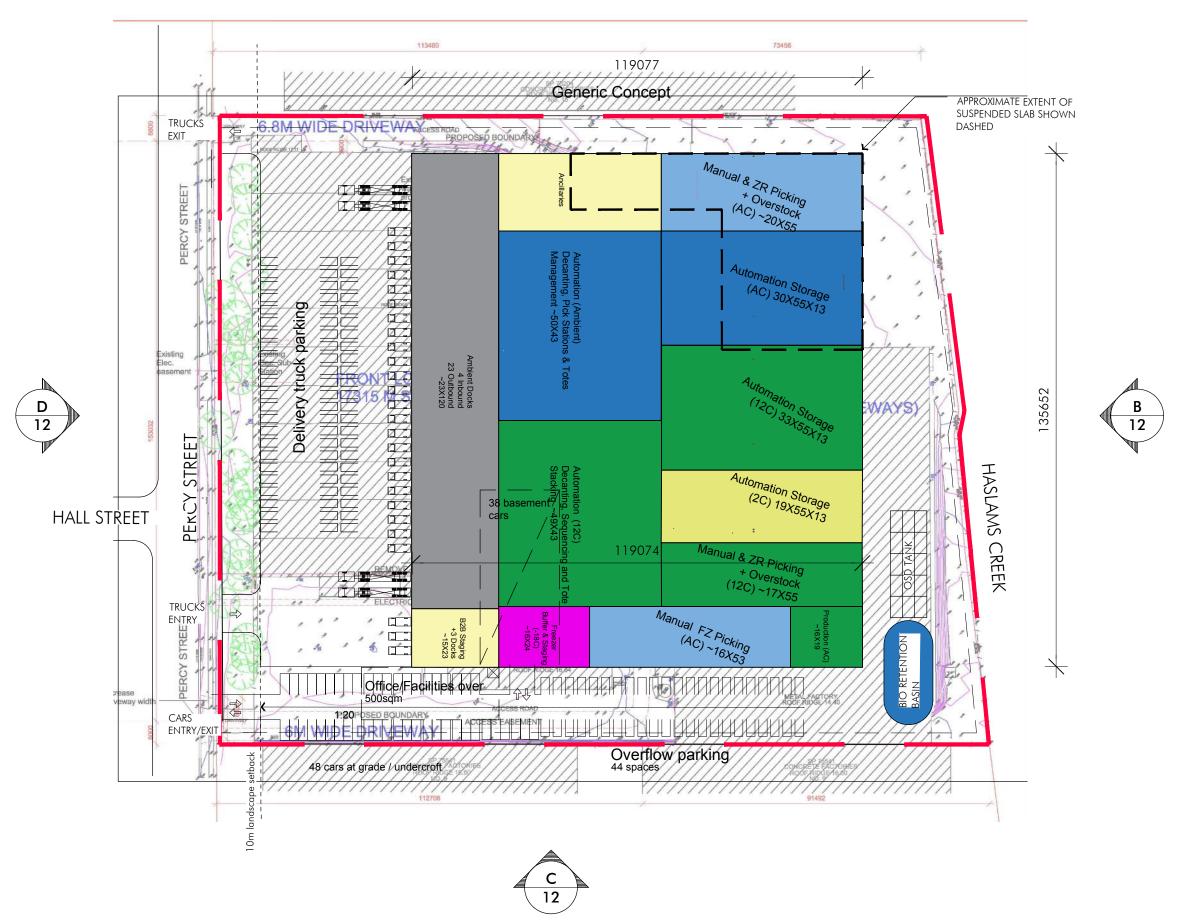
WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

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Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.





SITE PLAN GENERIC

1:1000 @ A3

21.10.2019

11250_SK011



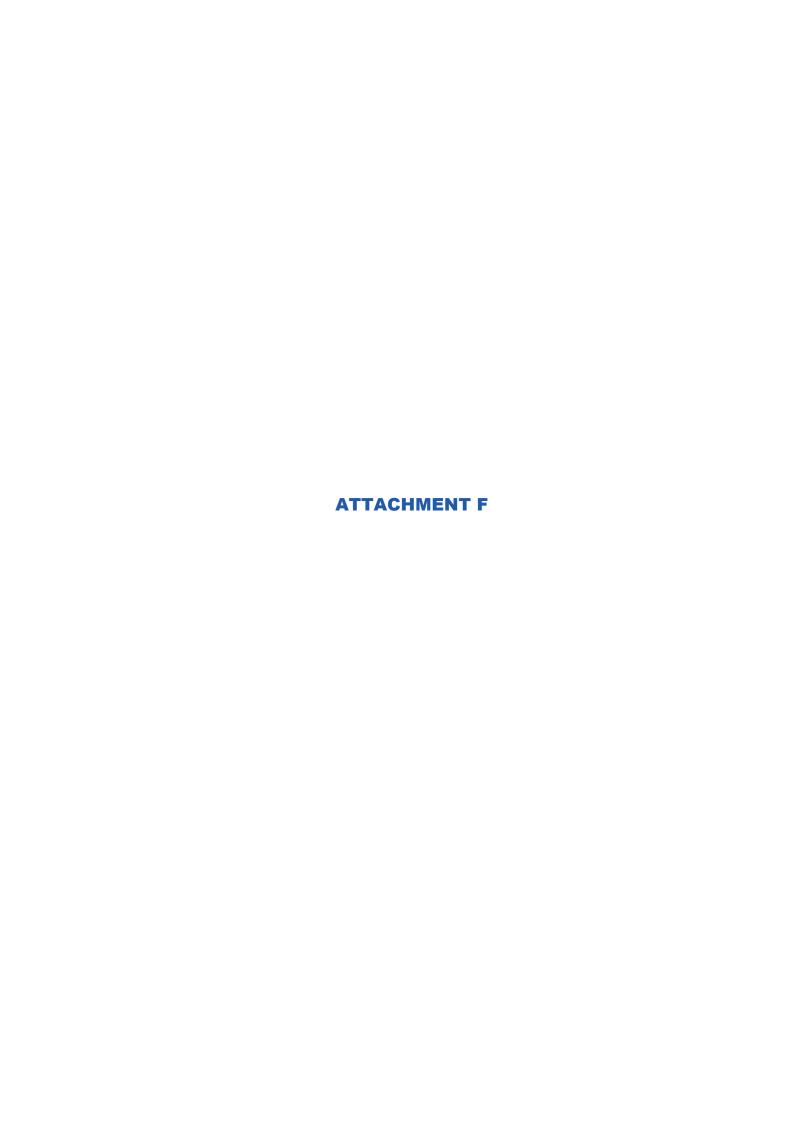


TABLE 1 SOIL ANALYTICAL SUMMARY - BTEX & TPH 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

				ВТ	EX			TF	Ή	
Sample ID and Depth	Date Sample Obtained	PID Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Xylenes (mg/kg)	C ₆ -C ₉ (mg/kg)	C ₁₀ -C ₁₄ (mg/kg)	C ₁₅ -C ₂₈ (mg/kg)	C ₂₉ -C ₃₆ (mg/kg)
SB-1, 1.2m	19/11/99	1.1	ND	ND	ND	ND	ND	ND	ND	ND
SB-3, 0.5m	19/11/99	3.1	ND	ND	ND	ND	ND	ND	ND	ND
SB-7, 0.5m	19/11/99	4	ND	ND	ND	ND	ND	ND	ND	ND
SB-9, 0.2m	18/11/99	2.7		-		-	ND	ND	ND	ND
SB-11, 0.5m	18/11/99	5.9	ND	ND	ND	ND	ND	ND	300	300
SB-12, 3.5m	18/11/99	5.8	ND	ND	ND	ND	-	T -	-	-
SB-15, 3.6m	19/11/99	4,1	ND	ND	ND	ND	ND	ND	ND	ND
SB-16, 1.2m	19/11/99	36.7	ND	ND	ND	ND	ND	900	1900	300
SB-16, 1.6m	19/11/99	2.1	ND	ND	ND	ND	ND	ND	ND	ND
SB-19, 0.7m	18/11/99	3.3	ND	ND	ND	ND	ND	ND	ND	ND
SB-25, 0.5m	18/11/99	3.1	ND	ND	ND	ND	ND	ND	ND	ND
SB-30, 0.2m	18/11/99	0.2	ND	ND	ND	ND	ND	ND	ND	ND
SB-32, 0.3m	19/11/99	146	ND	ND	ND	ND	ND	200	ND	ND
SB-33, 2.0m	19/11/99	240	ND	ND	ND	ND	ND	ND	ND	ND
NSW EP	A "industrial" C	riteria	1	130	50	25	**	1	5000	
Practica	al Quantitation	Limit	0,5	1	1	3	10	10	50	50
Labora	atory Methodol	ogy	E	1 1010 / Purge a	and Trap, GC/M	S	E1	220 / Solvent	Extraction, G0	C-FID

- "ND" = not detected above the practical quantitation limit
- "-" = sample not analysed
- BTEX & TPH criteria based on NSW EPA (1994) guidelines (refer to Appendix I of report)
- "**" = indicates no "intervention levels" (ie. Industrial criteria) specified in NSW EPA 1994 or Dutch 1994 Guidelines for TPH C₆-C₉. The 65mg/kg criteria is <u>not</u> considered appropriate for Industrial criteria as this guideline level is only a "potential approximate indicator of contamination" (NSW EPA 1994), not a risk based criteria

TABLE 2 SOIL ANALYTICAL SUMMARY - SELECTED METALS 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	Date Sample Obtained	Arsenic As (mg/kg)	Cadmium Cd (mg/kg)	Chromium Cr (mg/kg)	Copper Cu (mg/kg)	Lead Pb (mg/kg)	Nickel Ni (mg/kg)	Zinc Zn (mg/kg)	Mercury Hg (mg/kg)
SB-1, 0.3m	19/11/99	ND	ND	ND	44	17	13	61	ND
SB-1, 1.2m	19/11/99	ND	ND	5	9	13	3	5	ND
SB-2,0.5m	19/11/99	ND	1.2	ND	120	30	7	240	ND
SB-3, 0.5m	19/11/99	ND	1.8	10	91	37	37	180	-
SB-5, 0.5m	18/11/99	ND	ND	140	10	6	11	29	0.46
SB-7, 0.5m	19/11/99	ND	ND	100	25	9	74	63	0.1
SB-9, 0.2m	18/11/99	ND	0.7	110	56	12	69	77	ND
SB-10, 1.0m	18/11/99	ND	ND	140	7	ND	10	45	0.54
SB-11, 0.5m	18/11/99	ND	ND	170	13	7	12	31	0.42
SB-13, 0.2m	19/11/99	11	1	89	23	20	84	250	ND
SB-14, 0.4m	19/11/99	ND	0.6	ND	93	52	22	190	ND
SB-15, 3.6m	18/11/99	ND	ND	ND	6	8	4	8	
SB-16, 1.2m	19/11/99	ND	ND	ND	6	6	4	9	ND
SB-16, 1.6m	19/11/99	ND	ND	8	9	7	2	12	-
SB-17, 0.2m	18/11/99	10	0.8	23	34	54	16	120	0.09
SB-18, 0.5m	18/11/99	9	ND	63	35	92	13	140	0.15
SB-19, 0.7m	18/11/99	9	0.7	21	38	57	10	100	-
NEHF H	IIL "F"	500	100	500	5000	1500	3000	3500	75
Practical Quan	titation Limit	5	0,5	5	5	5	2	5	0.05
Laboratory M	ethodology			E5	910 / ICP-AES			•	E5950 CV-FIMS

- "ND" = not detected above the practical quantitation limit
- "-" = sample not analysed
- Heavy metals criteria are based on the NEHF HIL (1998) guidelines (refer to Appendix I of report)
- Exposure Setting "F" denotes "commercial/industrial"

TABLE 2 (cont/...) SOIL ANALYTICAL SUMMARY - SELECTED METALS 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	Date Sample Obtained	Arsenic As (mg/kg)	Cadmium Cd (mg/kg)	Chromium Cr (mg/kg)	Copper Cu (mg/kg)	Lead Pb (mg/kg)	Nickel Ni (mg/kg)	Zinc Zn (mg/kg)	Mercury Hg (mg/kg)
SB-20, 0.5m	18/11/99	6	2	16	320	110	25	480	ND
SB-22, 0.5m	19/11/99	ND	ND	8	14	12	ND	12	ND
SB-23, 0.3m	19/11/99	ND	ND	ND	69	55	14	100	ND
SB-24, 0.5m	19/11/99	ND	ND	6	24	23	3	27	ND
SB-25, 0.5m	18/11/99	7	31	21	800	940	1900	1400	ND
SB-26, 1.2m	18/11/99	18	0.5	20	56	420	. 7	350	0.08
SB-27, 0.5m	18/11/99	12	ND	16	17	31	5	29	ND
SB-28, 0.5m	19/11/99	9	ND	18	27	200	9	89	ND
SB-29, 0.5m	19/11/99	ND	ND	10	9	9	8	9	ND
SB-30, 0.2m	18/11/99	ND	ND	10	20	11	14	32	ND
SB-31, 2.8m	18/11/99	ND	ND	15	26	30	9	160	ND
SB-32, 0.3m	19/11/99	ND	ND	19	8	20	21	45	-
SB-33, 2.0m	19/11/99	7	ND	ND	12	12	3	9	ND
SB-34, 1.4m	19/11/99	ND	ND	5	ND	ND	3	6	ND
SB-35, 0.5m	19/11/99	5	ND	17	16	13	5	12	ND
SB-36, 0.2m	18/11/99	9	3.8	190	120	330	120	410	0.15
NEHF H	IL "F"	500	100	500	5000	1500	3000	3500	75
Practical Quar	ititation Limit	5	0.5	5	5	5	2	5	0.05
Laboratory M	ethodology			E5	910 / ICP-AES				E5950 CV-FIMS

- "ND" = not detected above the practical quantitation limit
- "-" = sample not analysed
- Heavy metals criteria are based on the NEHF HIL (1998) guidelines (refer to Appendix I of report)
- Exposure Setting "F" denotes "commercial/industrial"

SOIL ANALYTICAL SUMMARY - POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs) & PHENOLS AUBURN, NEW SOUTH WALES 11-13 PERCY STREET **TABLE 3**

Total PAHs Total Phenols	(mg/kg)		ī	QN	ı	QN	0.3	•	8500	0.1	E1142 / Distillation FIA
Total PAHs	(mg/kg)	1.4	Q	Q	Q	Q		QN	100	0.5	
QNI	(mg/kg)	ΩN	QN	Ω	QN	Q	ntil	QN		0,5	
BghiP	(mg/kg)	Q	QN	Q.	Q.	2		Q		0.5	
DahA	(mg/kg)	S.	QN	QN	Q	ON		CN		0.5	
ВаР	(mg/kg)	QN	2	2	QN	QN		QN	5	0.5	
BbF & BkF	(mg/kg)	Q.	2	QN	Q.	QN		QN		-	
CHR	(mg/kg)	8	QN.	QN	2	S.		QN		0.5	
BaA	(mg/kg)	Q.	2	2	QV	Q.		Q.		0.5	E1110 / GC-MS
PYR	(mg/kg)	QN	2	QN	Ð	S		QN		0.5	E1110
FLA	(mg/kg)	QN.	Q.	QN	9	QN.		Q		0.5	
ANT	(mg/kg)	NO NO	Q.	QN QN	Q.	QN		QN		0.5	
H	(mg/kg)	1.4	QN	QN	QN	Q.	i	QN		0.5	
13	(mg/kg)	QN	QN	2	Q.	QN		QN		9.0	
ACN	(mg/kg)	QN	NO	QN	QV.	QN	A	QN		0,5	
ACE	(mg/kg)	Q.	QN	QN	QN	QN		QN		0.5	
NAP	(mg/kg)	Q.	9	QN	QN ON	QN		QN		0.5	
Sample ID and Depth		SB-1, 0.3m	SB-3, 0.5m	SB-5, 0.5m	SB-6, 0.2m	SB-9, 0.2m	SB-11, 0.5m	SB-13, 0.2m	NSW EPA Grieria	Practical Quantitation	Laboratory Methodology

Notes:

- "ND" = not detected above the practical quantitation limit
- "-" = sample not analysed
- Samples obtained on 18 and 19 November 1999
- PAH criteria based on NEHF (1998) guidelines
- "*" = no NSW EPA criteria available at this time

NAP = NAPHTHALENE ACE = ACENAPHTHYLENE ACN = ACENAPHTHENE FL = FLUORENE

PH = PHENANTHRENE ANT = ANTHRACENE FLA = FLUORANTHENE PYR = PYRENE

BaA = BENZO (a) ANTHRACENE CHR = CHRYSENE BbF = BENZO (b) FLUORANTHENE BKF = BENZO (k) FLUORANTHENE

Bap = BENZO (a) PYRENE DahA = DIBENZO (ah) ANTHRACENE BghiP = BENZO (ghi) PERYLENE IND = INDENO (1,2,3-cd) PYRENE

SOIL ANALYTICAL SUMMARY - POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS) & PHENOLS AUBURN, NEW SOUTH WALES 11-13 PERCY STREET TABLE 3 (cont/...)

Total PAHs Total Phenois	(mg/kg)		i	,	0.2	QN	QN		8500	0.1	E1142 / Distillation FIA
Total PAHs	(mg/kg)	2.6	7.2	29		QN	-		100	0.5	
Q N	(mg/kg)	QN	QN	က	,	QN	QN			0.5	
BghiP	(mg/kg)	Q.	Q.	2.4		QN	Q			0.5	
DahA	(mg/kg)	S	QN	QN		ON	QN			0.5	
ВаР	(mg/kg)	Q.	QN	2.8		QN	QN		5	0.5	
BbF & BkF	(mg/kg)	9	QN	9		QN O	QN			-	
CHR	(mg/kg)	0.5	QN	2.8		ND	QN			0.5	
BaA	(mg/kg)	Q.	QN	2.2		QN	QN			9:0	E1110 / GC-MS
PYR	(mg/kg)	0.5	ND	4.2		QN	9.0	Jt:		9.0	E111
FLA	(mg/kg)	9.0	QN	4.6	•	QN	0.5			0.5	
ANT	(mg/kg)	Q	Q	QN	E	QN	QN	ж		0.5	
Н	(mg/kg)	-	2.8	1.2	¢	QN	QN	•		0.5	
표	(mg/kg)	QN	1.6	QN		QN	QN			0.5	
ACN	(mg/kg)	QN	-	QN		QN	QN	,		0.5	
ACE	(mg/kg)	QN	QN	QN		QN	QN			0.5	
NAP	(mg/kg)	QV	2	Q		Q	QN	1		0.5	
Sample ID and Depth		SB-14, 0.4m	SB-16, 1.2m	SB-18, 0.5m	SB-19, 0.7m	SB-21, 0.4m	SB-23, 0.3m	SB-24, 0.5m	NSW EPA Criteria	Practical Quantitation	Laboratory

Notes:

- 'ND" = not detected above the practical quantitation limit
- "-" = sample not analysed
- Samples obtained on 18 and 19 November 1999
- PAH criteria based on NEHF (1998) guidelines
- "*" = no NSW EPA criteria available at this time

NAP = NAPHTHALENE ACE = ACENAPHTHYLENE ACN = ACENAPHTHENE FL = FLUORENE

PH = PHENANTHRENE ANT = ANTHRACENE FLA = FLUORANTHENE PYR = PYRENE

BaA = BENZO (a) ANTHRACENE CHR = CHRYSENE BbF = BENZO (b) FLUORANTHENE BkF = BENZO (k) FLUORANTHENE

BaP = BENZO (a) PYRENE
DahA = DIBENZO (ah) ANTHRACENE
Bghip = BENZO (ghi) PERYLENE
IND = INDENO (1.2,3-cd) PYRENE

SOIL ANALYTICAL SUMMARY - POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS) & PHENOLS AUBURN, NEW SOUTH WALES 11-13 PERCY STREET TABLE 3 (cont/...)

מאַ		5		ANT		Æ	표 표	ACE ACN FL PH ANT
(mg/kg) (mg/kg) (mg/kg)	(mg/kg) (r	. 8		(mg/kg) (mg/kg) (m	(mg/kg)	(mg/kg) (mg/kg)	(mg/kg) (mg/kg) (mg/kg)	(mg/kg) (mg/kg) (mg/kg)
ON ON ON	QN	-	QN		QN	QN QN	QN QN QN	QN QN QN QN
QN QN	QN	12	QN		Q	QN	QN QN	QN QN QN
QN QN	QN	z	N ON		QN	QN QN	QN QN QN	ON ON ON
QN QN	ND QN	z	N ON		QN	QN QN	QN QN QN	ON ON ON ON
ON ON ON	QN	12	QN QN		QN	QN	QN QN QN	ON ON ON
•	<u> </u>	1 200						
		1			•	•		
0.5 0.5	2	0.5	0.5		0.5	0.5 0.5	0.5 0.5 0.5	0.5 0.5 0.5
E1110 / GC-MS	E1110/(

Notes:

- "ND" = not detected above the practical quantitation limit
- "-" = sample not analysed
- Samples obtained on 18 and 19 November 1999
- PAH criteria based on NEHF (1998) guidelines
- "*" = no NSW EPA criteria available at this time

NAP = NAPHTHALENE PH = PHENANTHRENE
ACE = ACENAPHTHYLENE ANT = ANTHRACENE
ACN = ACENAPHTHENE FLA = FLUORANTHENE
FL = FLUORENE

BaA = BENZO (a) ANTHRACENE CHR = CHRYSENE BbF = BENZO (b) FLUORANTHENE BKF = BENZO (k) FLUORANTHENE

BaP = BENZO (a) PYRENE
DahA = DIBENZO (ah) ANTHRACENE
BghiP = BENZO (ghi) PERYLENE
IND = INDENO (1,2,3-cd) PYRENE

TABLE 4 SOIL ANALYTICAL SUMMARY – OCPs & PCBs 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	SB-1, 1.2m	SB-8, 0.9m	SB-11, 0.5m	SB-13, 0.2m	Regulatory Criteria	Practical Quantitation Limit	Labaratary Methodology
HCB (mg/kg)	ND	ND	ND	ND		0.1	
a-BHC (mg/kg)	ND	ND	ND	ND	*	0.1	
g-BHC (mg/kg)	ND	ND	ND	ND	8 ● 0	0.1	
Heptachlor (mg/kg)	ND	ND	ND	ND	50 ^(F)	0.1	
Aldrin (mg/kg)	ND	ND	ND	ND	50 ^(F)	0.1	
Dieldrin (mg/kg)	ND	ND	ND	ND		0.1	
b-BHC (mg/kg)	ND	ND	ND	ND		0.1	
d-BHC (mg/kg)	ND	ND	ND	ND	•	0.1	
Oxychiordane (mg/kg)	ND	ND	ND	ND	*	0.1	
Heptachlor Epoxide (mg/kg)	ND	ND	ND	ND		0.1	E1081
Endosulfan 1 (mg/kg)	ND	ND	ND	ND	•	0.1	21001
Chlordane-Trans	ND	ND	ND	ND	250 ^(F)	0.1	
Chlordane-Cis (mg/kg)	ND	ND	ND	ND		0.1	
trans-Nonachlor (mg/kg)	ND	ND	ND	ND	•	0.1	
DDE (mg/kg)	ND	ND	ND	ND	(F)	0.1	
DDD (mg/kg)	ND	ND	ND	ND	1000 ^(F)	0.1	
DDT (mg/kg)	ND	ND	ND	ND		0.1	
Endrin (mg/kg)	ND	ND	ND	ND	4 ⁽⁹⁾	0.1	
Endosulfan 2 (mg/kg)	ND	ND	ND	ND	•	0.1	
Endosulfan S04 (mg/kg)	ND	ND	ND	ND		0.1	
Methoxychlor (mg/kg)	ND	ND	ND	ND		0.1	
Total PCBs (mg/kg)	ND	ND	ND	ND	50 ⁽⁺⁾	1	

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 and 19 November 1999
- (F) = criteria based on NEHF HIL (1998) guidelines Exposure Setting "F"
- (B) = criteria based on DUTCH (1994) guidelines
- "*" = criteria for individual OCP and PCB compounds have not been defined by ANZECC (1992), DUTCH (1994) or NEHF HIL (1998) refer to Appendix I of this report

TABLE 4 (cont/...) SOIL ANALYTICAL SUMMARY – OCPs & PCBs 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	SB-17, 0.2m	SB-19, 0.7m	SB-21, 0.4m	SB-25, 0.5m	Regulatory Criteria	*Practical Quantitation Limit	Laboratory Methodology
HCB	ND	ND	ND	ND	•	0.1	
(mg/kg)							
a-BHC	ND	ND	ND	ND		0.1	
(mg/kg)	- ND	ND	- 115	115		0.1	
g-BHC	ND	ND	ND	ND		0.1	
(mg/kg) Heptachlor	ND	ND	ND	ND	50 ^(F)	0.1	
(mg/kg)	ND	I ND	IND	IND I			
Aldrin	ND	ND	ND	ND	12	0.1	
(mg/kg)	,,,,	1	,,,,	1	50 ^(F)		
Dieldrin	ND	ND	ND	ND		0.1	
(mg/kg)		9,000					
b-BHC	ND	ND	ND	ND		0.1	
(mg/kg)							
d-BHC	ND	ND	ND	ND		0.1	
(mg/kg)	NID	- NE	ND	ND		0.1	
Oxychlordane	ND	ND	ND	ND		0.1	
(mg/kg) Heptachlor Epoxide	ND	ND	ND	ND		0.1	1
(mg/kg)	ND	ND	IND	I ND I		7.00	E1081
Endosulfan 1	ND	ND	ND	ND	•	0.1	Eluoi
(mg/kg)	.,,,,						
Chlordane-Trans	ND	ND	ND	ND	(E)	0.1	
(mg/kg)	750.0				250 ^(F)		
Chlordane-Cis	ND	ND	ND	ND		0.1	Ī
(mg/kg)						0.1	1
trans-Nonachlor	ND	ND	ND	ND	-5.	0.1	
(mg/kg)	ND	ND	ND	ND		0.1	1
DDE	ND	ND	ND	ND ND			
(mg/kg) DDD	ND	ND	ND	ND	1000 ^(F)	0.1	1
(mg/kg)	IND	110	110	1,0		5440	
DDT	ND	ND	ND	ND		0.1	1
(mg/kg)	1,10						
Endrin	ND	ND	ND	ND	4 ^(B)	0.1	1
(mg/kg)			İ				1
Endosulfan 2	ND	ND	ND	ND	•	0.1	
(mg/kg)						0.1	-
Endosulfan S04	ND	ND	ND	ND		0.1	
(mg/kg)	ND	NIE	ND	ND		0.1	1
Methoxychlor	ND	ND	I ND	ND		100	
(mg/kg) Total PCBs	ND	ND	ND	ND	50 ^(F)	1	1
(mg/kg)	IND	IND	IND	IND	5.5	1	

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 and 19 November 1999
- (F) = criteria based on NEHF HIL (1998) guidelines Exposure Setting "F"
- (B) = criteria based on DUTCH (1994) guidelines
- "*" = criteria for individual OCP and PCB compounds have not been defined by ANZECC (1992), DUTCH (1994) or NEHF HIL (1998) refer to Appendix I of this report

TABLE 4 (cont/...) SOIL ANALYTICAL SUMMARY – OCPs & PCBs 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	SB-26, 0.5m	SB-27, 0.5m	SB-29, 0.5m	Regulatory Criteria	Practical Quantitation Limit	Laboratory Methodology
НСВ	ND	ND	ND	b	0.1	
(mg/kg)					0.1	
a-BHC	ND	ND	ND	•	0.1	
(mg/kg) g-BHC	ND	ND	ND		0.1	
g-BHC (mg/kg)	I ND	I ND	I ND I		0.1	
Heptachlor	ND	ND	ND	50 ^(F)	0.1	
(mg/kg)	110	110	140			
Aldrin	ND	ND	ND		0.1	
(mg/kg)				50 ^(F)		
Dieldrin	0.1	ND	ND		0.1	
(mg/kg)						
b-BHC	ND	ND	ND		0 1	
(mg/kg)					0.1	
d-BHC	ND	ND	ND		UT	
(mg/kg)	ND	ND	ND		01	
Oxychlordane (mg/kg)	ND	ND	ND			
Heptachlor Epoxide	ND	ND	ND		0.1	
(mg/kg)	ND	ND	I ND			E1081
Endosulfan 1	ND	ND	ND	•	0.1	E1001
(mg/kg)						
Chlordane-Trans	ND	ND	ND	(E)	0.1	
(mg/kg)				250 ^(F)		
Chlordane-Cis	ND	ND	ND		0.1	
(mg/kg)						
trans-Nonachlor	ND	ND	ND		0.1	
(mg/kg) DDE	ND	ND	ND		0.1	1
	ם או	I ND	ND		V. 1	
(mg/kg)	ND	ND	ND	1000 ^(F)	0.1	1
(mg/kg)	l ND	IND	1,40		10	
DDT	ND	ND	ND		0.1	1
(mg/kg)						
Endrin	ND	ND	ND	4 ^(B)	0.1	
(mg/kg)						
Endosulfan 2	ND	ND	ND	•	0.1	
(mg/kg)	<u> </u>				0.1	-
Endosulfan S04	ND	ND	ND		0.1	
(mg/kg)	ND	ND	ND		0.1	1
Methoxychlor	ND	I ND	I ND		1	
(mg/kg) Total PCBs	ND	ND	ND	50 ⁽⁺⁾	1	1
(mg/kg)	I IND	שא	I ND	T.E.		

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 and 19 November 1999
- (F) = criteria based on NEHF HIL (1998) guidelines Exposure Setting "F"
- (B) = criteria based on DUTCH (1994) guidelines
- "*" = criteria for individual OCP and PCB compounds have not been defined by ANZECC (1992), DUTCH (1994) or NEHF HIL (1998) refer to Appendix I of this report

TABLE 4 (cont/...) SOIL ANALYTICAL SUMMARY – OCPs & PCBs 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	SB-31, 2.8m	SB-35, 0.5m	SB-36, 0.2m	Regulatory Criteria	Practical Quantitation Limit	Laboratory Methodology
НСВ	ND	ND	ND	7.0	0.1	
(mg/kg) a-BHC (mg/kg)	ND	ND	ND		0.1	
g-BHC (mg/kg)	ND	ND	ND	(9)	0.1	
Heptachlor (mg/kg)	ND	ND	ND	50 ^(F)	0.1	
Aldrin (mg/kg)	ND	ND	ND	50 ^(F)	01	i
Dieldrin (mg/kg)	ND	ND	ND		0.1	
b-BHC (mg/kg)	ND	ND	ND	,	0.1	
d-BHC (mg/kg)	ND	ND	ND	•	0,1	
Oxychlordane (mg/kg)	ND	ND	ND	•	0.1	
Heptachlor Epoxide (mg/kg)	ND	ND	ND		0.1	E1081
Endosulfan 1 (mg/kg)	ND	ND	ND	,	0.1	
Chlordane-Trans (mg/kg)	ND	ND	ND	250 ^(F)	0.1	
Chlordane-Cis (mg/kg)	ND	ND	ND		0.1	1
trans-Nonachlor (mg/kg)	ND	ND	ND		0.1	
DDE (mg/kg)	ND	ND	ND	1000 ^(F)	0.1	
DDD (mg/kg)	ND	ND	ND ND		0.1	
DDT (mg/kg)	ND	ND ND	ND	4 ^(e)	0.1	1
Endrin (mg/kg)	ND ND	ND	ND ND	•	0.1	1
Endosulfan 2 (mg/kg) Endosulfan S04	ND	ND	ND ND		0.1	4
(mg/kg) Methoxychlor	ND	ND	ND		0.1	-
(mg/kg)	ND	ND	ND	50 ^(F)	1	-
Total PCBs (mg/kg)	טא	םא	ן שו	30		

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 and 19 November 1999
- (F) = criteria based on NEHF HIL (1998) guidelines Exposure Setting "F"
- (B) = criteria based on DUTCH (1994) guidelines
- "*" = criteria for individual OCP and PCB compounds have not been defined by ANZECC (1992), DUTCH (1994) or NEHF HIL (1998) refer to Appendix I of this report

TABLE 5 SOIL ANALYTICAL SUMMARY - VOC SCAN 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	SB-6, 0.8m	SB-22, 0,5m	SB-26, 1 2m	SB-29, 0.5m	SB-32, 3,6m	Regulatory Criteria	Practical Quantitation Limit	Labaratary Methadalagy
Benzene (mg/kg)	ND	ND	ND	ND	ND	1	0.5	
Bromobenzene (mg/kg)	ND	ND	ND	ND	ND		1	1
Bromochloro- methane (mg/kg)	ND	ND	ND	ND	ND	-	1	
Bromodichloro- methane (mg/kg)	ND	ND	ND	ND	ND		1	
Bromoform (mg/kg)	ND	ND	ND	ND	ND		1	
Bromomethane (mg/kg)	ND	ND	ND	ND	ND	-	1	
n-Butylbenzene (mg/kg)	ND	ND	ND	ND	ND	•	1	
Sec- Butylbenzene (mg/kg)	ND	ND	ND	ND	ND	•	1	
Tert- Butylbenzene (mg/kg)	ND	ND	ND	ND	ND	-	1	
Carbon tetrachloride (mg/kg)	ND	ND	ND	ND	ND	1	1	
Chlorobenzene	ND	ND	ND	ND	ND	30	1	E1290 GC/MS
(mg/kg) Chloroethane	ND	ND	ND	ND	ND		1	1
(mg/kg) Chloroform	ND	ND	ND	ND	ND	10	1	
(mg/kg) Chloromethane	ND	ND	ND	ND	ND		1	1
(mg/kg) 2- Chlorotoluene (mg/kg)	ND	ND	ND	ND	ND		1	
4- Chlorotoluene (mg/kg)	ND	ND	ND	ND	ND	-	1	
Dibromochloro- methane (mg/kg)	ND	ND	ND	ND	ND	•	1	
1.2-Dibromo-3- chloropropane (mg/kg)	ND	ND	ND	ND	ND	1.5	1	
1.2- Dibromoethane (mg/kg)	ND	ND	ND	ND	ND	10	1	
Dibromo- methane (mg/kg)	ND	ND	ND	ND	ND	-	1	
1.2- Dichlorobenzene (mg/kg)	ND	ND	ND	ND	ND	-	1	
1.3- Dichlorobenzene (mg/kg)	ND	ND	ND	ND	ND		1	

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 and 19 November 1999
- Criteria based on NSW EPA (1994) or Dutch (1994) guidelines
- "-" = criteria not available

TABLE 5 (cont/...) SOIL ANALYTICAL SUMMARY - VOC SCAN 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	SB-6, 0.8m	SB-22, 0.5m	SB-26, 1.2m	SB-29, 0,5m	SB-32, 3.6m	Regulatory Criteria	Practical Quantitation Limit	Laboratory Methodology
1.4- Dichlorobenzene (mg/kg)	ND	ND	ND	ND	ND		1	
Dichlorodifluoro- Methane (mg/kg)	ND	ND	ND	ND	ND	-	1	
1.1- Dichloroethene (mg/kg)	ND	ND	ND	ND	ND	50	1	
1.2- Dichloroethane (mg/kg)	ND	ND	ND	ND	ND	4	1	
1.1-Dichloroethane (mg/kg)	ND	ND	ИD	ND	ND	50	1	
cis-1.2- Dichloroethene (mg/kg)	ND	ND	ND	ND	ND	50	1	
trans-1.2- Dichloroethene (mg/kg)	ND	ND	ND	ND	ND	50	1	
1.2- Dichloropropane (mg/kg)	ND	ND	ND	ND	ND	5	1	
1.3- Dichloropropane (mg/kg)	ND	ND	ND	ND	ND	•	1	E1290 Gc/ms
2.2- Dichloropropane (mg/kg)	ND	ND	ND	ND	ND		1	
1.1- Dichloropropylene	ND	ND	ND	ND	ND	•	1	
cis-1.3- Dichloropropylene (mg/kg)	ND	ND	ND	ND	ND	5	1	
trans-1.3- Dichloropropylene (mg/kg)	ND	ND	ND	ND	ND	5	1	
Ethylbenzene (mg/kg)	ND	ND	ND	ND	ND	3.1	1	
Hexachloro- butadiene (mg/kg)	ND	ND	ND	ND	ND	5	1	
Isopropyl- benzene (mg/kg)	ND	ND	ND	ND	ND		1	
p- Isopropyltoluene (mg/kg)	ND	ND	ND	ND	ND	•	1	
Methylene chloride (mg/kg)	ND	ND	ND	ND	ND	<u>.</u> .	1	
Naphthalene (mg/kg)	ND	ND	ND	ND	ND		1	

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 and 19 November 1999
- Criteria based on NSW EPA (1994) or Dutch (1994) guidelines
- "-" = criteria not available

TABLE 5 (cont/...) SOIL ANALYTICAL SUMMARY - VOC SCAN 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	SB-6, 0.8m	SB-22, 0,5m	SB-26, 1.2m	SB-29, 0,5m	SB-32, 3.6m	Regulatory Criteria	Practical Quantitation Limit	Laboratory Methodology
n-Propylbenzene (mg/kg)	ND	ND	ND	ND	ND		1	
Styrene (mg/kg)	ND	ND	ND	ND	ND	100	1	
1.1.1.2-Tetra- chloroethane (mg/kg)	ND	ND	ND	ND	ND	-	1	
1.1.2.2-Tetra- chloroethane (mg/kg)	ND	ND	ND	ND	ND	50	1	
Tetra- Chloroethene (mg/kg)	ND	ND	ND	ND	ND	4	1	
Taluene (mg/kg)	ND	ND	ND	ND	ND	1.4	1	
1,2,3-Trichloro- benzene (mg/kg)	ND	ND	ND	ND	ND	-	1	
1.2.4-Trichloro- benzene (mg/kg)	ND	ND	ND	ND	ND	-	ſ	
1.1.1- Trichloroethane (mg/kg)	ND	ND	ND	ND	ND	50	1	
1.1.2- Trichloroethane	ND	ND	ND	ND	ND	50	1	E1290 GC/MS
Trichloroethene (mg/kg)	ND	ND	ND	ND	ND	60	1	
Trichloro- fluoromethane (mg/kg)	ND	ND	ND	ND	ND	-	1	
1.2.3-Tri- chloropropane (mg/kg)	ND	ND	ND	ND	ND.	•	1	
1.2.4-Tri- methylbenzene (mg/kg)	ND	ND	ND	ND	ND		1	
1.3.5-Tri- methylbenzene (mg/kg)	ND	ND	ND	ND	ND		1	
Vinyl chloride (mg/kg)	ND	ND	ND	ND	ND	0.1	1	
ortho-Xylene (mg/kg)	ND	ND	ND	ND	ND	14	1	
meta & para- Xylene (mg/kg)	ND	ND	ND	ND	ND	14	2	

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 and 19 November 1999
- Criteria based on NSW EPA (1994) or Dutch (1994) guidelines
- "-" = criteria not available

TABLE 6 WATER ANALYTICAL SUMMARY - BTEX & TPH 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

			ВТ	EX	TPH				
Sample ID	Date Sample Obtained	Benzene (μg/L)	Toluene (μg/L)	Ethyl- benzene (µg/L)	Xylenes (μg/L)	C ₆ -C ₉ (μg/L)	C ₁₀ -C ₁₄ (μg/L)	С₁₅-С₂₈ (µg/L)	C ₂₉ -C ₃₆ (µg/L)
MW-1	9/12/99	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	9/12/99	ND	ND	ND	ND	ND	ND	ND	ND
MW-3	9/12/99	4	17	15	40	1200	100	ND	ND
NSW EP	A Criteria	300	300	140	380	••			
Practical Qua	ntitation Limit	0.5	1	1	3	20	20	100	100
Laboratory N	Methodology	-	0010 / Purge ar	010 / Purge and Trap – GC/MS E0220 / DCM / Acetone Extraction – GC					- GC/FID

- "ND" = not detected above the practical quantitation limit
- "**" = the NSW EPA do not have a specified numerical criterion for TPH in groundwater or surface waters. However, the requirement that water be "visually free of grease and oil" under Part 3(8) of the Clean Waters Act (1970) has been shown to correspond approximately to a TPH concentration of 10 mg/L (10,000ug/L)
- Water Quality criteria based on the NSW EPA (1994) guidelines for the protection of fresh water aquatic ecosystems (refer to Appendix I of report)

TABLE 7 WATER ANALYTICAL SUMMARY - SELECTED METALS 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID	Date Sample Obtained	Arsenic As (mg/L)	Cadmium Cd (mg/L)	Chromium Cr (mg/L)	Copper Cu (mg/L)	Lead Pb (mg/L)	Nickel Ni (mg/L)	Zinc Zn (mg/L)	Mercury Hg (mg/L)
MW-1	9/12/99	<0.03	0.0013	0.025	0.008	ND	0.008	0.103	ND
MW-2	9/12/99	0.03	ND	0.008	0.003	0.073	0.010	0.030	ND
MW-3	9/12/99	<0.02	ND	0.004	0.008	0.135	0.006	0.043	ND
ANZECC 19	992 Criteria	0.05	0.002	0.01	0.005	0.005	0.015	0.005	0.01
Practical Qua	ntitation Limit	0.001	0.0001	0.001	0.001	0.001	0 001	0 002	0.001
Laboratory N	Methodology		I		E4870 ICP-MS		J	1	E4950

- "ND" = not detected above the practical quantitation limit
- Heavy metals criteria are based on the ANZECC (1992) guidelines (refer to Appendix I of report)
- Shading indicates concentration above criteria

TABLE 8 SOIL QA/QC PROGRAM - BTEX & TPH 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

			ВТ	EX			TF	PH	
Sample ID and Depth	Date Sample Obtained	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Xylenes (mg/kg)	C ₆ -C ₉ (mg/kg)	C ₁₀ -C ₁₄ (mg/kg)	C ₁₅ -C ₂₈ (mg/kg)	C ₂₉ -C ₃₆ (mg/kg)
QS-5	19/11/99	1.4	2	2	9	20	1200	2400	700
SB-16, 1.2m	19/11/99	ND	ND	ND	ND	ND	900	1900	300
RPD	%		4				29%	23%	80%
Practical Quan	titation Limit	0.5	1	1	3	10	10	50	50
Laboratory M	ethodology		<u>I</u> E1010 / Purge a	nd Trap, GC/MS		E1	220 / Solvent E	Extraction, GC	-FID

- "ND" = not detected above the practical quantitation limit
- RPD % = Relative Percent Difference
- "-" denotes RPD could not be calculated (one or both samples ND)
- QS-5 is a field duplicate of SB-16, 1.2m

TABLE 9 SOIL QA/QC PROGRAM - SELECTED METALS 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	Date Sample Obtained	Arsenic As (mg/kg)	Cadmium Cd (mg/kg)	Chromium Cr (mg/kg)	Copper Cu (mg/kg)	Lead Pb (mg/kg)	Nickel Ni (mg/kg)	Zinc Zn (mg/kg)	Mercury Hg (mg/kg)
QS-1	18/11/99	ND	ND	130	10	ND	8	21	0.61
SB-11, 0.5m	18/11/99	ND	ND	170	13	7	12	31	0.42
RPD	%		-	27%	26%	-	40%	38%	37%
QS-3	18/11/99	22	ND	17	63	250	11	280	0.07
SB-26, 1.2m	18/11/99	18	0.5	20	56	420	7	350	0.08
RPD	%	20%	-	16%	12%	51%	44%	22%	13%
QS-5	19/11/99	ND	ND	ND	ND	ND	3	7	ND
SB-16, 1.2m	19/11/99	ND	ND	ND	6	6	4	9	ND
RPD	%			-	-	2.0	29%	25%	-
Practical Quan	titation Limit	5	0.5	5	5	5	2	5	0.05
Laboratory M	ethodology		1	E5:	910 / ICP-AES				E5950 CV-FIMS

- "ND" = not detected above the practical quantitation limit
- RPD % = Relative Percent Difference
- "-" denotes RPD could not be calculated (one or both samples ND)
- QS-1 is a field duplicate of SB-11, 0.5m
- QS-3 is a field duplicate of SB-26, 1.2m
- QS-5 is a field duplicate of SB-16, 1.2m

SOIL QA/QC PROGRAM - POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS) & PHENOLS AUBURN, NEW SOUTH WALES 11-13 PERCY STREET **TABLE 10**

Sample ID N and Depth	NAP	ACE	ACN	Ħ	H	ANT	Ā	PYR	ВаА	CHR	BbF & BkF	ВаР	DahA	BghiP	2	Total PAHS	Total PAHS Total Phenois
Ε,	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)								
Ĺ	N O	Q	Q.	QN	0.8	QN	1.4	1.2	9.0	0.5	-	9.0	QN	Q	QN	6.4	0.8
SB-26, 1.2m	Q.	QN	ND	QN	QN	QN	QN	QN	QN	ΩN	QN	QN	QN	QN	Q	Q	8
1			r		Ŀ		5.	ĐÃ.		31	ı	,		ŧ	κ		153%
-	2	QN	6.0	1.8	m	Q.	QN	QN	QN	ΩN	Q.	Q.	QN	QN	QN	7.6	A
SB-16, 1.2m	2	QN.	-	1.6	2.8	QN	ΩN	QN	QN	QN	Q	QN Q	QN	ND	QN	7.2	NA
-	%0	é	11%	12%	%/	,		*	,	×	į		i		В	2%	(10)
F	0.5	0.5	0.5	0.5	0.5	0.5	9.0	0.5	9'0	0.5	-	0.5	0.5	0.5	0.5	0.5	0.1
Quantitation																	
Laboratory								E111(E1110 / GC-MS								Distillation FIA

Notes:

- "ND" = not detected above the practical quantitation limit
 - Samples obtained on 18 and 19 November 1999
- "NA" = sample not analysed
- RPD % = Relative Percent Difference
- "-" denotes RPD could not be calculated (one or both samples ND)
- QS-3 is a field duplicate of SB-26, 1.2m
- QS-5 is a field duplicate of SB-16, 1.2m

NAP = NAPHTHALENE PH = PHENANTHRENE
ACE = ACENAPHTHYLENE ANT = ANTHRACENE
ACN = ACENAPHTHENE FLA = FLUORANTHENE
FL = FLUORENE

BaA = BENZO (a) ANTHRACENE CHR = CHRYSENE BbF = BENZO (b) FLUORANTHENE BkF = BENZO (k) FLUORANTHENE

BaP = BENZO (a) PYRENE DahA = DIBENZO (ah) ANTHRACENE BghiP = BENZO (ghi) PERYLENE IND = INDENO (1,2,3-cd) PYRENE

TABLE 11 SOIL QA/QC PROGRAM - OCPs & PCBs 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

Sample ID and Depth	QS-1	SB-11, 0.5m	RPD %	Practical Quantitation Limit	Eaboratory Methodology
HCB (mg/kg)	ND	ND		0.1	
a-BHC (mg/kg)	ND	ND	•	0.1	
g-BHC (mg/kg)	ND	ND	•	0.1	
Heptachlor (mg/kg)	ND	ND	-	0.1	
Aldrin (mg/kg)	ND	ND	-	0.1	
Dieldrin (mg/kg)	ND	ND		0.1	
b-BHC (ing/kg)	ND	ND		0.1	
d-BHC (mg/kg)	ND	ND	4	0.1	
Oxychlordane (mg/kg)	ND	ND	7	0.1	
Heptachlor Epoxide (mg/kg)	ND	ND	-	0.1	E1081
Endosulfan 1 (mg/kg)	ND	ND	2	0.1	2,001
Chlordane-Trans (mg/kg)	ND	ND	<u> </u>	0.1	
Chlordane-Cis (mg/kg)	ND	ND	<u> </u>	0.1	
trans-Nonachlor (mg/kg)	ND	ND	-	0.1	
DDE (mg/kg)	ND	ND		0.1	
DDD (mg/kg)	ND	ND	. .	0.1	
DDT (mg/kg)	ND	ND	•	0.1	
Endrin (mg/kg)	ND	ND	•	0.1	
Endosulfan 2 (mg/kg)	ND	ND	5 - 0	0.1	
Endosulfan S04 (mg/kg)	ND	ND	*	0.1	
Methoxychlor (mg/kg)	ND	ND	-	0.1	
Total PCBs (mg/kg)	ND	ND	•	1	

- "ND" = not detected above the practical quantitation limit
- Samples obtained on 18 November 1999
- RPD % = Relative Percent Difference
- "-" denotes RPD could not be calculated (one or both samples ND)
- QS-1 is a field duplicate of SB-11, 0.5m

TABLE 12 WATER QA/QC PROGRAM - BTEX, TPH & DISSOLVED LEAD 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

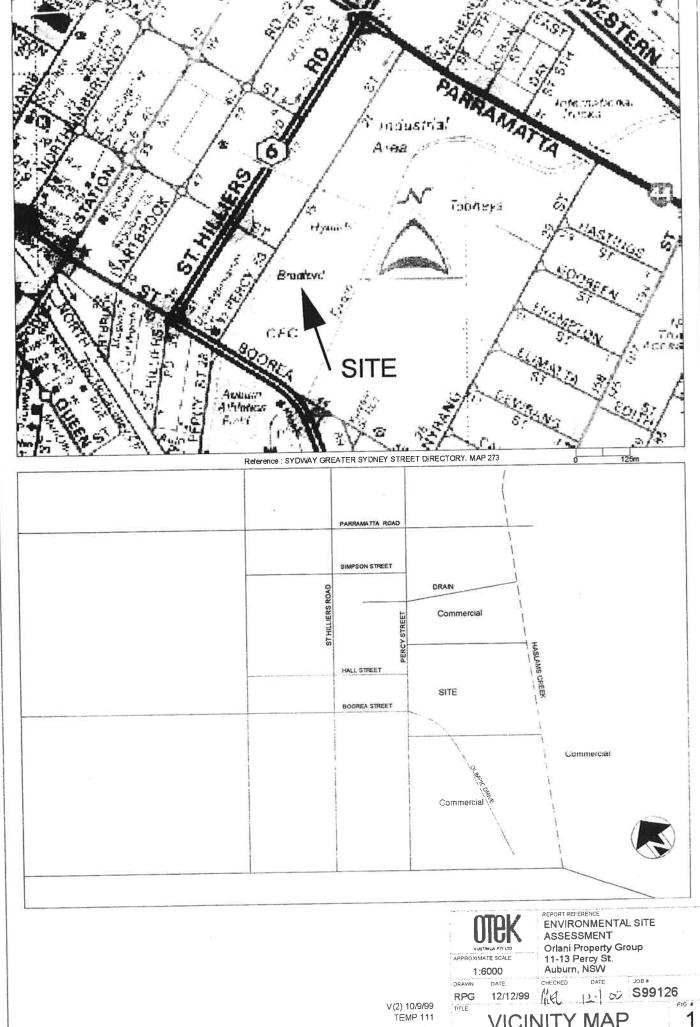
			ВТ	EX			TF	PH		
Sample ID and Depth	Date Sample Obtained	Benzene (μg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (μg/L)	С₆-С₉ (µg/L)	C ₁₀ -C ₁₄ (μg/L)	C ₁₅ -C ₂₈ (µg/L)	C ₂₉ -C ₃₆ (µg/L)	Dissolved Lead (µg/L)
QW(1)	9/12/99	4	18	16	39	1100	100	ND	ND	128
MW-3	9/12/99	4	17	15	40	1200	100	ND	ND	135
RPI	0%	0%	6%	6%	2%	9%	0%	-	-	5%
QW(2)	9/12/99	ND	ND	ND	ND	ND	ND	ND	ND	ND
Practical Qua	ntitation Limit	1	1	1	3	20	20	100	100	1
Laboratory N	Methodology	E1	1 0010 / Purge ar	nd Trap – GC/M	S	E0220	/ DCM / Acetor	ne Extraction -	- GC/FID	E4870 ICP-MS

- "ND" = not detected above the practical quantitation limit
- RPD % = Relative Percent Difference
- "-" denotes RPD could not be calculated (one or both samples ND)
- QW(1) is a duplicate sample MW-3
- QW(2) is a rinsate blank sample

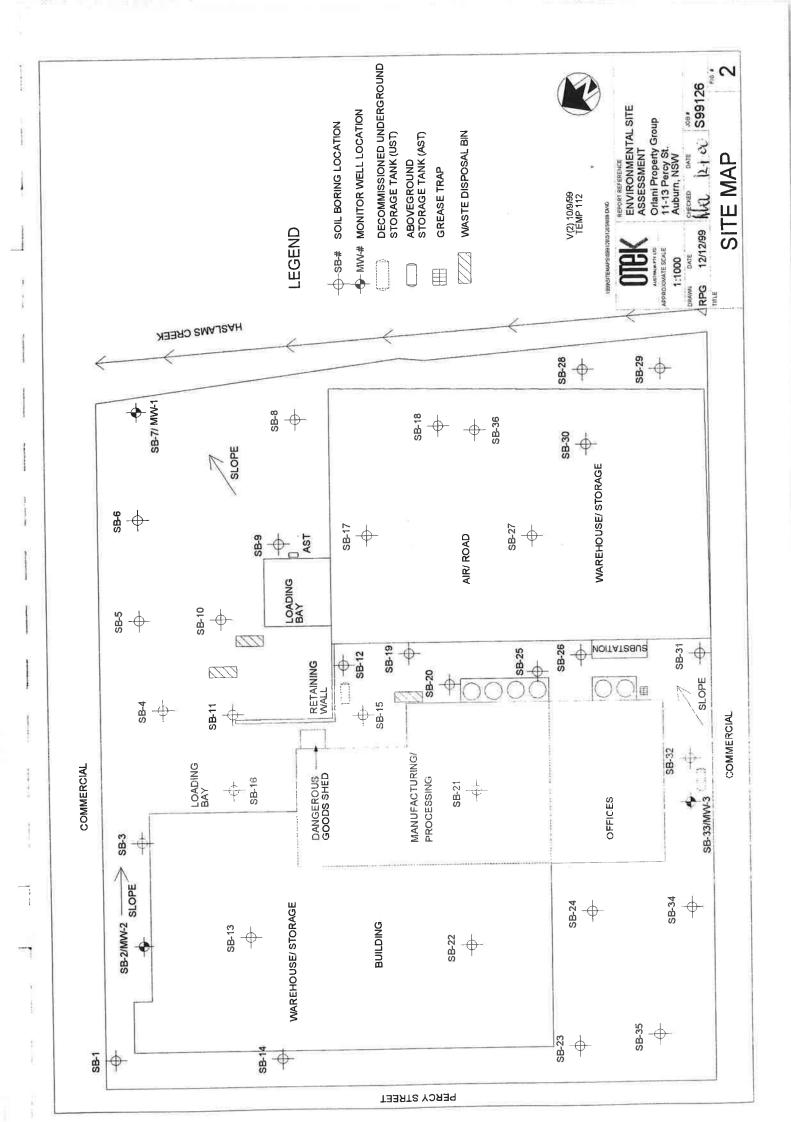
TABLE 13 WATER QA/QC PROGRAM - SELECTED METALS 11-13 PERCY STREET AUBURN, NEW SOUTH WALES

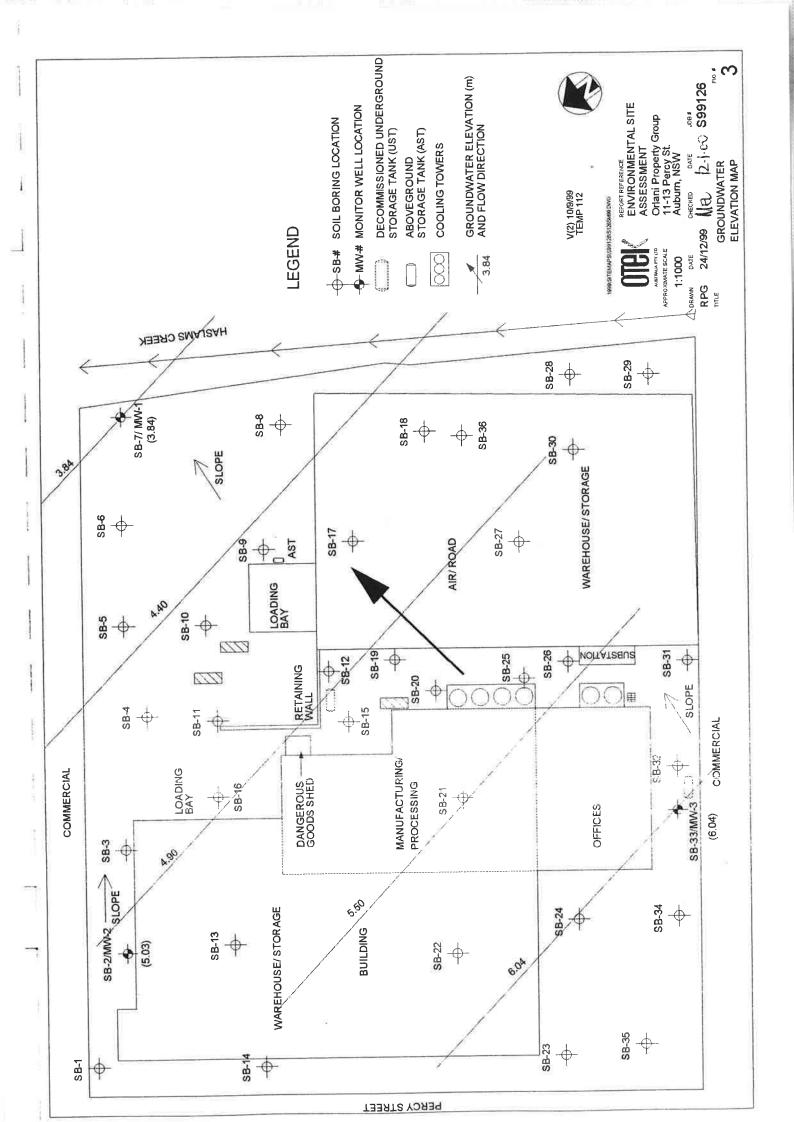
Sample ID	Date Sample Obtained	Arsenic As	Cadmium Cd	Chromium Cr	Copper Cu	Lead Pb	Nickel Ni	Zinc Zn	Mercury Hg
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
QW-1	19/11/99	ND	ND	0.001	0.001	ND	ND	0.013	ND
Practical Qua	ntitation Limit	0.001	0.0001	0 001	0.001	0.001	0.001	0.002	0.001
Laboratory N	Methodology				E4870 ICP-MS	L		L.	E4850

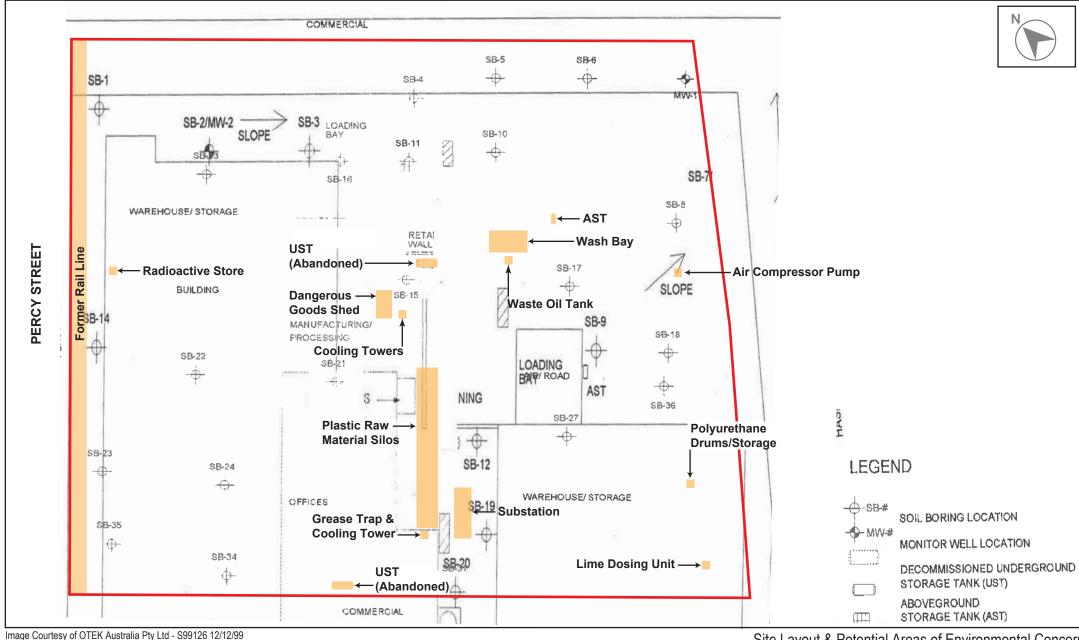
- "ND" = not detected above the practical quantitation limit
- QW-1 is an equipment Rinsate Blank



1998STEMAP5\S912951265H99 DMG







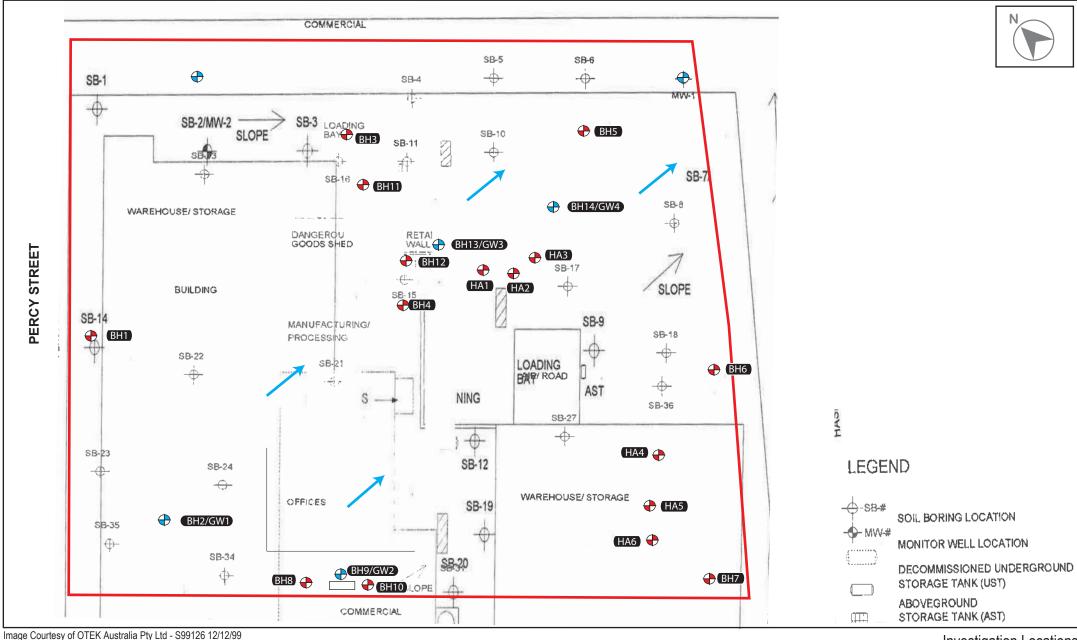
Site Boundary

Site Layout & Potential Areas of Environmental Concern

11-13 Percy Street, Auburn NSW 00030196

FIGURE 2





Site Boundary

Soil Bore Location BH1

Monitoring Well Location

Inferred Groundwater Flow Direction

*Figure not to scale

Investigation Locations

11-13 Percy Street, Auburn NSW

00030196







Fig. Part							8 meta	ıls in soi	ı			MBAS							P/	AHs in S	oil								PCB	OCP	Phenols	TP	H in Soi	I (C10-C	36)	sVC	C	VOC
For			Arsenic	Cadmium	Chromium (III	Copper	Lead	Mercury	Nickel	Zinc	MBAS	Acenaphthene	Acenaphthylene	Anthracene	Benz	Benz	Benzo(b)&(k)fluoranther	Benz	Chrysene	Dibenz (a,h)anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-c,d) pyrd	Naphthalene	Phenanthrene	Pyrene	Total P.	ā.	Total	Phenolics Total	- 010 нат	TPH C15 -	L	TPH+C10 - C36 (Sum of	втех	трн се -	VOC in	
First 1981 1982								mg/kg																														
Field 10 LocCode Sample Depth Range The late Sample Depth Range The late Sample Depth Range Samp	EQL			4	0.5	1	1	1	0.1	1	1	_1_	0.1	0.1	0.1	0.1	0.05	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5	50	100	100		0.2		1
Field D LocCode Sample Depth Range SH1			nes																																1000		65	
BHT BHT	NEPM 1999	HIL F		500	100	500	5000	1500	75	3000	35000						5											100	50		42,500							
BHT BHT																																						
BH1-Tiplicate BH1-Tiplicat			Sample Depth Range																																			
BH10			2									-	<0.1	0.1	0.3	0.9	0.83	1.5	0.4	1.1	<0.1	2.1	<0.1	0.4	<0.1	1.5	1.8	10.93	<0.1	<0.1	<5	<50	<100	<100	-	ND	<25	
BH11					0.6	30			<0.1			-	-	-	-	-		'ـــــــــــــــــــــــــــــــــــــ	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-			
BH11					-	-			-			-																	-						-			
BH12 BH14 D.5			0.5		<0.5				0.1			-	<0.1		<0.1	<0.1	<0.05	<0.2	<0.1	<0.1	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1	ND	<0.1						-			
BH19			1		-	-			-			-	-		-	-		'ـــــــــــــــــــــــــــــــــــــ	-	-	-	-		-	-	-	-	-	-						-			
BH14 BH4 D2			1	-	-	-	-		-	-	-	-														<0.1	0.2	0.39	-	-	-				1250			
BH2				_	_	-	-		-	_		-																	-						-			
BHS					-				-			-																0.06							-			
BHS BHS SHS				-				-			-																							-				
BH4 BH5 D.5 44 0.5 67 0.7 17 5 0.0 18 28 0.0 18 28 0.0 0					1.4	16	56	8	< 0.1	67	53	-	<0.1	<0.1	<0.1	< 0.1	<0.05	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ND	<0.1		<5				-			
BH5 0.5 44 0.5 67 17 5 0.1 8 26 . 0.1					-	-	-	-	-	-		-	-	-	-	-		- '	-	-	-	-	-	-	-	-	-	-	-		-				-			
BH6												-																							-			- 1
BHF BHF 0.2 44 0.5 22 48 12 0.01 100 46 0.1 0.1 0.01										8		-																							170			
BH8 BH8 D2										7		-																							-			- 1
BH9					<0.5				< 0.1	100	46	-																	<0.1						-			
Dip BH1 2 33 1.1 29 170 130 50.1 41 330 - 40.1 0.1 0.3 0.9 0.84 1.5 0.4 1 - 40.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.1			0.2	-	-	-	-		-	-	-	-																	-	-	-				-			- 1
DUP3 BH9 1					-	-	-		-		-	-								<0.1									-		-				-			- 1
DP3 BH9 1			2	33	1.1	29	170	130	< 0.1	41	330	-	<0.1	0.1	0.3	0.9			0.4	1	<0.1	2.1		0.5	<0.1	1.2	1.8	10.74	< 0.1	ND	<5			<100	-			-
HA1			1		-	-	-		-	-		•																			-				390			-
HAZ HAZ 02 6 6 0.5 18 44 47 01 10 93 01 01 01 01 01 01 01 01 01 01 01 01 01	DUP3		1	-	-	-	-	11	-	-	-	-	<0.1	<0.1	<0.1	< 0.1			<0.1		<0.1	<0.1		<0.1	0.3	<0.1	<0.1		-	-	-	<50		<100	-	ND		-
HA3				<4	< 0.5	6	6	5	< 0.1	1	4	<1	<0.1	<0.1	<0.1	< 0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		,	-	<5				-	- 1	<25	- 1
HA4 HA5 0.5 7 0.5 13 35 63 0.2 9 120 · · · · · · · · · · · · · · · · · · ·	HA2	HA2	0.2	6	0.5	18	44	47	< 0.1	10	93	<1	<0.1	<0.1	<0.1	< 0.1	0.08	<0.2	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.1	0.2	0.5	,	-	<5	<50	<100	<100	-	- 1	<25	- 1
1445		HA3			< 0.5	16	320	23	0.1	6	86	<1	<0.1	<0.1	<0.1	< 0.1	0.05	<0.2	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.25	,	-	<5	<50	<100	<100	-	- 1	<25	- 1
H46	HA4	HA4	0.5	7	< 0.5	13	35	63	0.2	9	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		<0.1	-	-	<50	<100	<100	-	ND	-	ND
TRIPT BHT 2 < 5 <1 7 82 61 <1.0 1 23 328 - 40.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <	HA5	HA5		5	< 0.5	140	28	21	< 0.1	22	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	<50	<100	<100	-	ND	-	
TRIP2 BH12 1	HA6	HA6	0.2	<4	< 0.5	5	7	4	< 0.1	2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		<0.1	-	-	<50	<100	<100	-	ND	-	ND
TRIP2 BH12 1 112 0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	TRIP1	BH1	2	<5	<1	7	82	61	< 0.1	23	326	-	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	-	ND	<1	<50	<100	<100	<50	ND	<10	-
	TRIP2	BH12	1	-	-	-	-	112	-	-		-	<0.5	<0.5	<0.5	< 0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5			< 0.5	< 0.5		<0.5	ND	-	-	-	<50	630	360	990	ND	<10	- I
	TRIP3	BH9	1	-	-	-	-	17	-	-	-	-									<0.5			< 0.5			<0.5	ND	-	-	-					ND	<10	

ND - Non Detect
*See laboratory report for full list of analytes

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			8 H	IM in wat	er - disso	olved			MBAS	v٦	RH &	BTEX	in Wat	ter	sTi	RH in \	Nater (C10-C	36)	OCP
	Arsenic (Filtered)	Cadmium (Filtered)	Chromium (III+VI) (Filtered)	Copper (Filtered)	Lead (Filtered)	Mercury (Filtered)	Nickel (Filtered)	Zinc (Filtered)	MBAS	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	трн с6 - с9	TPH C10 - C14	TPH C15 - C28	TPH C29-C36	TPH+C10 - C36 (Sum of total)	OCP Sum of Total*
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L		μg/L		μg/L	μg/L
EQL	0.001	0.0001	0.001	0.001	0.001	0.00005	0.001	0.001	0.1	1	1	1	2	1	10	50	100	100		0.2
ANZECC 2000 MW 95%		0.0055		0.0013	0.0044	0.0004	0.07	0.015		700										
EPA 1994 Service Station Guidelines											300	800	600							
ANZECC 2000 Low Reliability Threshold																				
Dutch Intervention						,													600	

Field_ID	LocCode	Sampled_Date-Time																				
DUO1	GW2	17/05/2012	0.009	<0.0001	<0.001	<0.001	<0.001	<0.00005	<0.001	0.01	-	1	<1	<1	3	<1	670	830	<100	<100	830	ND
GW1	GW1	17/05/2012	<0.001	0.0001	<0.001	0.003	<0.001	<0.00005	0.002	0.016	-	<1	<1	<1	<2	<1	<10	<50	<100	<100	<250	ND
GW2	GW2	17/05/2012	0.009	< 0.0001	<0.001	0.002	<0.001	< 0.00005	<0.001	0.022	-	1	<1	<1	3	<1	700	680	<100	<100	680	ND
GW3	GW3	17/05/2012	<0.001	0.0001	<0.001	0.002	<0.001	<0.00005	0.002	0.023	-	<1	<1	<1	<2	<1	<10	<50	<100	<100	<250	ND
GW4	GW4	17/05/2012	< 0.001	0.0001	<0.001	0.003	<0.001	< 0.00005	0.003	0.021	<0.10	<1	<1	1	<2	<1	3900	<50	<100	<100	<250	ND
MW1	MW1	17/05/2012	0.002	0.0001	<0.001	<0.001	<0.001	<0.00005	<0.001	0.02	-	<1	<1	<1	<2	<1	<10	<50	<100	<100	<250	ND
MW2	MW2	17/05/2012	< 0.001	< 0.0001	<0.001	0.002	<0.001	< 0.00005	0.001	0.028		<1	<1	<1	<2	<1	<10	<50	<100	<100	<250	ND
TRIP 1	GW2	17/05/2012	0.01	< 0.0001	<0.001	< 0.001	<0.001	<0.0001	<0.001	0.006	-	1	-	-	-	-	660	1160	300	<50	1460	ND
TB1	TB1	17/05/2012		-	-	-	-	-	-		-	<1	<1	<1	<2	<1	<10	-	1	-	1	ND

1/06/2012 Page 1 of 3

ND- Non-detect
* See laboratory report for full list of analytes



									PAH	s in W	ater								PCB	Phenols																		
			Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b)&(k)fluoranthene	Benzo(g,h,i)perylene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	PCBs (Sum of total)*	Phenolics Total	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichlorobenzene	1,2,3-trichloropropane	1,2,4-trichlorobenzene	1,2,4-trimethylbenzene	1,2-dibromo-3-chloropropane	1,2-dibromoethane	1,2-dichlorobenzene	1,2-dichloroethane	1,2-dichloropropane	1,3,5-trimethylbenzene	1,3-dichlorobenzene
EQL			μg/L	μg/L	μg/L	μg/L	μg/L	μg/L 2	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L			μg/L 50	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
	000 MW 95%		_	_	_	_	_	2	_	_	_	_	_	-	70	_	_			400	_	_	_	1900	_	_	_	_	_	80	_	_	_	_	_	_	_	
	Service Station	Cuidolinos					0.01								70					400				1900						00								
		pility Threshold					0.01																										=					
Dutch Inter		bility Threshold	1												1		1															_	-	_			_	
Duton inter	vention																																					_
Field ID	LocCode	Sampled Date-Time																																				
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MW2	MW2	17/05/2012	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND	ND	<50	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-
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1/06/2012 Page 2 of 3

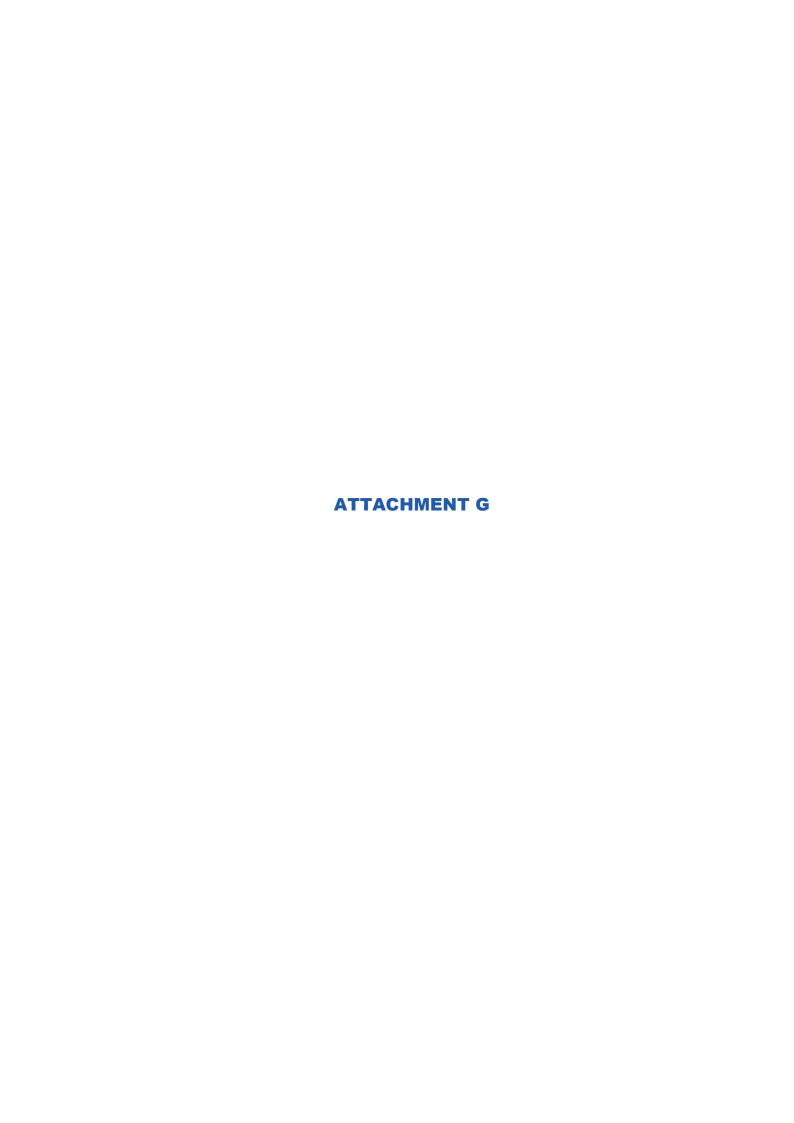
ND- Non-detect
* See laboratory report for full list of analytes



										VO	Cs in v	vator																									—
			1,3-dichloropropane	1,4-dichlorobenzene	2,2-dichloropropane	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Cyclohexane	Dibromomethane	Dichlorodifluoromethane	Hexachlorobutadiene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyftoluene	sec-butylbenzene	Styrene	Trichloroethene	tert-butylbenzene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Trichlorofluoromethane	Vinyl chloride
Eo.			μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	mg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L		μg/L
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GW2	GW2	17/05/2012	-	-	-	-	1	-	1	-	1	-	-	-		-	-	-	-		1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
GW3		17/05/2012		-	1	-	1	-	1	-	1	1	-	-	-	1	-	1	1	-	-	-	-	1	1	-	1	-	-	1	-	1	-	-	-	-	-
GW4	GW4	17/05/2012	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<10	3	<10	1200	<1	<0.001	<1	<10	<1	<1	<1	<1	<1	<1	<1	1200	<1	2	13	<1	<10	950
MW1	MW1	17/05/2012		-	1	-	1	-	1	-	1	1	-	-	-	1	-	1	1	-		-	-	1	1	-	1	-	-	1	-	1	-	-	-	-	-
MW2	MW2	17/05/2012	-	-	1	-	1	-	1	-	ì	ì	-	-	-	-	-	•	ı	-	-	-	-	-		-	1	-	-	1	-	ı	-	-	-	-	-
TRIP 1	GW2	17/05/2012		-	1	-	1	-	1	-	1	1	-	-	-	1	-	1	1	-		-	-	1	1	-	1	-	-	1	-	1	-	-	-	-	-
TB1	TB1	17/05/2012		-	1	-	1	-	1	-	1	1	-	-	-	1	-	-	1	-		-	-	1	1	-	-	-	-	-	-	1	-	-	-	-	-

1/06/2012 Page 3 of 3

ND- Non-detect
* See laboratory report for full list of analytes







Detailed Site Investigation 11-13 Percy Street, Auburn NSW





Detailed Site Investigation 11-13 Percy Street, Auburn NSW









Detailed Site Investigation 11-13 Percy Street, Auburn NSW





AERIAL PHOTOGRAPH - 2007

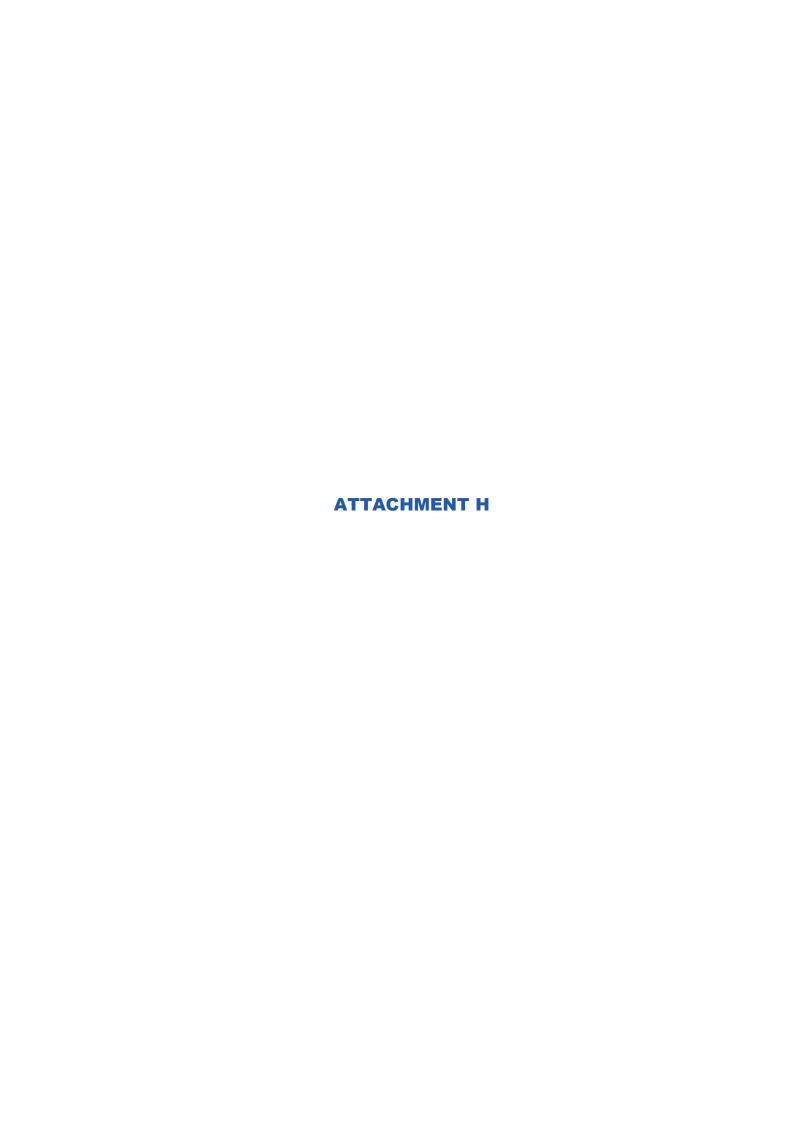
Detailed Site Investigation 11-13 Percy Street, Auburn NSW





AERIAL PHOTOGRAPH - 2019

Detailed Site Investigation 11-13 Percy Street, Auburn NSW



Municipality of Auburn

All communications to be addressed to THE TOWN CLERK P.O. BOX 118, AUBURN, N.S.W. 2144 Telephone: 649 6011



Council Chambers Auburn 2144

In reply quote

d.

ment Act, 1979.

Delete whichever is inapplicable.

CG: NWH: KB DCU 17 16/12/81 December 18, 1981

Environmental Planning and Assessment Act, 1979

Notice to Applicant of Determination of a **Development Application**

Check Trans Pty. Limited, 5-7 Salisbury Street, N.S.W.

Pursu	ant to section 92 of the Act notice is hereby given of the determination							
by the consent authority of the development application No. 279/81								
relating to the land described as follows:-								
Valuation/Assessment No. Street No., Name 11-13 Percy Street								
Estate	e/D.P. – Section – Lot –							
Local	ity Auburn							
Descr	ription of development for the purpose of the installation of a							
.25.,0	00 litre underground petrol tank							
The o	development application has been determined by -							
*(a)	scanting of consent our conditionally:							
*(b)	granting of consent subject to the conditions specified in this notice;							
*(c)	refusing of consent.							
a.	the proposed tank to be located in accordance with the plan submitted with the application being Drawing No. H.L.P.I.							
b.	compliance with the requirements of the Department of Industrial Relations and Technology.							
c.	compliance with the requirements of Council's Health and Building Department.							
	·							

compliance with the provisions of the Local Government Act, 1919, Ordinances thereunder and any other Acts administered by Council which

e. compliance with the provisions of the Environmental Planning and Assess-

may be applicable to the subject application.

determination of this application of the inserve a to religious tensor ad-

See back hereof for reasons of conditions/refused and notes relating to the

Municipality of Suburn

INCOSPOSATED 1892

AB certifications to be addressed to THE TOWN CLERK P.O. BOX [18, AUBURN, N.S.W., 2144 Telephone: 649 0011

Dependen 18, 1981

Consumed Rhamslores

In reply quote = CG (MAGE) SE = 21/ L | DOU 17 | 18/12/91 |

Environmental Planning and Assessment Act, 1979

The reasons for the conditions/the refusal are set out as follows:

a. to ensure that all other Acts and requirements of Council's area of responsibility are observed.

Check Grane Pty. Limited, 5-7 Salisbury Cireet, Augyse. H.S.W. 2144

Pursuant to section 92 of the Act notice is hereby given of the determination by the consent authority of the development application No. 279/81, relating to the land described as follows:

Valuation (Assessment No. Street No., Name IL-13 Parcy Street

Estate D.P. . Section - Lot -

cenaduá villano.

Description of development for the purpose of the installation of a

The development application has been determined by -

- (a) grapitago of content successificantly:
- (b) granting of consent subject to the conditions specified in this notice:
 - damescoolectariades (c)
- a. The proposed tank to be located in accordance with the plan submitted with the application being Drawing No. H.L.P.I.
 - b. compliance with the requirements of the Espartment of Industrial Relations and Technology.
 - Endorsement of date of consent December 21, 1981
- d. compliance with the provisions of the local Government Act, 1213, Crd-
 - (1) To ascertain the date upon which the consent becomes effective refer to section 93 of the Act.
- (2) To ascertain the extent to which the consent is liable to lapse refer to section 99 of the Act.
 - (3) Section 97 of the Act confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of this notice.

- f. no retail sale of petrol to be made under any circumstances.
- g. all petrol stored within the tanks is to be used exclusively by vehicles owned or operated by Check Trans Pty. Limited, being the occupants of Building M4.

C. GOLDSWORTHY TOWN CLERK





AUBURN COUNCIL

HOME OF THE 2000 OLYMPICS

APPLICATION NO. (OFFICE USE ONLY) DA: 217/99

CC:

ACTIVITY:

Many Cultures, one community.

36 Auburn Road, PO Box 118 Auburn, NSW 1835 Australia
Telephone 9735 1222 Facsimile 9643 1120

I AND USE APPLICATION

▼ Part A	- Ty	pe of a	plicatio	n requir	ed				
			Details r	nust be printed	ın ınk. Tick Ø as ap				
De	velo	pment App	olication			Combi	ned Dev	velopment a	and
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		& Assessmo							• •
		iction Cert				Modification of a consent			
I				& 81A(4) of t	1		s96(1))		
		1979)	(- // (- /					be modified for b	uilding work)
Ot	her a	pproval ur	nder s68 d	of the Loca				f a consent	
		ment Act			I I		s96(2))		
				ac opcomy)		•	, , ,	be modified for b	uilding work)
▼ Part B	- A	pplicant	and site	details					
	iptio	n of prop	erty						
Street No.		Street						Suburb	
11 - 13	<u> </u>	Percy	Stree					Aubur	
Lot No.		Section Nb	(if applicabl	e) Depos	ited/Strata Plan	No.	Prope	rty No. (Office	use only)
B					419168	}		2900 .	60/1
3. Cost	ods of d	of h	val (on haza	mmerchedous)	use of distribution of development, in	400 155	of witabl	non-de e for re	i 🗸 🔒
Surname (or		pany Name)			Given Na	mes (or	ACN)		
A.Ral	1.	- sedice "	5 0000	1 PI 1	td ACN			485	
AirRoad Postal Addre	100	9/5/16 >	<u>sapport</u>	177	34 ACIO	011	<u> </u>	4 -02	stcode
									
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					Signature			at	e / / .
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					fice use only)				
foo (bld	000	Fee	Receipt	Date		<u> </u>	Fee	Receipt	Date
fee (bld work)	022				S94 - open space	56			
fee (subd work) fee (other)	053 022	17	2206	all loc	S94 - comm facilit				
signated DA	022	170.00	33981	8/4 99	S94 - drainage Damage deposit	176	-		
vertising fee	182				Other bonds	216			
grated DA	<u> </u>				Compliance Cert	183			
g Service Levy	254				Occupation Cert	- 	 		+
struction Cert	17				Inspection fees	007			1
4 - carparking	14			 			 		

TOTAL

V P	art C - Develo	pmei	nt details					1 3	
				Øseled	tions				
5.	Integrated	LEGISLATION						AGENCY	
	Development	☐ Fis	heries Manageme	NSW Fisheries					
	Will the	☐ He	ritage Act (s 58)	Heritage Council					
	development		ne Subsidence Co	Mine Subsidence					
	require an		tional Parks and V	·				NPWS	. 60
	approval under		lution Control Act	EPA					
	the following legislation?	İ						,	
			ers and Foreshore	•	CL 194	o (rait s	ν, (Δ	DLWC	
ı	☐ YES		ads Act 1993 (s 10	•				RTA	
	(nominate legislation)		iste Minimisation A		•			EPA	
ı	NO NO	☐ Wa	iter Act 1912 (s 10), 13A, 18	F, 20E	3, 20CA	20L, 116	DLWC	
	•	Pt	8)						
Please		ie shall b	fee is required whe e made payable to t be lodged directly	the releva	nt ager	ncy and k	odged with Co	ouncil.	
								outside agencies is re	equired.
6.	Are you apply	-	Stormwater	☐ Place	of public entertainment				
	for any of the		☐ Building waste container on ☐ Temp					orary Structure	
	activities und		footpath	☐ Sentic	Tank, waste treatment				
	Government		_ `		itinone				
	1993?		Domestic oi	i/solia tu	ei nea	system			
	YES \ (nomin	ate)	☐ Moveable dwelling, ☐ Oth					er	
	NO B	···-	manufactured home						 7
7.	Do you need		1	-		-	quired if the	e development in	volves
	pay the Build Industry Lon	_		anig 170.	0,,0		+- (
	Service Levy	_	NO ZI						
			<u> </u>						
	Part D - State	ment	of Environm	nental	Effe	cts			
	- · · · · ·			· · · · · ·					
8.				esses t	he fo	llowin	g topics,	where relevant	t to the
\	proposed de	velop	ment	TICK		NI	A		TICK
A	Site suitability			TICK	F	⊥ <u>ι'</u> ∐Air ar	id noise		1101
В	Present and pre								
С	Operation and n	nanagement H Energy					· · · · · · · · · · · · · · · · · · ·		
D	Access and traff				1	Wast	e		:
E	Privacy, views, of Note:	oversh	adowing	<u> </u>	<u> </u>				<u> </u>
When enviro a) de	e a proposed develop onmental effects unles emonstrate that the en et out steps to be taken	s the de vironme	velopment is consid ital impact of the de	ered to ha	ve neg t has b	iligible ef neen cons	fect (eg: mind	npanied by a statem or internal alteration)	ent of which musi

9.	Are you applying for a construction	YES		You must specificat		d construction di	awings and
	certificate now?	NO	7	specificat		-	on plans and pply either to Council
OTE	: IF YOU ANSWERED	YES 1	OQ				COMPLETED
	IF YOU ANSWERED						
		IED DI		ED DETA	11.0		
0. Nam	BUILDER OR OWN	IEK-BI	UILL	EKUETA	1179	Builders Lice	ence No
INaiii	C					Julia 210	31,00
Addr	ess				Postcode	Telephone N	10.
Own	er-Builder Permit	Date o	f Issu	ıe	Office Use o	_/\ nlv	
No.	Cr Banasi r Sillin				Permit sighté	, •	Date:
lease	Note				/.		0 5 71
. You	i must confirm in writing the mit) before a Construction C	builder's `ertificate	name	e, address and	l licence number	(or provide a copy	of the Owner-Builder
pen L. An	Owner-Builder permit is requ	uired for	reside	ential building	work that exceed	ls a value of \$3,000	Such applications must b
	de to the Department of Fair			·			
44	Da way mand Ham	e 🗆	·	Yes	Aloto: If a	vou are using a l	icensed builder for
11.	Do you need Hom Building Act	e _		162			exceeding \$5,000 you
	insurance?			Not relevan			ng Act insurance. A
	Illourance:						
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2. Should the number of inspections exceeds the initial estimate, an invoice will be forwarded for the additional inspection

days prior to the commencement of work.

fees.

V P	art G - Statisti	car rett	urn	(for the Austra (for constructi				y)	
13.	Particulars of	the prop	osa	I			/		
What	is the area of the la	nd?			oes the site	contair	a dual /		
(m2)				l	ccupancy?				
Gros	s floor area of existir	ng		H	low many sto	reys w	ill the		
buildi	ing (m2).	_		į b	ouilding consis	st of?			
If no	existing building, wri	te "NIL"							
	t is the existing buildi	ing or site		Main use:					
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\A/b o	t will the proposed bu	uilding bo		Main use	erations, joiny	give a	ie auditional not	or area	
used		uliuling be		Iviaiii use					
useu	IOI !			Other uses:					
How	many dwellings			(a) are presently at this address? dwellings					
				(b) are proposed				vellings	
				are proposed				vellings	
14.	Materials to b		-						
Ø	WALLS	CODE	Ø	ROOF	CODE	Ø	FLOOR	CODE	
	Brick veneer	12	<u> </u>	Alumigium	70		Concrete	20	
	Full brick	11		Concrete	20		Timber	10	
	Single brick	11		Concrete tile	10		Other	80	
	Concrete block	11		Fibrous tile	30		Unknown	90-	
	Concrete/masonry	20	 	/ Fibrous cement	30				
	Concrete	20	1	Fibreglass	80				
	Steel	60	/	Masonry tiles	10	1			
	Fibrous plaster	30 /	1	Slate	20				
	Hardiplank	30		Steel	60				
	Timber/	40		Terracotta shing	le 10	Ø	FRAME	CODE	

Cladding - aluminium	70	Terracotta tile	10	Timber	. 40
Curtain glass	50	Other	. 80	Steel	60
Other	80	Unknown	90	Other	80
Unknown	90			Unknown	90
Part H - Cons	ent of Ow	ner - if applicat	nt is not t	he owner	
. (All owners mu	ist sign)	conse.	~t let	ter a Ha	iched
urname (or Company	Name)		Given Name	s (or ACN)	
DIVAMI PTY	Limite	EO V	೦೦3 ೦	20166	
ostal Address					Postcode
0 Box 50	69	Turramura	9		2074
the owner of th	e above pr	operty, I/we conse		application	
		aHached			Date 293
te: Where the owner	is a Company	or Owner's Association	n, this form m	ust be signed by a Di	rector or Secreta



AUBURN COUNCIL

HOME OF THE 2000 OLYMPICS

Many Cultures, one community.

PO Box 118 Auburn, NSW Australia

Telephone 9735 1222 Facsimile 9643 1120

Notice of determination of development application (Form 4)

(Section 81(1)(a) - the Environmental Planning and Assessment Act 1979)

Ref. No.	IY:EG:217/99
Development Application	217/99
Applicant name	AIR ROAD LOGISTICS SUPPORT P/L
Applicant address	31 NYRANG ST
	LIDCOMBE 2141
Land to be developed: address	DP 419168 Lot B
	A PERCY STREET, AUBURN
Proposed development	WAREHOUSING & DISTRIBUTION OF NON-DANGEROUS
	GOODS
Building Code of Australia	1
classification	
	THE BUILDING IS A CLASS 7
Determination	
Date of determination	APRIL 30, 1999
Determination	CONDITIONAL APPROVAL
	,

The consent is granted subject to the following conditions:

1. Approved Plans

The development is to be carried out in accordance with the approved stamped plans, numbered 217/99 Sheets 1-3 and dated 8/4/1999, except as otherwise provided by the conditions of this determination (Note:- modifications to the approved plans will require the lodgment and consideration by Council of a modification pursuant to Section 96 of the Environmental Planning and Assessment Act).

Reason:- to confirm and clarify the terms of Council's approval.

2. Time period of consent

This consent shall lapse five (5) years from the date of determination unless the approved building, engineering or construction work has been physically commenced in accordance with this consent.

Development consent for the use of land does not lapse if the approved use of any land, building or work is actually commenced prior to the date on which the consent would otherwise lapse.

Reason: To satisfy the requirements of Section 95 of the Environmental Planning and Assessment Act.

3. Provision of Street Numbers on the development

Street numbers are to be clearly displayed prior to occupation of the building. Numbers are to be of a colour contrasting with the wall to which they are affixed.

Reason:- to clearly identify the street number of the property.

4. Hours of operation

The hours of operation of the development are limited to 6.30 a.m. to 11.30 p.m. on Mondays to Fridays.

<u>Reason</u>:- to limit the operating hours of the development so as to reduce the likely nuisance on adjoining development.

5. No advertising approved

Advertising structures or signs shall not be erected, affixed, painted or displayed without prior Council consent.

<u>Reason</u>:- to prevent the proliferation of signs which will result in a degradation of the visual quality of the area.

6. Display of goods not permitted outside property

Materials, goods or advertising structures are not to be stored, placed or displayed anywhere outside the property.

<u>Reason</u>:- to avoid visual intrusion into areas adjoining the site.

7. Number of car parking spaces

A total of 135 one hundred and thirty five off-street car parking spaces are to be provided to the development. The spaces are to have minimum dimensions of 5.5 m x 2.5 m and be suitably sealed, marked, drained and freely accessible at all times.

Reason:- to ensure there is sufficient car parking for the development.

8. Vehicles related to the development to be parked on the development site

All company and/or commercial vehicles associated with the use of the premises shall be parked within the confines of the site at all times.

<u>Reason</u>:- to ensure the use of the premises does not impact onto the street and affect surrounding development.

9. Vehicles driven in forward direction

All vehicles must be driven in a forward direction at all times when entering or leaving the premises.

<u>Reason</u>:- to preserve and enhance the safe operation of the car parking area.

10. Loading and unloading of vehicles

The floor space within the building adjacent to the roller shutter door shall be reserved at all times for the use of vehicles to stand thereon for the purpose of loading or unloading. The space set aside must be at least the width of the roller shutter opening and for a depth within the building of at least 8 metres.

<u>Reason</u>:- to assist in keeping general vehicle circulation areas clear of obstruction.

11. Loading and unloading of vehicles

All vehicles being loaded and unloaded must stand wholly within the property.

<u>Reason</u>:- to contain all vehicle movements associated with the use within the subject property.

12. Trade waste containers to be stored within the building

An adequate area is to be set aside within the building for the storage of trade waste containers. Such space is to have minimum dimensions of 3.0 metres x 2.0 metres and must be reserved at all times for the storage of trade waste containers.

<u>Reason</u>:- to ensure the trade waste containers are stored within the building to prevent vandalism, arson and possible pollution to the external environment.

13. Building not to be adapted for another use

The building is to be used for warehousing and distribution of goods of commercial goods only and is not to be altered or adapted for another use without the prior consent of Council.

<u>Reason</u>:- the building has only been approved for this use and other uses require a separate approval of Council.

14. Sale & display of Goods

No direct sale or display of goods to the general public to be made under any circumstances.

Reason: To control and regulate the use of the premises.

15. Offices

Offices are to be used solely in conjunction with the industrial use being carried out on the property and are not to be let separately.

Reason: To control and regulate the use of the premises.

Consent to operate from:	April 30, 1999	(see note 1)		
Consent to lapse on:	April 30, 2004			
Right of appeal (also see note 3)	If you are dissatisfied with this decision section 97 of the <i>Environmental Planning and Assessment Act 1979</i> gives you the right to appeal to the Land and Environment Court within 12 months after the date on which you receive this notice			
	does not apply to the de	nmental Planning and Assessment Act 1979 termination of a development application for oment or local designated development that Commission of Inquiry.		
Signed	on behalf of the consent auth	nority		
Signature				
Name	IDALY YAP TOWN PLANNER	.3		
Note 1	operate until the applicant s	to a condition that the consent is not to atisfies a particular condition the date that condition has been satisfied.		
Note 2	included in a notice of deter	n contains additional particulars to be mination where a condition under section 94 ng and Assessment Act 1979 has been		
Note 3		nental Planning and Assessment Act permits n		

Job No: 2012/1627

Thursday, 20 December 2012

Auburn Council PO Box 118 Auburn NSW 1835

Attention: General Manager

AUBURN COUNCIL

File No:

2 - JAN 2013

REFERRED TO:

CDSPPC 2/2013 \$36-RN: 701067 3/1/2013

SYDNEY . BRISBANE

RE: Complying Development Certificate No. 12/1627/01 11-13 Percy Street, Auburn

Please find attached a copy of Complying Development Certificate 12/1627/01 and required attachments issued by Steve Watson & Partners for the above mentioned development in accordance with Section 85, 85A of the Environmental Planning and Assessment Act 1979.

Please also find attached a cheque for \$36 for the registration of the Complying Development Certificate.

Can you please forward SWP a receipt for the acknowledgment of the lodgement cheque?

If you have any gueries please do not hesitate to contact me on (02) 9283 6555.

k Hontas

Steve Watson & Partners

Job No: 2012/1627

Thursday, 20 December 2012

Auburn Council PO Box 118 Auburn NSW 1835

Attention: General Manager

RE: Notice of Commencement

11-13 Percy Street, Auburn

CDC: 12/1627/01

Description of work: Construction of new internal wall and external partial demolition to North West corner of warehouse building

Please find enclosed a Notice of Commencement form in accordance with either Section 81(A) 2(a)(ii) and 2(c), or Section 86 (1) of the Environmental Planning and Assessment Act 1979, as applicable.

Please note that the following inspections are required under Clause 162A of the Environmental Planning and Assessment Regulation. These inspections are required to be carried out by an accredited certifier and we are unable to accept inspection records form engineers who do not hold the appropriate accreditation. SWP requires 48 hours notice of these inspections and work cannot continue to its subsequent stage until these inspections are carried out.

	Class 5, 6, 7, 8 or 9 Inspections	Action by
1.	After the building work has been completed and prior to any occupation	SWP
	certificate being issued in relation to the building	

Should you have any queries, please contact myself on (02) 9283 6555.

Nick Hontas

Building Regulations Consultant Steve Watson and Partners Pty Ltd



COMPLYING DEVELOPMENT CERTIFICATE

BUILDING REGULATIONS CONSULTANTS AND CERTIFIERS FIRE SAFETY ENGINEERS

LEVEL 5, 432 KENT STREET, SYDNEY NSW 2000 TEL +61 2 9283 6555 FAX +61 2 9283 8500 sydney@swpariners.com.au www.swpariners.com.au ABN 48 102 366 576

Issued under the Environmental Planning and Assessment Act 1979 Section 85, 85A

Complying Development Certificate No. 12/1627/01

Steve Watson and Partners certify that the proposed development is complying development and that if carried out in accordance with the approved plans and specifications will comply with all development standards, any standards in a DCP and all requirements of the Regulation under the *Environmental Planning and Assessment Act* 1979.

Applicant	Name: Motive Properties Pty Ltd Address: PO Box 556				
	Suburb: Ryde State: NSW	Postcode: 1680			
Location of the Property	Address: 11-13 Percy Street				
	Suburb: Auburn State: NSW	Postcode: 2144			
	Real Property Description: Lots A and B DP419168	**************************************			
Proposed Complying	Type: Carrying out of work				
Development	Description: Construction of new internal wall and external partial demolition to north west				
	corner of warehouse building				
	Proposed Use: Warehouse				
	Building Code of Australia Classification: Class 7b				
Date of Receipt	Date Received: 19th December 2012				
Determination	Approved				
	Date of Determination: 20th December 2012				
Date of Lapse	20th December 2017				
Environmental Planning Instrument Decision Made Under	State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 – Part 5 and Part 7				
Land Use Zone	Zone IN1 – General Industrial	(4.1407011			

Prior to commencement of work s 86 (1) and (2) of the Environmental Planning and Assessment Act 1979 must be satisfied

Guiseppe Graziano (BPB0144) on behalf of

Steve Watson and Partners

Accreditation Body: BPB

Accreditation no: ABC 1

12/1627/01
Complying Devolopment Certificate Accredited Budy Comercie #ABO1

Date of Endorsement: Thursday, 20 December 2012

Design documentation approved for Complying Development Certificate 12/1627/01 for 11-13 Percy Street, Auburn

Drawing No.	Drawing Title	Revision	Date	Drawn by
CDC01	Site plan	С	03/12/12	Nordon Jago
CDC02	Demolition photos	В	03/12/12	Nordon Jago
CDC03	New wall details	В	03/12/12	Nordon Jago

Documentation relied upon to issue Complying Development Certificate 12/1627/01 for 11-13 Percy Street, Auburn

Item No	Description	Date
1.	Pre-CDC inspection record	20/12/12
2.	Application for Complying Development Certificate	19/12/12
3.	Existing and proposed fire safety schedule	-
4.	Evidence of Long Service Levy Payment	07/12/12
5.	Structural design documentation from Van Der Meer Consulting	22/10/12
6.	Complying Development Certificate Conditions	8

12/102//01
Complying Devalopment Certificate
Accredited Body Cornorate #ABC1

FIRE SAFETY SCHEDULE



11-13 Percy Street, Auburn

CDC No. 12/1627/01

Existing Fire Safety Schedule

Unit No.	Measure	Standard of Performance
1,	Automatic fire suppression systems (Sprinklers)	BCA Specification E1.5 and AS 2118.1
2.	Emergency Lighting	BCA Clause E4.2, E4.4 and AS 2293.1
3.	Exit Signs	BCA2 Clause E4.5, NSW E4.6, E4.8 and AS 2293.1
4.	Fire Doors	BCA Specification C3.4 and AS 1905.1
5.	Fire Hydrants Systems	BCA Clause E1.3 and AS 2419.1
6.	Fire seals protecting opening in fire resisting components of the building	BCA Clause C3.15
7.	Hose Reel System	BCA Clause E1.4 and AS 2441
8.	Portable Fire Extinguishers	BCA Clause E1.6 and AS 2444

Proposed Fire Safety Schedule

Unit No.	Measure	Standard of Performance
1,	Automatic fire suppression systems (Sprinklers)	BCA2012 Specification E1.5 and AS 2118.1 – 1999

12/162//01

Complying Development Certificate Accredited Body Compare #ABC1

Division 2 Conditions applying to complying development certificate under this code

Note 1. Complying development must comply with the requirements of the Act, the *Environmental Planning and Assessment Regulation 2000* and the conditions listed in this Part.

Note 2. A contributions plan setting out the contribution requirements towards the provision or improvement of public amenities or public services may specify that an accredited certifier must, under section 94EC of the Act, impose a condition on a complying development certificate requiring the payment of a monetary contribution in accordance with that plan. Contributions may be imposed in respect of development on certain land under section 61 the City of Sydney Act 1988.

Subdivision 1 Conditions applying before works commence

5.13 Protection of adjoining areas

A hoarding or a temporary construction site fence must be erected between the work site and adjoining lands before the works begin and must be kept in place until after the completion of works if the works:

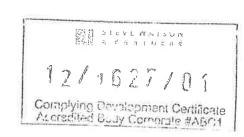
- (a) could cause a danger, obstruction or inconvenience to pedestrian or vehicular traffic, or
- (b) could cause damage to adjoining lands by falling objects, or
- (c) involve the enclosure of a public place or part of a public place. Note. See the entry in the General Exempt Development Code for scaffolding, hoardings and temporary construction site fences.

5.14 Toilet facilities

- (1) Toilet facilities must be available or provided at the work site before works begin and must be maintained until the works are completed at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site.
- (2) Each toilet must:
 - (a) be a standard flushing toilet connected to a public sewer, or
 - (b) have an on-site effluent disposal system approved under the *Local Government Act 1993*, or
 - (c) be a temporary chemical closet approved under the *Local Government Act 1993*.

5.15 Garbage receptacle

- (1) A garbage receptacle must be provided at the work site before works begin and must be maintained until the works are completed.
- (2) The garbage receptacle must have a tight fitting lid and be suitable for the reception of food scraps and papers.



Subdivision 2 Conditions applying during the works

Note. The Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (Noise Control) Regulation 2008 contain provisions relating to noise.

5.16 Hours for construction

Construction that is audible in any dwelling on an adjoining lot may only be carried out between 7.00 am and 8.00 pm on Monday to Saturday.

5.17 Compliance with plans

Works must be carried out in accordance with the plans and specifications to which the complying development certificate relates.

5.18 Maintenance of site

- (1) Building materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.
- (2) Waste materials must be disposed of at a waste management facility.
- (3) The work site must be left clear of waste and debris at the completion of the works.

Subdivision 3 Construction requirements

5.19 Utility services

If the complying development requires alteration to, or the relocation of, utility services on the lot on which the complying development is carried out, the complying development is not complete until all such works are carried out.

5.20 Mechanical ventilation systems

If the complying development is a mechanical ventilation system that is a regulated system in regulated premises within the meaning of the Public Health Act 1991, the system must be notified as required by the Public Health (Microbial Control) Regulation 2000, before an occupation certificate (whether interim or final) for the complying development is issued.

5.21 Food businesses

If the complying development is a *food business* within the meaning of the *Food Act 2003*, the food business must be notified as required by that Act or licensed as required by the *Food Regulation 2004*, before an occupation certificate (whether interim or final) for the complying development is issued.

5,22 Premises where skin penetration procedures are carried out

If the complying development involves premises at which a skin penetration procedure within the meaning of the Public Health Act 1991 will be carried out, the premises must be notified as required under the Public Health (Skin Penetration) Regulation 2000 before an occupation certificate (whether interim or final) for the complying development is issued.

Motive Properties Pty Limited PO Box 556 RYDE NSW 1680

Notice of determination of development application (Form 4)

(Section 81(1)(a) - the Environmental Planning and Assessment Act 1979)

Development Application	DA-371/2012
Land to be developed	Lot B DP 419168, Lot A DP 419168, 11-13 Percy Street,
	AUBURN
Proposed development	Boundary re-alignment between two existing industrial
	allotments.
Determination	

The consent is granted subject to the following conditions:

1. Approved Plans

The development is to be carried out in accordance with the approved stamped plans as numbered below:

Plan Number	Prepare	ed By	Revision No.	Dated
Sheet 1 of 5 to 5 of 5	Damien	Joseph	-	19/11/12 &
Draft plan of	Maguire			30/01/13
subdivision of Lots A	_			
& B in DP 419168				
DA01F - Subdivision	Nordon	Jago	F	30/01/2013
plan	Architects			
120236E1 – Proposed	Barker	Ryan	D	25/01/2013
Lot 1 parking layout	Stewart	-		
120236E2 - Proposed	Barker	Ryan	D	25/01/2013
Lot 2 parking layout	Stewart			

except as otherwise provided by the conditions of this determination (Note:modifications to the approved plans will require the lodgement and consideration by Council of a modification pursuant to Section 96 of the Environmental Planning and Assessment Act).

Reason:- to confirm and clarify the terms of Council's approval.

2. Time period of consent

This consent shall lapse five (5) years from the date of determination unless the approved building, engineering or construction work has been physically commenced in accordance with this consent.

Development consent for the use of land does not lapse if the approved use of any land, building or work is actually commenced prior to the date on which the consent would otherwise lapse.

<u>Reason</u>:- to satisfy the requirements of Section 95 of the Environmental Planning and Assessment Act.

3. Arrangements for electricity and telephone services

Satisfactory arrangements are to be made with Energy Australia, Telstra and/or Optus for the provision of services to and within the subject land. Written evidence of such arrangements shall be submitted to Council **prior to the issue of the subdivision certificate.**

Reason:- to ensure these services are available to the site.

4. Arrangements for Water and Sewer Services

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained.

Application must be made through an authorised Water Servicing Coordinator, for details see the Sydney Water web site www.sydneywater.com.au/customer/urban/index or telephone 132 092.

Following application a "Notice of Requirements" will be forwarded detailing water and sewer extensions to be built or charges to be paid. Please make early contact with the Coordinator, since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscaping design.

The Section 73 Certificate must be submitted to Council **prior to release of the final plan of subdivision**.

Reason:- to ensure that adequate water and sewer services can be provided to the site.

5. Removal of obstructions

All obstructions within the proposed Right of Carriageway, loading bays, parking bays and parking aisles shall be removed or demolished (in accordance with a separate development consent or Complying Development Certificate), **prior to the approval of the Linen Plan of Subdivision.**

In this regard,

- a) All parking and loading bays shall be line marked
- b) A work-as-executed plan prepared by a registered surveyor showing all designated parking bays and loading bays shall be submitted to Council.

Reason:- to ensure right of way is clear of any obstructions.

6. Services Diagram – for existing buildings affected by a subdivision

A services diagram, prepared by a registered surveyor, detailing the location of all sewer, water, stormwater and electrical services to the existing dwelling, shall be submitted to Council prior to issue of Subdivision Certificate. Where the existing services encroach upon the proposed new allotment, it will be necessary to:-

- redirect services prior to endorsement of the plan of subdivision and approval of the subdivisions certificate. The services diagram shall confirm the locations of any redirected services; or
- b) create an easement for services under section 88B of the Conveyancing Act 1919. The section 88B instrument shall be submitted to Council with the final plan of subdivision for approval.

Reason:- to ensure the adequate provision and protection of services.

7. Submission of Plan of Subdivision

Submission of an original plan of subdivision together with seven (7) copies. Note: A Subdivision Certificate release fee is payable to Council before collection of the Council endorsed final plan of subdivision.

Reason:- to provide adequate number of plans.

8. Approval of Subdivision Plan

The final plan of subdivision and subdivision certificate will not be endorsed by Council unless the subdivision has been completed in accordance with the conditions contained in the notice of determination of development application DA 371/2012 and approved plans.

Reason:- to ensure the development proceeds in accordance with the approved plans.

9. Occupation Certificate

A person must not commence occupation or use of the whole or part of a new building unless an occupation certificate has been issued in relation to the building or part.

The application for an Occupation Certificate must be made to the Principal Certifying Authority (Council or an accredited certifier) using the approved form.

<u>Reason</u>:- to comply with the requirements of Section 109M/N of the Environmental Planning and Assessment Act.

10. Bicycle Rack

Provision shall be made for a secure bicycle rack in a safe and convenient location for each Lot within the development. The rack shall comply with the relevant Australian Standards.

Details demonstrating compliance with the above requirements shall be submitted to Council prior to the issue of the Subdivision Certificate.

Reason:- to comply with the Parking And Loading DCP

11. Parking and Loading

Prior to the release of the Linen Plan of subdivision, the following details shall be submitted to Council:

- The submitted plan DA01 issue F dated 30. 01. 2013 prepared by Nordon Jago 1. Architects shall be amended to annotate:
 - a) Distance between the buildings.
 - a) Distance between the building located within proposed Lot 1 and the kerb along the southern boundary.
 - b) Width of all parking bays and aisle widths. (All dimensions shall comply with relevant Australian Standards).
- 1. All required detailed turning circle (swept path) shall be shown at every designated loading bay to ensure that the trucks can manoeuvre without encroaching the parking bays.

Reason:- to ensure parking bay compliance and adequate manoeuvring for truck access to loading areas.

12. Splay at North-Eastern Corner

A splay shall be provided at the proposed right of ways at the north-eastern corner of proposed Lot 1. The size of the splay shall be similar to the proposed splay at the southeastern corner of proposed Lot 1. Details shall be submitted with the application for Subdivision Certificate.

Reason:- to ensure the right way for truck movements.

13. Right of Carriageway and Drainage Easements

Right of carriage way and drainage easements widths shall comply with the draft plans of subdivision dated 30.01. 2013 and 19. 11. 2012 prepared by Damian Joseph Maguire.

Reason:- to ensure adequate right of way and drainage easements are provided.

14. Compliance with the Building Code of Australia

All building work must be carried out in accordance with the requirements of the Building Code of Australia.

Reason:- to ensure compliance with the requirements of the Building Code of Australia and to comply with Clause 98 of the Environmental Planning and Assessment Regulation 2000.

15. Automatic Fire Sprinkler System

Automatic Fire Sprinkler System to be installed in accordance with the requirements of AS 2118.1 – 1999 Emergency Lighting and Illuminated Exit Signs

A complete system of emergency lighting and illuminated exit signs is to be installed throughout the building.

Reason: to assist people exiting the building in the event of power failure.

16. Fire Hydrant System

Fire Hydrant System to be installed in accordance with the requirements of AS 2419.1-2005 Emergency Lighting and Illuminated Exit Signs

A complete system of emergency lighting and illuminated exit signs is to be installed throughout the building.

Reason: to assist people exiting the building in the event of power failure.

Emergency <u>Lighting and Illuminated Exit Signs</u>

 \underline{A} complete system of emergency lighting and illuminated exit signs is to be installed throughout the building.

Reason: to assist people exiting the building in the event of power failure.

17. Fire Hose Reel System

Emergency Lighting and Illuminated Exit Signs

A complete system of emergency lighting and illuminated exit signs is to be installed throughout the building.

<u>Reason:</u> to assist people exiting the building in the event of power failure.

18. Exit Sign

Emergency Lighting and Illuminated Exit Signs

A complete system of emergency lighting and illuminated exit signs is to be installed throughout the building.

Reason: to assist people exiting the building in the event of power failure.

19. Emergency Lighting

Emergency Lighting and Illuminated Exit Signs

A complete system of emergency lighting and illuminated exit signs is to be installed throughout the building.

Reason: to assist people exiting the building in the event of power failure.

20. Exit Doors Installed in the Path of Travel

A door in a required exit, forming part of a required exit or in the path of travel to a required exit, must be readily openable without a key from the side facing a person seeking egress, by a single handed downward action or pushing action on a single device.

<u>Reason</u>:- to ensure people can exit the building at all times and to comply with the requirements of D2.21 of the BCA

21. Alter Direction of Exit Doors

All swinging exit doors must be altered to open in the direction of egress and must be readily openable without a key.

Reason:- to ensure people can exit the building at all times and to comply with the requirements of D2.20 of the Building Code of Australia.

22. Bollards outside Exit Doors

Where exit doors open onto driveway, loading docks or similar areas, bollards shall be placed at either side of the door opening to prevent obstruction of the exit.

Reason:- to ensure the exit does not become obstructed.

23. **Building Occupant Warning System**

Building Occupant Warning System shall comply with the current requirements of AS 1670.4 and BCA E2.2b.

Reason:- to comply with the requirements of AS 1670.4 and BCA E2.2b of the Building Code of Australia.

24. Fail Safe Device

Provide automatic fail safe devices to serve sliding fire doors to comply with the current requirements of the BCA D2.21 servicing Lot 1 (front building located in 11-13 Percy Street Auburn).

Reason:- to comply with the current requirements of the BCA D2.21.

25. Final Fire Safety Certificate

Prior to the occupation of the building, the owner of the building shall submit to the Principal Certifying Authority (Council or Accredited Certifier), a final fire safety certificate in relation to each essential fire safety measure specified in the fire safety **schedule**, attached to the development consent or construction certificate.

Such certificate shall state that each essential fire safety measure specified:-

- a) Has been assessed by a properly qualified person, and
- Was found, at the date of assessment, to be capable of performing to a standard b) not less than that required by the current fire safety schedule for the building for which the certificate is issued.

NOTES:

- As soon as practicable after a final fire safety certificate is issued, the owner of the building to which it relates:-
 - Must cause a copy of the statement (and current fire safety schedule) to be i) given to the Commissioner of NSW Fire Brigades, and
 - ii) Must cause a further copy of the statement (and current copy of the current fire safety schedule) to be prominently displayed in the building.

2. A "fire safety measure" is defined as any measure (including any item of equipment, form of construction or fire safety strategy) that is, or is proposed to be, implemented in the building to ensure the safety of persons using the building in the event of fire.

<u>Reason</u>:- to ensure compliance with Regulations 149 & 171 of the Environmental Planning and Assessment Regulation 2000.

26. Annual Fire Safety Statement

The owner of any building in which fire safety measures are installed, must cause the Council to be given an **annual fire safety statement**, within 12 months after the last such statement or final fire safety certificate was issued.

The certificate shall certify:-

- a) That each essential fire safety measure has been assessed by a properly qualified person and was found, at the date of assessment, to be capable of performing to a standard not less than that required by the current fire safety schedule.
- b) That a properly qualified person has inspected the building and has certified that, as at the date of inspection, the condition of the building did not disclose any grounds for a prosecution under Division C.

NOTES:

- 1. As soon as practicable after an annual fire safety statement is issued, the owner of the building to which it relates:
 - i) must cause a copy of the statement (and current fire safety schedule) to be given to the Commissioner of NSW Fire Brigades, and
 - ii) must cause a further copy of the statement (and current copy of the current fire safety schedule) to be prominently displayed in the building.
- 2. A "fire safety measure" is defined as any measure (including any item of equipment, form of construction or fire safety strategy) that is, or is proposed to be, implemented in the building to ensure the safety of persons using the building in the event of fire.

<u>Reason</u>:- to ensure compliance with Regulation 171 of the Environmental Planning and Assessment Regulation 2000.

27. Submission of Construction Certificate

Construction works are not to commence until such time that a construction certificate for the proposed works has been issued by Council or an Accredited Certifier.

NOTES:

Where an Accredited Certifier issues a construction certificate, a copy of the following documents must be forwarded to Council within 7 days of issue, together with payment of the Council's adopted registration fee: determination; application to which it relates; construction certificate issued; plans and specifications; any fire safety schedule; and any other documents lodged with the certificate.

Any modification involving building works to the approved development made under Section 96 of the Environmental Planning and Assessment Act 1979 requires the submission of an amended construction certificate.

<u>Reason</u>:- to comply with the requirements of Section 81A of the Environmental Planning and Assessment Act and clause 142 of the Environmental Planning and Assessment Regulation 2000.

28. Appointment of Principal Certifying Authority/Notice of Commencement of Work

Site works are not to commence until:-

- a) a construction certificate for the building work has been issued by the consent authority, and
- b) the person having the benefit of the development consent has:
 - i) appointed a principal certifying authority for the building work, and
 - ii) notified the principal certifying authority that the person will carry out the building work as an owner-builder, if that is the case, and
- b1) the principal certifying authority has, no later than 2 days before the building work commences:
 - i) notified the consent authority and the council (if the council is not the consent authority) of his or her appointment, and
 - ii) notified the person having the benefit of the development consent of any critical stage inspections and other inspections that are to be carried out in respect of the building work, and
- b2) the person having the benefit of the development consent, if not carrying out the work as an owner-builder, has:-
 - appointed a principal contractor for the building work who must be the holder of a contractor licence if any residential building work is involved, and
 - ii) notified the principal certifying authority of any such appointment, and
 - unless that person is the principal contractor, notified the principal contractor of any critical stage inspections and other inspections that are to be carried out in respect of the building work, and
- c) the person having the benefit of the development consent has given at least 2 days' notice to the council of the person's intention to commence the erection of the building.

<u>Reason</u>:- to comply with the requirements of Section 81A of the Environmental Planning and Assessment Act

29. **Principal Certifying Authority**

 The person having the benefit of a development consent or complying development certificate for development involving building work or subdivision work may appoint the consent authority, the council or an accredited certifier as the principal certifying authority for the development.

- 1A) Despite subsection (1), such an appointment may not be made by any contractor or other person who will carry out the building work or subdivision work unless the contractor or other person is the owner of the land on which the work is to be carried out.
- 2) Despite subsection (1), an accredited certifier must not be appointed as the principal certifying authority for development involving subdivision work unless the subdivision to which the work relates is of a kind identified by an environmental planning instrument as one in respect of which an accredited certifier may be a certifying authority.
- 3) A principal certifying authority for building work or subdivision work to be carried out on a site is required to be satisfied:-
 - a) that a construction certificate or complying development certificate has been issued for such of the building work or subdivision work as requires development consent and over which the principal certifying authority has control, before the work commences on the site, and
 - b) that the principal contractor for the work is the holder of the appropriate licence and is covered by the appropriate insurance, in each case if required by the *Home Building Act 1989*, before any residential building work over which the principal certifying authority has control commences on the site, unless the work is to be carried out by an owner-builder, and
 - c) that the owner-builder is the holder of any owner-builder permit required under the *Home Building Act 1989*, before an owner-builder commences on the site any residential building work over which the principal certifying authority has control, and
 - d) that building work or subdivision work on the site has been inspected by the principal certifying authority or another certifying authority on such occasions (if any) as are prescribed by the regulations and on such other occasions as may be required by the principal certifying authority, before the principal certifying authority issues an occupation certificate or subdivision certificate for the building or work, and
 - e) that any preconditions required by a development consent or complying development certificate to be met for the work before the issue of an occupation certificate or subdivision certificate have been met, before the principal certifying authority issues the occupation certificate or subdivision certificate.
- 4) A principal certifying authority must also comply with such other requirements of a like or different nature as may be imposed on principal certifying authorities by the regulations.

Note. Section 81A prohibits the commencement of building work or subdivision work unless the consent authority has been notified of the appointment of a principal certifying authority for the work. Section 109D (2) prohibits the issue of an occupation certificate authorising the occupation and use of a new building except by the principal certifying authority appointed for the erection of the building. Section 109D (3) prohibits the issue of a subdivision certificate for a subdivision involving subdivision work except by the principal certifying authority appointed for the carrying out of the subdivision.

<u>Reason</u>:- to comply with the requirements of Section 109E of the Environmental Planning and Assessment Act.

30. Replacement of Principal Certifying Authorities

Unless the relevant authority so approves in writing, a person may not be appointed to replace another person as the principal certifying authority for development.

A principal certifying authority appointed to replace another principal certifying authority must ensure that notice of the appointment and of the approval of that appointment is given to the consent authority (and, if the consent authority is not the council, to the council) within 2 days of the appointment.

<u>Reason</u>:- to comply with the requirements of Section 109EA of the Environmental Planning and Assessment Act and clause 162 of the Environmental Planning and Assessment Regulation.

31. Notice to Allow Inspections

To allow a principal certifying authority or another certifying authority time to carry out critical stage inspections or any other inspections required by the principal certifying authority, the principal contractor for a building site, or the owner-builder, must notify the principal certifying authority at least 48 hours before building work is commenced at the site if a critical stage inspection is required before the commencement of the work.

<u>Reason</u>:- to comply with the requirements of Clause 163 of the Environmental Planning and Assessment Regulation.

32. Erection of Signs

A rigid and durable sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:-

- a) showing the name, address and telephone number of the principal certifying authority for the work, and
- b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
- c) stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

Note: Principal certifying authorities and principal contractors must also ensure that signs required by this clause are erected and maintained (see clause 227A which currently imposes a maximum penalty of \$1,100.

<u>Reason</u>:- to comply with the requirements of Clause 98A and 136B of the Environmental Planning and Assessment Regulations.

33. Construction/Demolition Hours

Site works, building works and demolition works, including the delivery of materials or equipment to and from the property are to be carried out between the hours of 7.00 am and 6.00 p.m. only from Mondays to Fridays and between 8.00 am and 4.00 p.m. only on Saturdays. No construction works or deliveries for the construction are to take place on Sundays or public holidays.

Prior to commencement of any demolition or construction work the applicant is to erect signs on the site, which are clearly visible from the footpaths adjoining the site boundaries, which state the permitted construction/demolition hours. These signs must also state "Any instances of site works, building works, demolition works or deliveries outside the permitted hours can be reported to Auburn Council on 9735-1222 during office hours or 0417-287-113 outside office hours".

<u>Reason</u>:- to reduce nuisance to the surrounding properties during the construction period.

34. Information required prior to the issue of Construction Certificate

The following documentation (where applicable) is to be submitted to Council or the accredited certifier, **prior to the granting of the construction certificate**:

- Detailed building plans and specifications containing sufficient information to verify that the completed building will comply with the Building Code of Australia.
- b) A list of any existing fire safety measures provided in relation to the land or any existing building on the land (not applicable to dwellings or outbuildings)
- c) A list of any proposed fire safety measures provided in relation to the land or any existing building on the land (not applicable to dwellings or outbuildings)

<u>Reason</u>:- to ensure that adequate information is submitted to enable assessment or that the development can proceed with the concurrence of others.

35. Infrastructure Fee

The infrastructure inspection fee in accordance with Councils Fees and Charges Schedule shall be paid prior to the issue of the Construction Certificate.

<u>Reason</u>: to contribute to the cost of inspection and identification of any damage to Council's infrastructure as a result of the development.

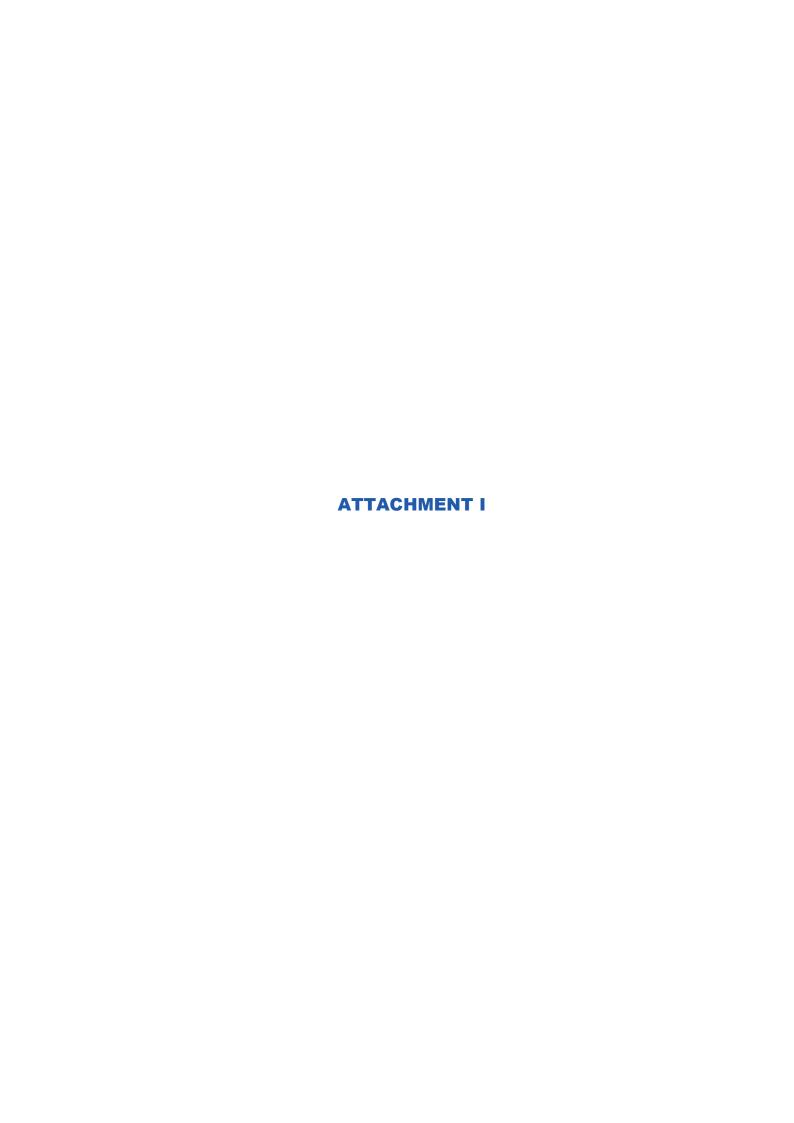
36. Maintain plans on-site

A copy of the construction certificate, the approved plans & specifications and development consent conditions must be kept on the site at all times and be available to the Council officers upon request.

Reason:- to ensure a record of the approved plans are readily available.

Consent to operate from:	27 February 2013	(see note 1)
Consent to lapse on:		
Other approvals		
List Local Government Act 1993 Approvals granted under s 78A(5)	Not Applicable	
Right of appeal (also see note 3)	If you are dissatisfied with this decisi Environmental Planning and Assessme the right to appeal to the Land and Envir • 12 months - consents lodged befor • 6 months - consents lodged after * Section 97 of the Environment Assessment Act 1979 does not apply to development application for State signilical designated development that has Commission of Inquiry.	ont Act 1979 gives you onment Court within: re 27 February 2011 28 February 2011 ental Planning and the determination of a difficant development or
Signed	on behalf of the consent authority	
Signature	John Burgess	
Name	General Manager	

Note 1	Where the consent is subject to a condition that the consent is not to operate				
	until the applicant satisfies a particular condition the date should not be				
	endorsed until that condition has been satisfied.				
Note 2	Clause 101 of the Regulation contains additional particulars to be included i				
	a notice of determination where a condition under section 94 of the				
	Environmental Planning and Assessment Act 1979 has been imposed.				
Note 3	Section 82A of the Environmental Planning and Assessment Act permits a				
	review of the determination				



Locked Bag 2906, Lisarow NSW 2252 Customer Experience 13 10 50 ABN 81 913 830 179 | www.safework.nsw.gov.au

Our Ref: D19/178037

23 August 2019

Geo-Logix Pty Ltd Mr Edward Lilly Unit 2309/4 Daydream St Warriewood NSW 2102

Dear Mr Lilly

RE SITE: 11 (Lot 1 DP1183821) Percy St, Auburn NSW 2144

I refer to your site search request received by SafeWork NSW on 14 August 2019 requesting information on Storage of Hazardous Chemicals for the above site.

Enclosed are copies of the documents that SafeWork NSW holds on record number 35/026570 relating to the storage of Hazardous Chemicals at the above-mentioned premises.

For further information or if you have any questions, please call us on 13 10 50 or email licensing@safework.nsw.gov.au

026570

Yours sincerely

Customer Service Officer

Customer Experience - Operations

SafeWork NSW

NPG. 026 570.

Chemicals

Notification of Schedule 1/1 Hazardous



Reference Code: SLV7QM

Your form has been submitted for processing. Please keep a copy for your records. Once processed, you will receive an acknowledgement.

20 Jun 2016 1:52:19 PM

Submission Reference Number:

notification-of-sche-1436

e or print a copy of your completed form, go to the "File menu and select "Save as" or "Print".

Application Information

Application Information

Notification of Schedule 11 hazardous chemicals

This form is to be used by the person conducting a business or undertaking (PCBU) at a workplace to notify SafeWork NSW when:

- 1. Hazardous chemicals are used, handled or stored at the workplace in quantities that exceed manifest quantities, as specified in column 5 of table 11.1 of Schedule 11 of the WHS Regulation.
- 2. There will be a significant change to a current notification record in the risk of using, handling or storing the Schedule 11 hazardous chemicals. A significant change includes: a change to the quantity, location or manner of storage of chemicals, or when the affected chemicals are of a quantity greater than the placard quantity for that chemical or group of chemicals.
- 3. A new owner and/or PCBU has taken control of a site.
- 4. Requesting a closure of record or when hazardous chemicals no longer exceed manifest quantities, as specified in column 5 of table 11.1 of Schedule 11 of the WHS Regulation, or cease to be used, handled or stored at the workplace.
- 5. There is abandonment of an underground tank, partially underground, or fully mounded tank that was used to store flammable gases or flammable
- 6. There is a need to change contact details, or emergency contact details.
- 7. Your notification certificate is lost, stolen, damaged, not received or if there was a printing error.

Privacy Compliance Statement

This information is collected by SafeWork NSW for the purposes of undertaking the evaluation, assessment and processing of a notification of Schedule 11 hazardous chemicals, as required by the WHS Act and WHS Regulation.

This information may also be used by SafeWork NSW for the purposes of confirming applicant details, to establish and maintain an internal and external database and to assist SafeWork NSW and its inspectorate with its work generally. It may also be provided to other state, territory and the Commonwealth regulatory authorities

Except for the purposes of prosecution and unless such disclosure is otherwise required by law, the information will not be accessed by other third parties in a way that would identify the individual without the consent of that individual.

You may also apply to SafeWork NSW to access and correct any information about yourself that SafeWork NSW holds if that information is inaccurate, incomplete, not relevant or out of date. Applications should be made in writing to

Privacy Contact Officer, SafeWork NSW, Locked Bag 2906, Lisarow NSW 2252.

Type of Notification

Notification Type	
Please select the type of notification you are making:*	
New Notification	
Amendment to a Current Notification	
SafeWork NSW Reference Number (if known) Type of Amendment * Please select all that apply. Significant Change to a current record of Hazardous Chemicals stored on site A significant change includes: a change to the quantity, location or manner of storage of chemicals, when the affected chemicals are of a greater quantity than the placard quantity for that chemical or group of chemicals. Closure of Record PCBU is no longer using, handling or storing Schedule 11 - hazardous chemicals above manifest quantities. Abandonment of Tank When there is an abandoned tank that is underground, partially underground or fully moulded and the tank was used to store flammable gases or liquids, and the PCBU does not intend to use the tank to store flammable gases or flammable liquids. Contact Details There has been a change in the contact person, contact details or emergency contact for this site.	
A new owner or PCBU has taken control of the site. Replacement Select this option ONLY if your notification certificate is lost, stolen, damaged, not received or if there was a printing error. (For all amendments, a new acknowledgement will automatically be sent to you) Application Details	
Contact Person Title Mr Family Name *	
Sultana	2
Given Name * Paul]
Middle / Other Name	
Daytime Contact Number * Mobile Number 02 8878 7878	_
Email Address	_
Business Name/PCBU Registered Business Name/PCBU * Huntermotive Pty Ltd T/as Hunter Holden	_
Transcriber by Eta Trab Transcrib	

ABN (for Australian Businesses only)		
24003247514	18	
Type of business or undertaking being conducted *		
Motor Vehicle and Motor Vehicle Parts Wholesaling		
Activities of the PCBU * Describe the activities of the business or undertaking that involve using, handling or storing hazardous chemicals.		
Sale of Motor Vehicle parts and paint for wholesale. Preparation of motor vehicles for delivery		
Site Address Address of the business or undertaking where Schedule 11 hazardous chemicals exceeding manifest quantities are to be used to be us	ised, handled or store	ed.
·	ised, naticied of Store	
Street Address (must NOT be PO Box) Building / Property Name	*	
outlaing / Property Name		1
Address Line 1 *		
11-13 Percy Street		
Address Line 2		
Suburb *	State	Postcode *
Auburn	NSW	2144
Nearest Cross Street		
Nearest Cross Street		
200 H		
Postal Address		2/
Same as Street Address?*		
○Yes No		
Address Line 1 *		
PO Box 556		
Address Line 2		
Suburb *	State *	Postcode *
Ryde	NOW	1680

Hazardous Chemicals

Manifest Prepared		
Please provide the date the manifest was last	amended or, if it has	not been amended, the date it was prepared.*
24 May 2016		
Goods too Dangerous to be Tr	ansported	
Please note: for a significant change amendm	ent, please only provi	ride details of the hazardous chemicals that are affected by the change.
Listing of Hazardous Chemical	Is Used, Store	d or Handled
Please provide details of all hazardous chemi-	cals that are above pl	acard quantities.
Please note: for a significant change amendm	ent, please only provi	ride details of the hazardous chemicals that are affected by the change.
Chemical 1		
Please describe the change(s) to the chemica	al listed (e.g. Change	to maximum quantity), *
Addition of Chemical listed, Diesel		
Storage Identifier *		8
Tank A		
Storage Facility Type		
Above ground tank (AGT)		
UN Number* Note: If you are notifying Diesel or any other C	Combustible Liquid C1	1, please enter 00C1 in the UN number field.
UN Number		
00C1		
Proper Shipping Name *		
COMBUSTIBLE LIQUID	11	
Class / Division		
C1		
Packing Group		
01		
Design / Maximum Capacity *	Units *	1-
7000	Litres	Kilograms
Typical Quantity *	Units *	
5000	Litres	Kilograms

Diameter of fixed vertical tanks used to store fire	risk nazardous chemicais	(m)	
2,250			
Chemical 2			
Please describe the change(s) to the chemical li	isted (e.g. Change to maxir	num quantity), *	
Addition of chemical listing, Petroleum Gas			
Storage Identifier*			
Tank B			
Storage Facility Type			
Above ground tank (AGT)			
UN Number * Note: If you are notifying Diesel or any other Cor	ກbustible Liquid C1, pleasເ	e enter 00C1 in the UN number field.	
UN Number			
1075		0,	
Proper Shipping Name *			
PETROLEUM GASES, LIQUEFIED			
Class / Division			
2.1			
Packing Group			
\bigcirc I			
O"			
O			
Design / Maximum Capacity *	Units *		
12000	Litres	Kilograms	
iypical Quantity*	Units *		
10000	Litres	○Kilograms	
Diameter of fixed vertical tanks used to store fire	risk hazardous chemicals	(m)	
	Hazara do onomicalo	ייא	
2,420			

Lodgement Fees

Lodgement Fees

Description			Price
No fee payable		.5	\$0.00
Total Amount Payable (GST exempt)			

Applicant Declaration

Applicant Declaration	App	licant	Decla	aration
-----------------------	-----	--------	-------	---------

Name *

\$0.00

Paul Sultana

I, Paul Sultana, declare that:

- I am 18 years of age or over
- I have authority from the PCBU (if applicable) to lodge this application
- The information in this notification is true and correct to the best of my knowledge
- I consent to SafeWork NSW making enquiries and exchanging information with work health and safety regulators in other states, territories of the Commonwealth regarding any matter relevant to this application

X	I agre	е '

Date of Declaration

20 Jun 2016

Invoice

Flammable Storage Paint Miking Area (perissectors) ENTRANCE PARTS DEPARMENT OFFICE PRE DELIVERY DEPARMENT Salf Bunded Fuel Tanks OPFICE ENTRANCE Fuel Tonk B WASH BAY RAINIP PARKING ENTRANCE



DECLARATION

To be completed where notifiable amounts of Dangerous Goods are not stored.

declare that I do not store and I (name), of VISY I HOUSER PLASTICS address

declare that I do not store and handle Dangerous Goods at premises 35/026570, site 11-13 PERCY ST, AUBURN 2144

in quantities that exceed or are likely to exceed the manifest quantity in the Table to Schedule 5 of the Occupational Health and Safety Regulation 2001.

....Signature

6 3 00 Date

This declaration is to be returned with your licence to:

WorkCover New South Wales
Dangerous Goods Notification Team
LOCKED BAG 2906, LISAROW NSW 2252

WorkCover. Watching out for you.



11-13 Percy St, Auburn, NSW 2144 Australia



Telephone: (02) 9917 1300 Facsimile: (02) 9917 1360

International Fax No: 61 2 9917 1360

4th March 1999

Scientific Services Branch Dangerous Goods Licensing Locked Bag 10 Clarence Street Sydney NSW 2000

Dear Sir/Madam

Re: License Number 35/026570

With regards to the $2 \times 20,000$ litre steel fuel storage tanks abandoned at ACI Plastics Packaging at 11-13 Percy Street, Auburn. We hereby confirm the said tanks were abandoned in accordance with "Australian Standards AS 1940-1993, The Storage and Handling of Flammable and Combustible Liquids, Section 9.8.13(b). The material used to fill the tanks was concrete.

Regards

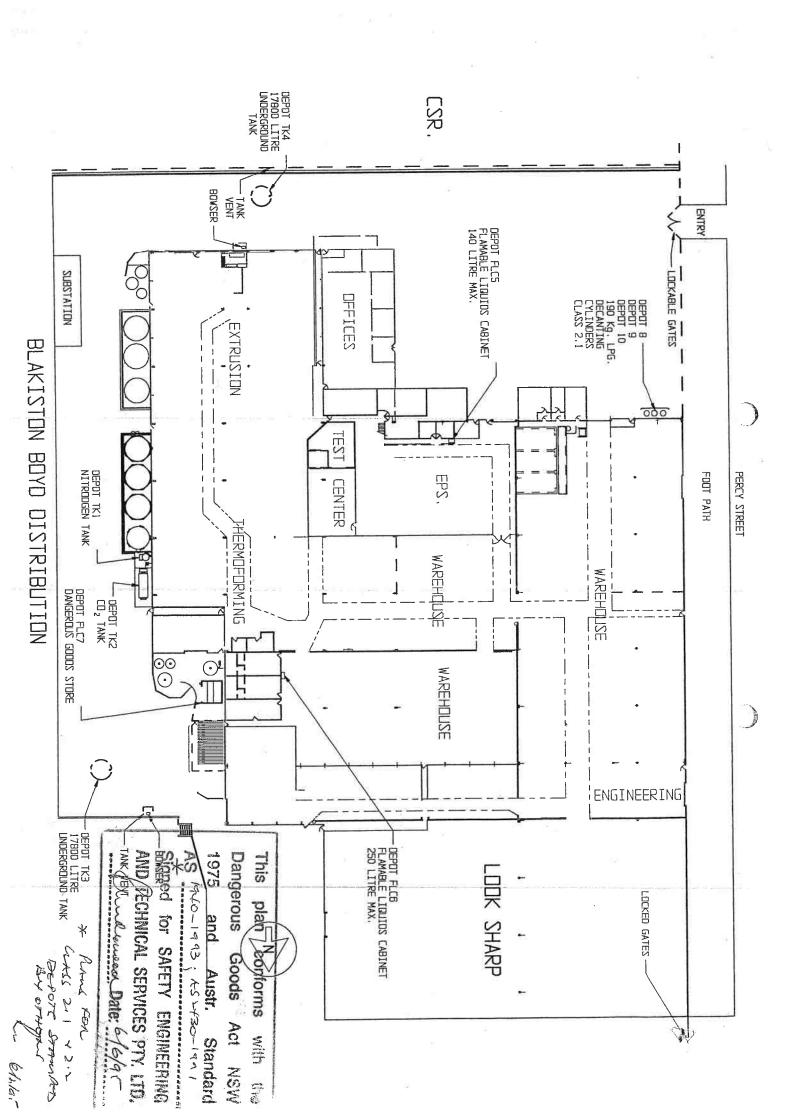
IVAN GROCHOLSKY OPERATIONS MANAGER

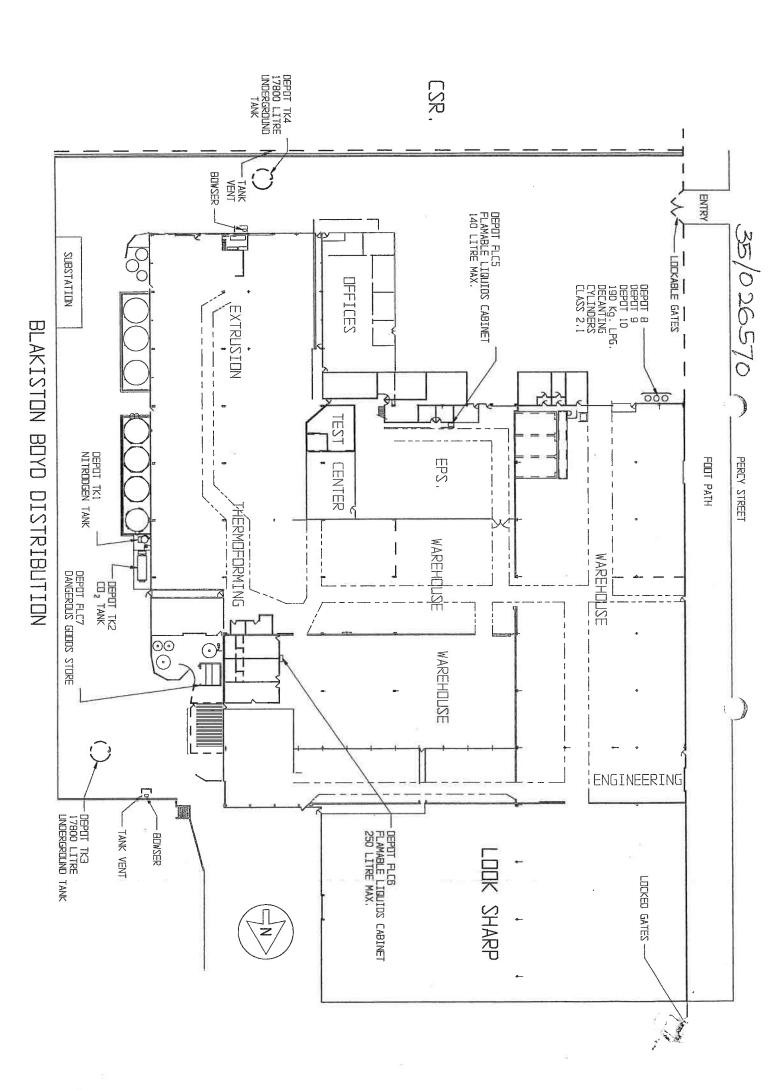
RECEIVED

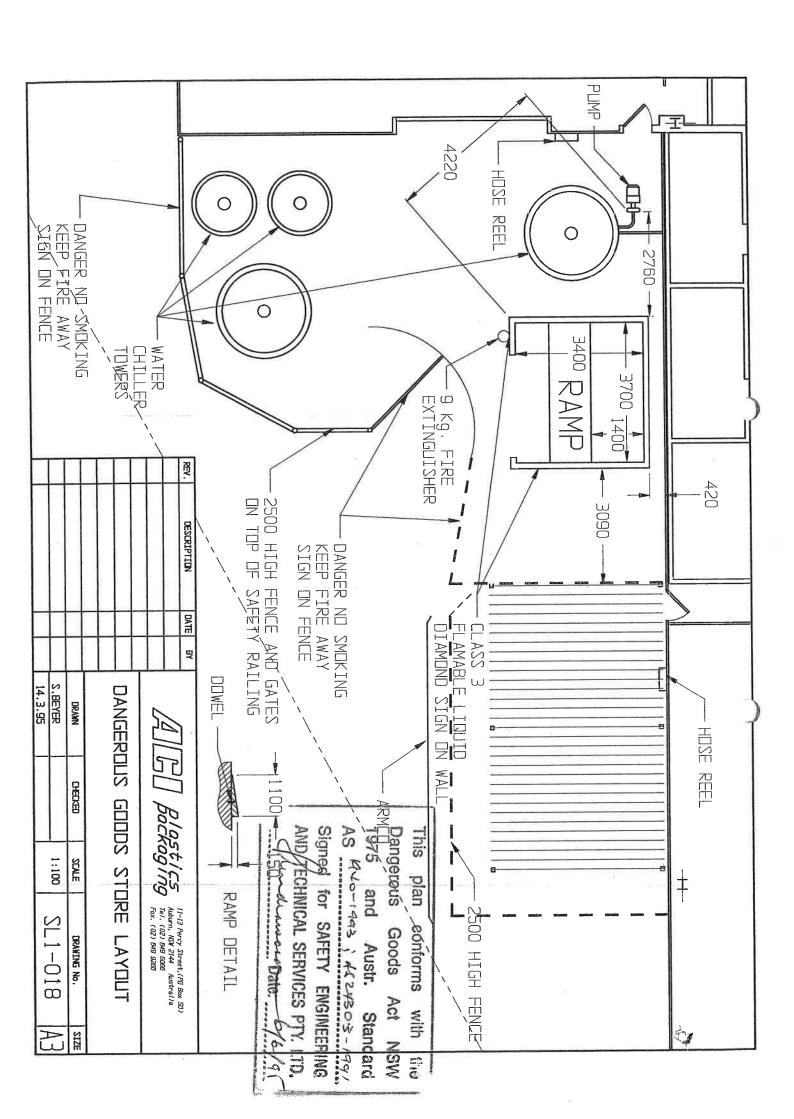
- 5 MAR 1999

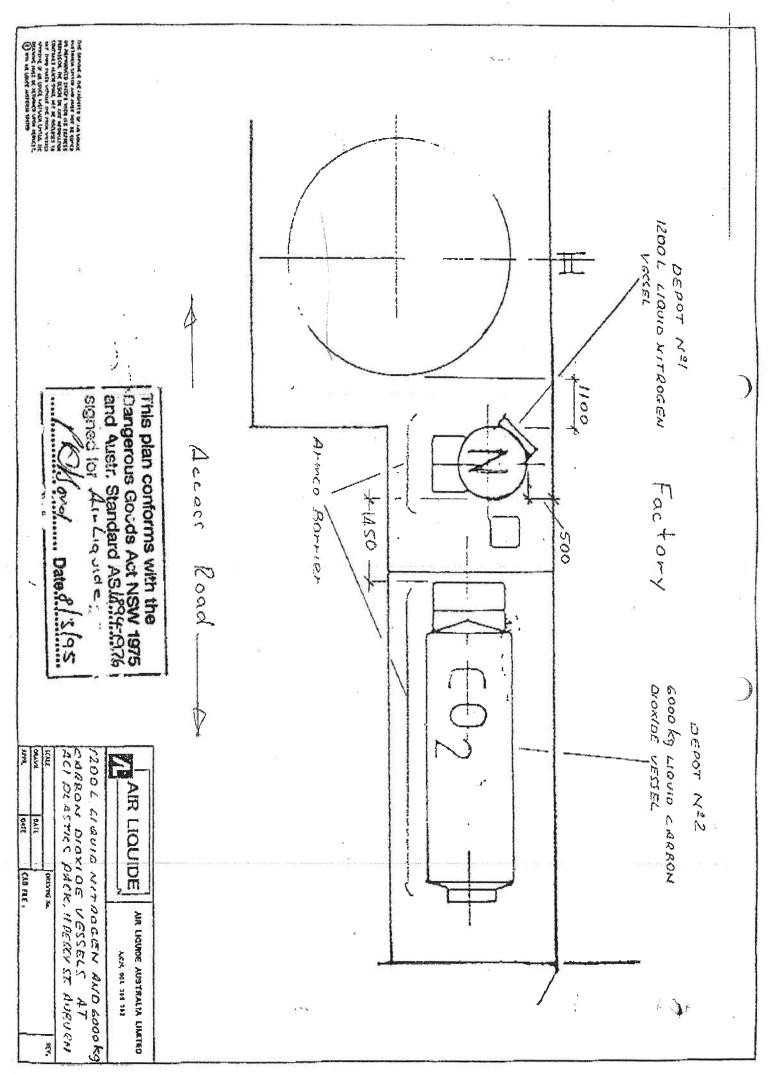
SCIENTIFIC SERVICES

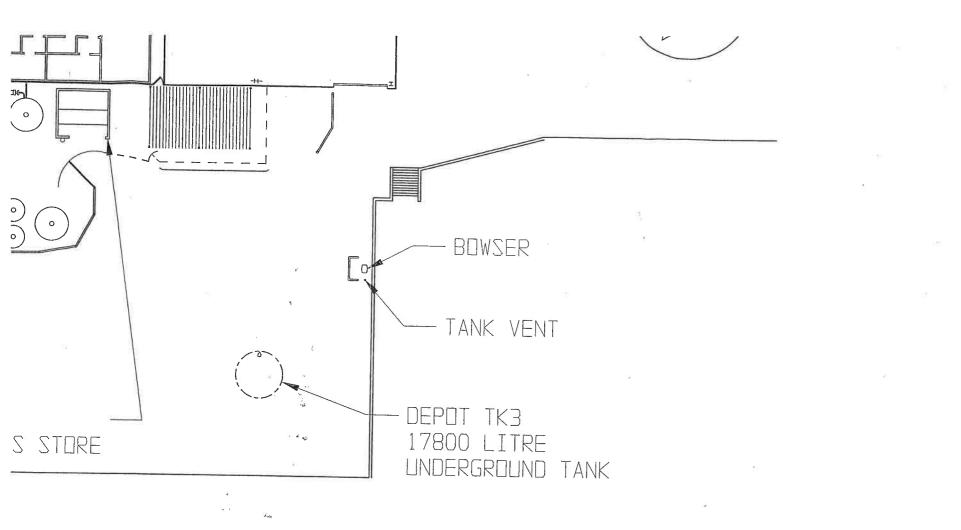
Delote TK3



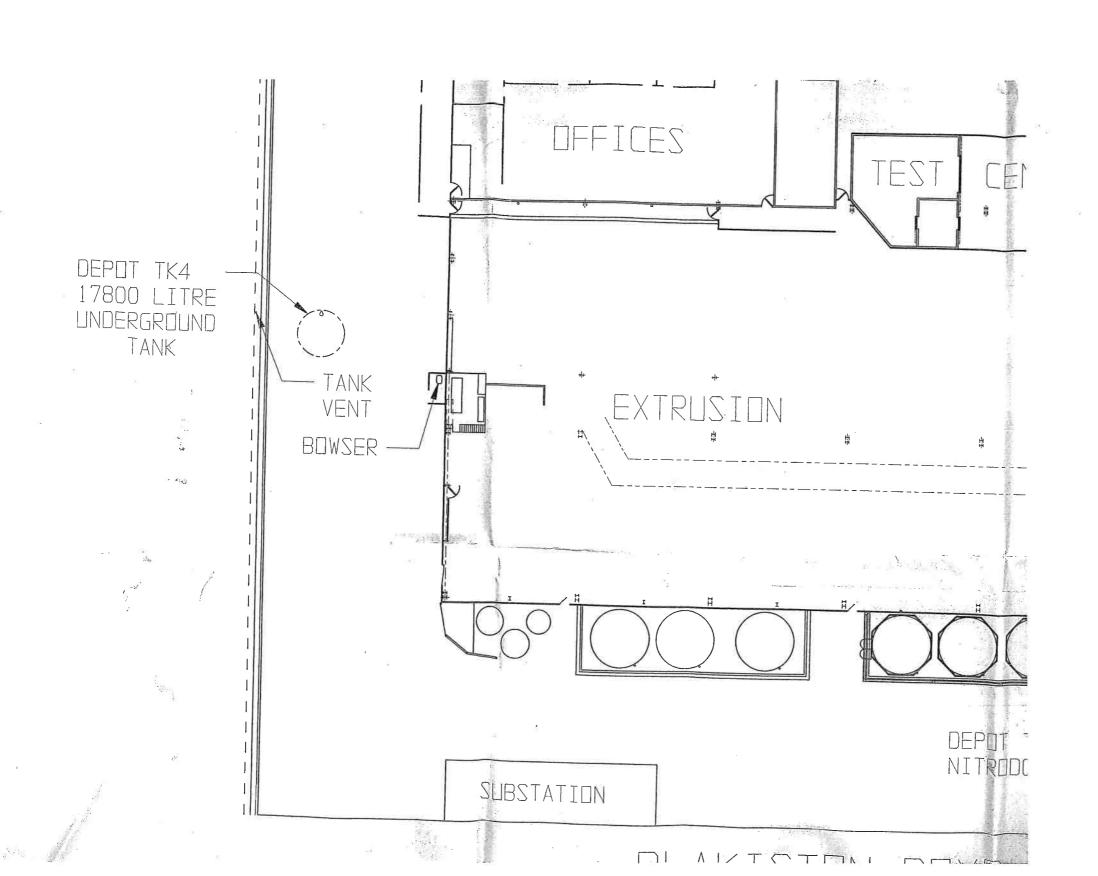


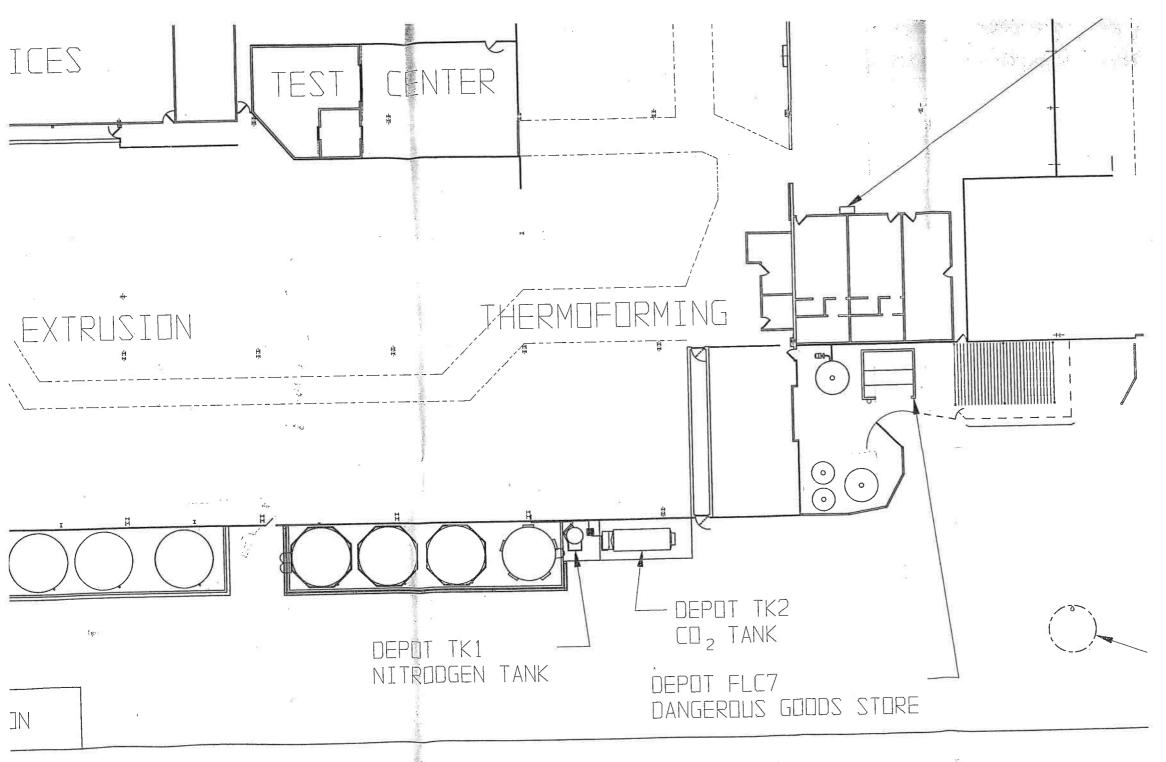




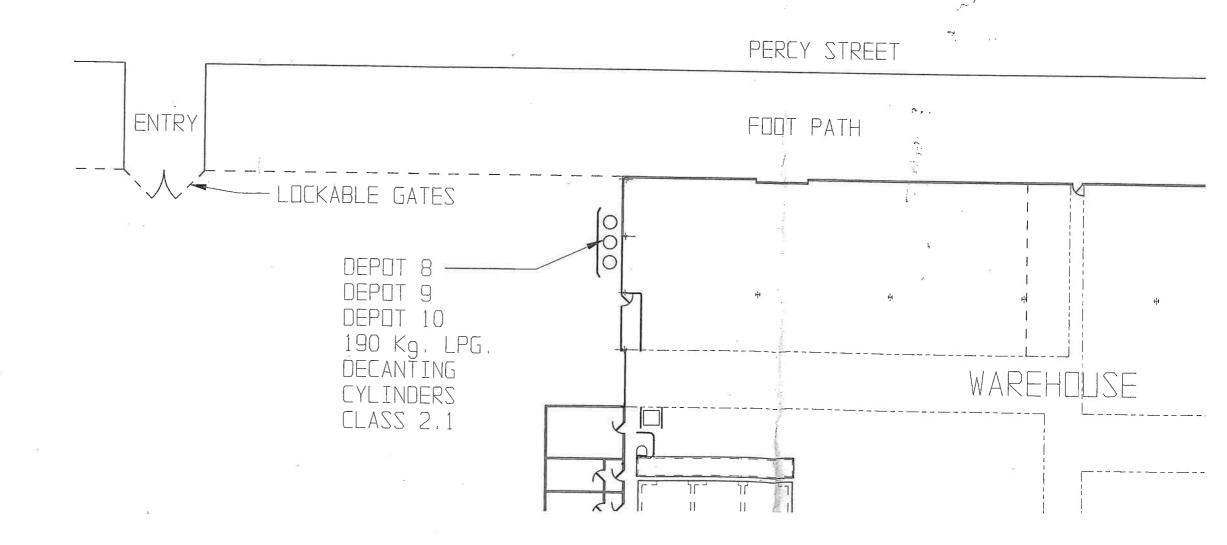


REV. DESCRIPTION





RIAKISTAN BOYD DISTRIBUTION





Locked Bag 2906, Lisarow NSW 2252

Customer Experience 13 10 50

ABN 81 913 830 179 | www.safework.nsw.gov.au

Our Ref: D19/175903

20 August 2019

Nicholas Fox Geo-Logix Pty Ltd Building Q2, Level 3, Unit 2309 4 Daydream Street WARRIEWOOD NSW 2102

Dear Nicholas

RE SITE: 13 Percy Street, Auburn NSW 2144

I refer to your site search request received by SafeWork NSW on 9 August 2019 requesting information on Storage of Hazardous Chemicals for the above site.

Enclosed are copies of the documents that SafeWork NSW holds on record number 35/026570 relating to the storage of Hazardous Chemicals at the above-mentioned premises.

For further information or if you have any questions, please call us on 13 10 50 or email licensing@safework.nsw.gov.au

Yours sincerely

HBRealy
Customer Service Officer

Customer Experience - Operations

SafeWork NSW

INF 887738

WF 183083

MG. 026 570.



Notification of Schedule 1 Hazardous Chemicals

Reference Code: SLV7QM

Your form has been submitted for processing. Please keep a copy for your records. Once processed, you will receive an acknowledgement.

notifea

Date and Time:

20 Jun 2016 1:52:19 PM

Submission Reference Number:

notification-of-sche-1436

To save or print a copy of your completed form, go to the "File menu and select "Save as" or "Print".

Application Information

Application Information

Notification of Schedule 11 hazardous chemicals

This form is to be used by the person conducting a business or undertaking (PCBU) at a workplace to notify SafeWork NSW when:

- 1. Hazardous chemicals are used, handled or stored at the workplace in quantities that exceed manifest quantities, as specified in column 5 of table 11.1 of Schedule 11 of the WHS Regulation.
- 2. There will be a significant change to a current notification record in the risk of using, handling or storing the Schedule 11 hazardous chemicals. A significant change includes: a change to the quantity, location or manner of storage of chemicals, or when the affected chemicals are of a quantity greater than the placard quantity for that chemical or group of chemicals.
- 3. A new owner and/or PCBU has taken control of a site.
- 4. Requesting a closure of record or when hazardous chemicals no longer exceed manifest quantities, as specified in column 5 of table 11.1 of Schedule 11 of the WHS Regulation, or cease to be used, handled or stored at the workplace.
- 5. There is abandonment of an underground tank, partially underground, or fully mounded tank that was used to store flammable gases or flammable liquids.
- 6. There is a need to change contact details, or emergency contact details.
- 7. Your notification certificate is lost, stolen, damaged, not received or if there was a printing error.

Privacy Compliance Statement

This information is collected by SafeWork NSW for the purposes of undertaking the evaluation, assessment and processing of a notification of Schedule 11 hazardous chemicals, as required by the WHS Act and WHS Regulation.

This information may also be used by SafeWork NSW for the purposes of confirming applicant details, to establish and maintain an internal and external database and to assist SafeWork NSW and its inspectorate with its work generally. It may also be provided to other state, territory and the Commonwealth regulatory authorities.

Except for the purposes of prosecution and unless such disclosure is otherwise required by law, the information will not be accessed by other third parties in a way that would identify the individual without the consent of that individual.

You may also apply to SafeWork NSW to access and correct any information about yourself that SafeWork NSW holds if that information is inaccurate, incomplete, not relevant or out of date. Applications should be made in writing to:

Privacy Contact Officer, SafeWork NSW, Locked Bag 2906, Lisarow NSW 2252.

Type of Notification

Notification Type			
Please select the type of notification you are making: *			
New Notification			
Amendment to a Current Notification			
SafeWork NSW Reference Number (if known) Type of Amendment * Please select all that apply.			
Significant Change to a current record of Hazardous Chemicals stored on site A significant change includes: a change to the quantity, location or manner of storage of chemicals, when the affected chemicals are of a greater quantity than the placard quantity for that chemical or group of chemicals. Closure of Record			
PCBU is no longer using, handling or storing Schedule 11 - hazardous chemicals above manifest quantities. Abandonment of Tank			
When there is an abandoned tank that is underground, partially underground or fully moulded and the tank was used to store flammable gases or liquids, and the PCBU does not intend to use the tank to store flammable gases or flammable liquids.			
Contact Details There has been a change in the contact person, contact details or emergency contact for this site. New Owner			
A new owner or PCBU has taken control of the site.			
Replacement Select this option ONLY if your notification certificate is lost, stolen, damaged, not received or if there was a printing error. (For all amendments, a new acknowledgement will automatically be sent to you)			
Application Details			
Contact Person			
Title			
Mr			
Family Name *			
Sultana			
Given Name *			
Paul]		
Middle / Other Name	7		
Daytime Contact Number * Mobile Number	7		
Daytime Contact Number * Mobile Number 02 8878 7878			
Email Address			
paul.sultana@hunterholden.com.au			
Business Name/PCBU			
Registered Business Name/PCBU *	_		
Huntermotive Pty Ltd T/as Hunter Holden			

ABN (for Australian Businesses only)		
24003247514		
Type of business or undertaking being conducted *		
Motor Vehicle and Motor Vehicle Parts Wholesaling		
Activities of the PCBU * Describe the activities of the business or undertaking that involve using, handling or storing hazardous chemicals.		
Sale of Motor Vehicle parts and paint for wholesale Preparation of motor vehicles for delivery		
Site Address Address of the business or undertaking where Schedule 11 hazardous chemicals exceeding manifest quantities are to be to	used, handled or store	ed.
Street Address (must NOT be PO Box)		
∂uilding / Property Name		
Address Line 1 *		
11-13 Percy Street		
Address Line 2		
Suburb *	State	Postcode *
Auburn	NsW	2144
Nearest Cross Street		
Nearest Cross Street		
Nearest Cross Street		
Postal Address		10
Same as Street Address?*		
○Yes		
Address Line 1 *		
PO Box 556		
Address Line 2		
Suburb *	State *	Postcode *
Ryde		1680

Hazardous Chemicals

Manifest Prepared

Please provide the date the manifest was last amended or, if it has not been amended, the date it was prepared.*
24 May 2016
Goods too Dangerous to be Transported
Please note: for a significant change amendment, please only provide details of the hazardous chemicals that are affected by the change.
inting of Hazardaya Chamicala Haad. Stared and landlad
Listing of Hazardous Chemicals Used, Stored or Handled Please provide details of all hazardous chemicals that are above placard quantities.
Please note: for a significant change amendment, please only provide details of the hazardous chemicals that are affected by the change.
Chemical 1
Please describe the change(s) to the chemical listed (e.g. Change to maximum quantity). *
Addition of Chemical listed, Diesel
Storage Identifier*
Tank A
Storage Facility Type
Above ground tank (AGT)
JN Number *
Note: If you are notifying Diesel or any other Combustible Liquid C1, please enter 00C1 in the UN number field.
JN Number
00C1
Proper Shipping Name *
COMBUSTIBLE LIQUID
(
No. of Division
Class / Division C1
Packing Group
Oil .
)III
Design / Maximum Capacity * Units *
7000 OKilograms
ypical Quantity * Units *
5000 Kilograms

Diameter of fixed vertical tanks used to store fire	risk hazardous chemicals	s (m)
2,250		
Chemical 2		
Please describe the change(s) to the chemical I	isted (e.g. Change to maxi	mum quantity). *
Addition of chemical listing, Petroleum Gas		
Storage Identifier *		
Tank B		
Storage Facility Type		
Above ground tank (AGT)		
UN Number *		
Note: If you are notifying Diesel or any other Cor	mbustible Liquid C1, pleas	e enter 00C1 in the UN number field.
UN Number		
1075		
⁻roper Shipping Name *		
PETROLEUM GASES, LIQUEFIED		
à		
Class / Division		
2.1		
Packing Group		
\bigcirc I		
OIII		
Design / Maximum Capacity *	Units *	
12000	Litres	Kilograms
iypical Quantity *	Units *	
10000	Litres	Kilograms
Diameter of fixed vertical tanks used to store fire	risk hazardous chemicals	(m)
2,420		
2,420		

Lodgement Fees

Lodgement Fees

Desc		

Price

No fee payable

\$0.00

Total Amount Payable (GST exempt)

\$0.00

Applicant Declaration

Applicant Declaration

Name *

Paul Sultana

I, Paul Sultana, declare that:

I am 18 years of age or over

I have authority from the PCBU (if applicable) to lodge this application

· The information in this notification is true and correct to the best of my knowledge

 I consent to SafeWork NSW making enquiries and exchanging information with work health and safety regulators in other states, territories of the Commonwealth regarding any matter relevant to this application

☐ I agree *

Date of Declaration

20 Jun 2016

Invoice

Flornmable Storage Paint Miking Area (protested and ENTRANCE PARTS DEPARMENT OFFICE PRE DELIVERY DEPARMENT Dieser Tonk A Self Bunded Fuel Tanke OFFICE ENTRANCE Fuze Tank B WASH BAY RAMID PARKING ENTRANCE

,



DECLARATION

To be completed where notifiable amounts of Dangerous Goods are not stored.

declare that I do not store and handle Dangerous Goods at premises 35/026570,

site 11-13 PERCY ST, AUBURN 2144 in quantities that exceed or are likely to exceed the manifest quantity in the Table to Schedule 5 of the Occupational Health and Safety Regulation 2001.

...Signature

6 S 06 Date

This declaration is to be returned with your licence to:

WorkCover New South Wales
Dangerous Goods Notification Team
LOCKED BAG 2906, LISAROW NSW 2252

WorkCover. Watching out for you.

14/01/01/01



11-13 Percy St, Auburn, NSW 2144 Australia



Telephone: (02) 9917 1300 Facsimile: (02) 9917 1360

International Fax No: 61 2 9917 1360

4th March 1999

Scientific Services Branch Dangerous Goods Licensing Locked Bag 10 Clarence Street Sydney NSW 2000

Dear Sir/Madam

Re: License Number 35/026570

With regards to the 2 x 20,000 litre steel fuel storage tanks abandoned at ACI Plastics Packaging at 11-13 Percy Street, Auburn. We hereby confirm the said tanks were abandoned in accordance with "Australian Standards AS 1940-1993, The Storage and Handling of Flammable and Combustible Liquids, Section 9.8.13(b). The material used to fill the tanks was concrete.

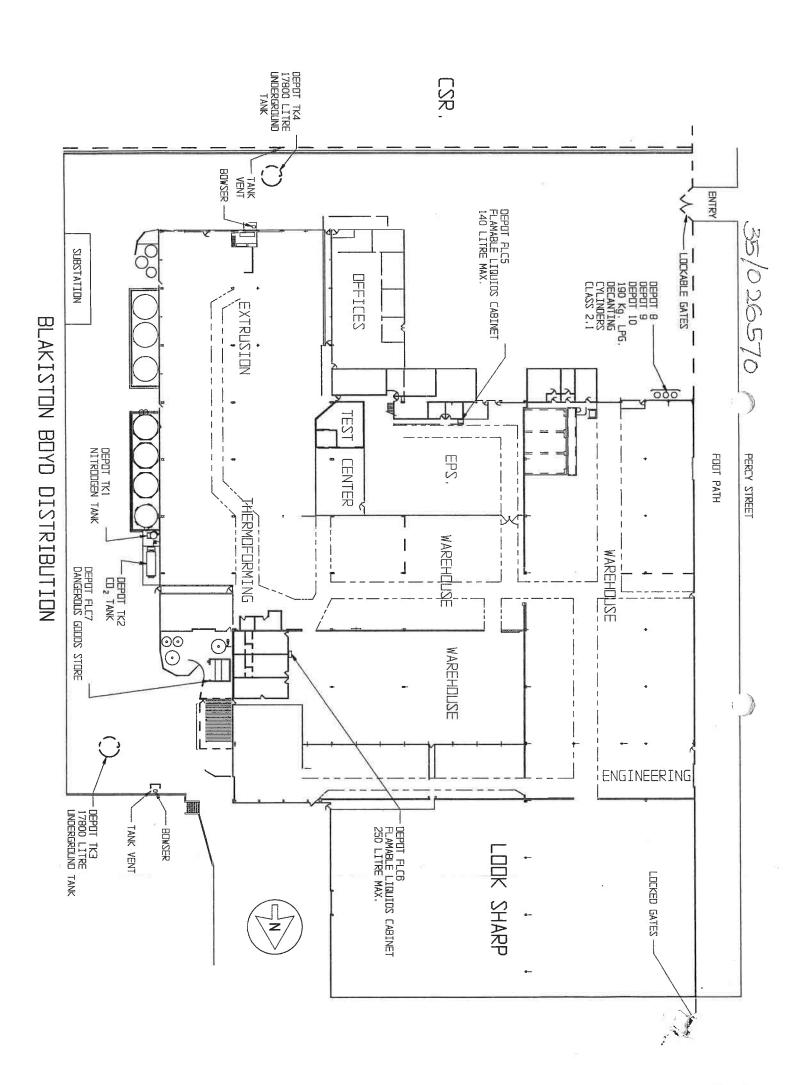
Regards

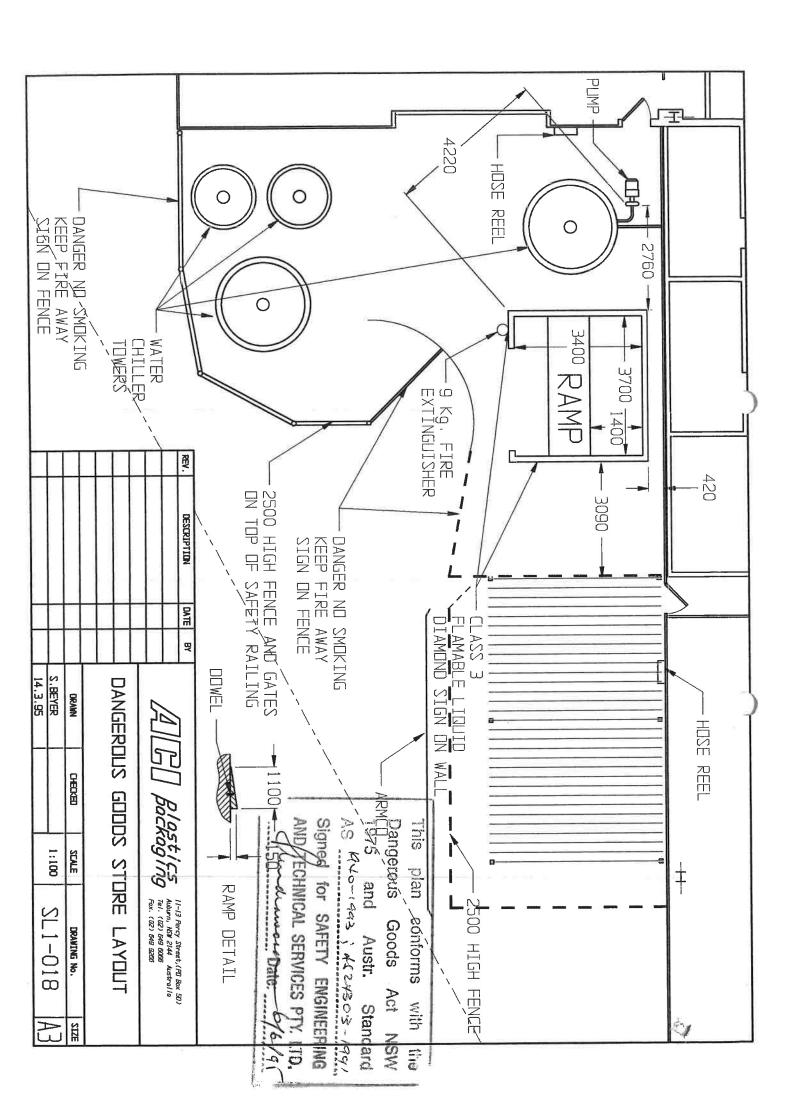
IVAN GROCHOLSKY OPERATIONS MANAGER RECEIVED

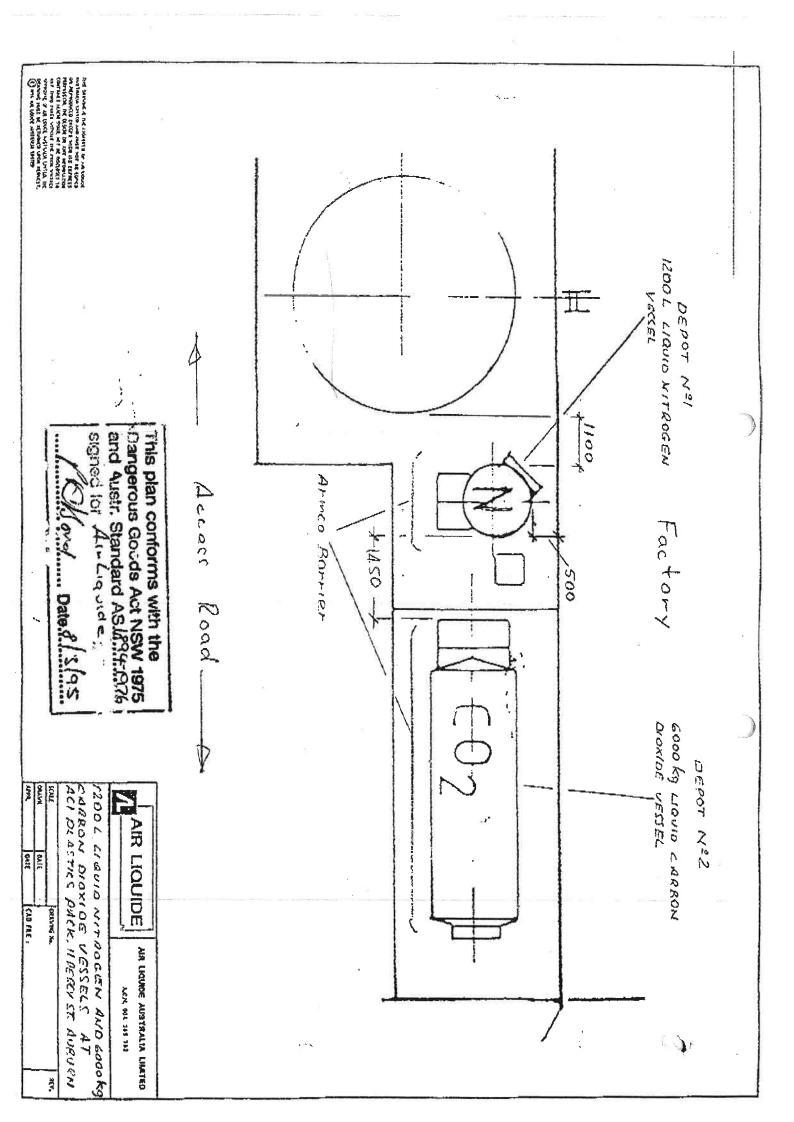
- 5 MAR 1999

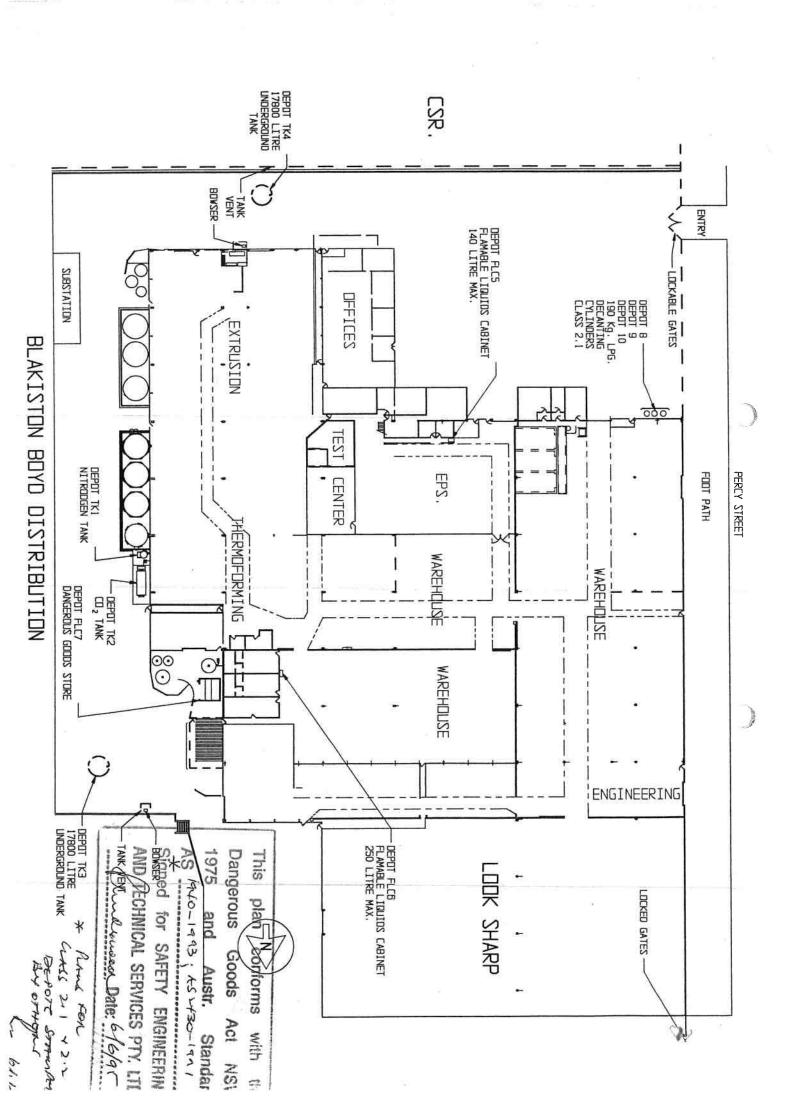
SCIENTIFIC SERVICES

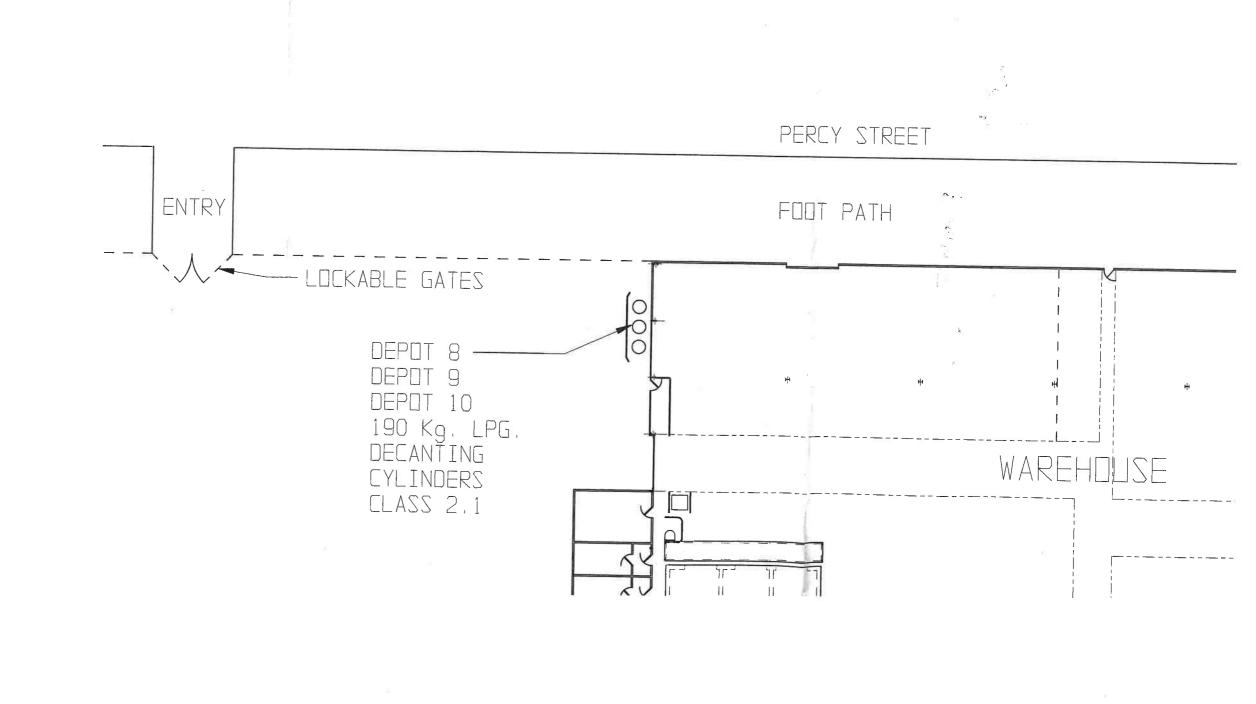
Dolote TK3

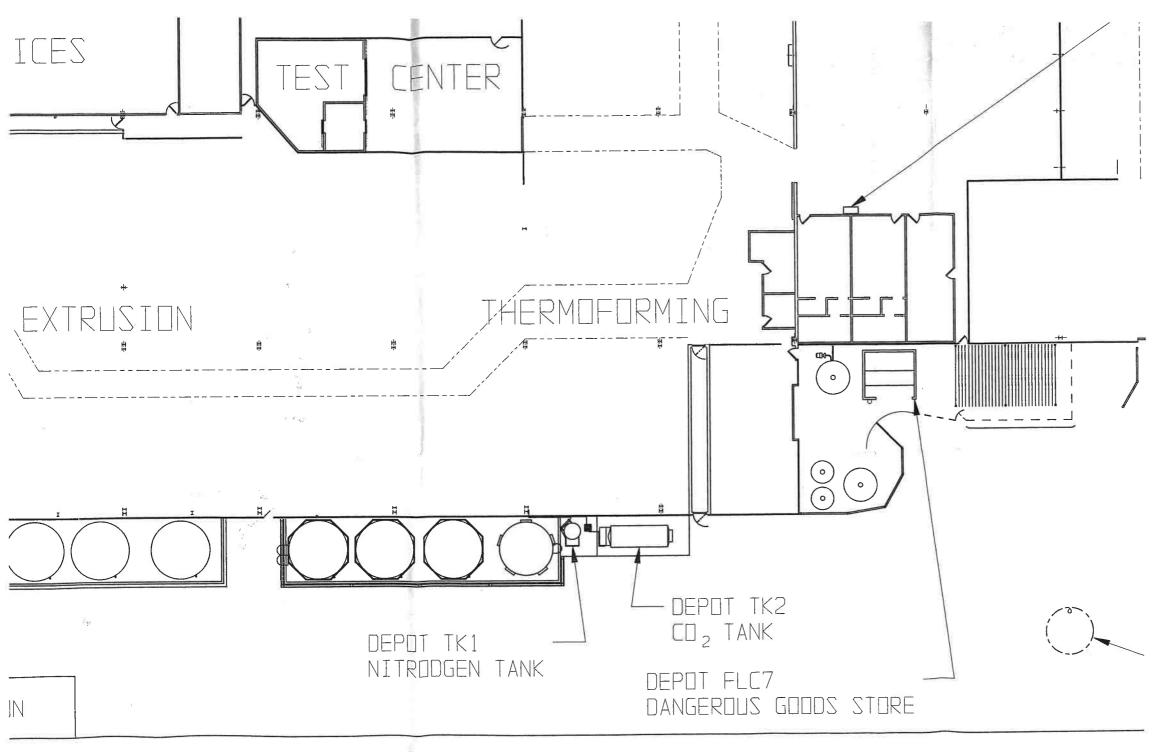




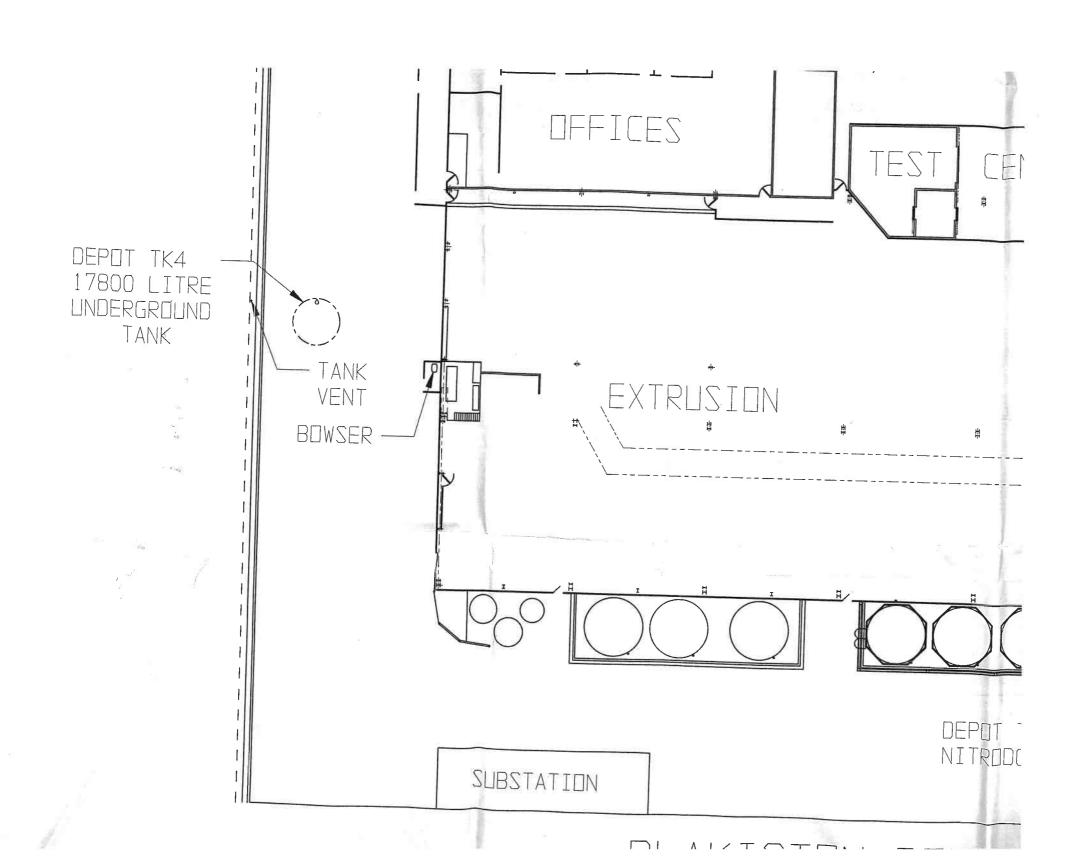


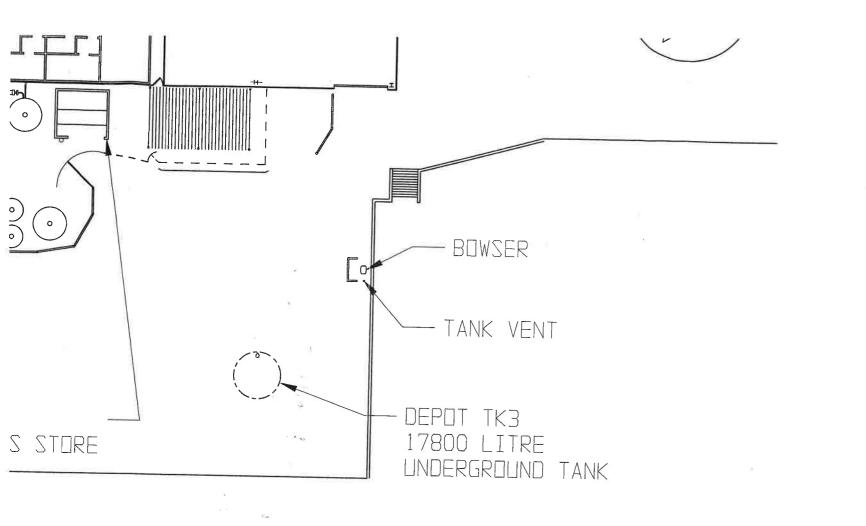




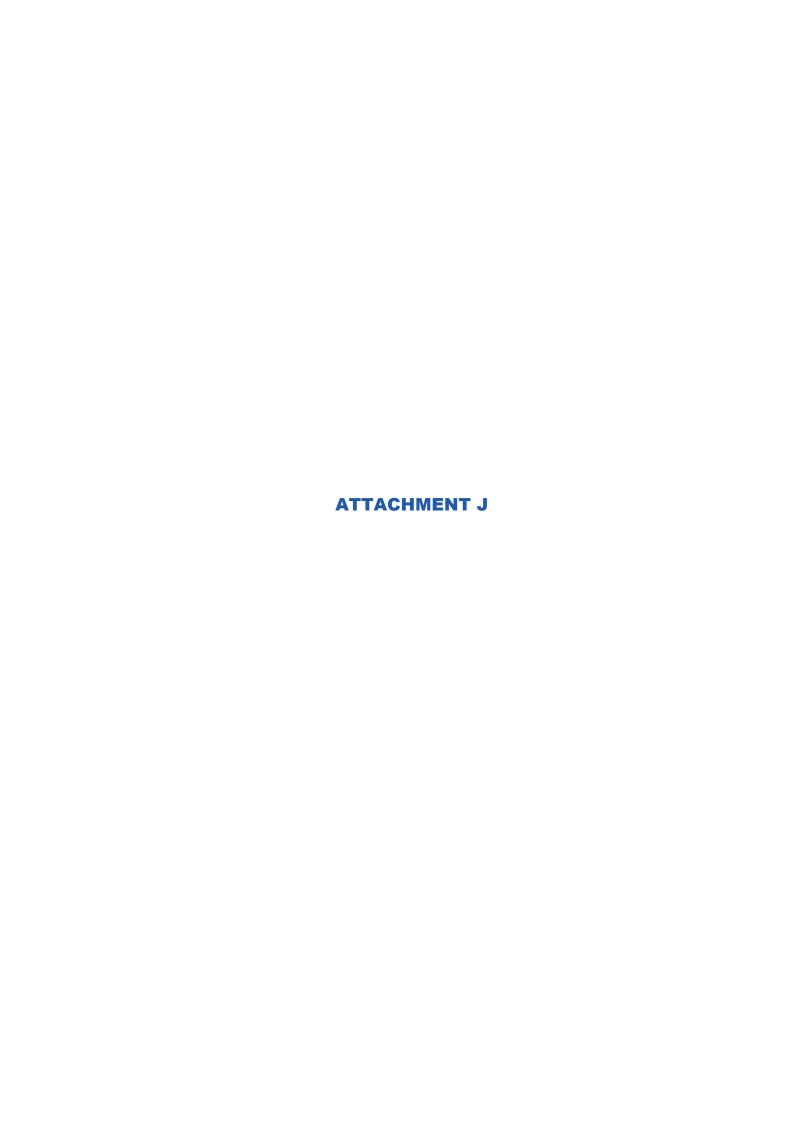


BLAKISTON BOYD DISTRIBUTION





REV. DESCRIPTION



Search results

Your search for:LGA: Auburn City Council

Matched 50 notices relating to 12 sites.

Notice Type: Declaration of Significantly Contaminated Land

Search Again Refine Search

		I VEIII I	e Search
Suburb	Address	Site Name	Notices related to this site
AUBURN	Jamieson STREET	Department of Corrective Services land adjacent to the former Auburn Landfill	1 former
AUBURN	9 Short STREET	Former Ajax chemical factory	2 former
HOMEBUSH BAY	No specific Street OTHER	Homebush Bay General Area	2 former
HOMEBUSH BAY	25 Bennelong ROAD	<u>Timber Treatment Plant</u>	4 former
SILVERWATER	Carnarvon ROAD	Former Silverwater Landfill	1 current
SILVERWATER	54-58 Derby STREET	Storage Facility	2 current
SYDNEY OLYMPIC PARK	Bicentennial DRIVE	Bicentennial Park	1 current and 2 former
SYDNEY OLYMPIC PARK	Jamieson STREET	Blaxland Common Landfill	1 current and 3 former
SYDNEY OLYMPIC PARK	Sarah Durack AVENUE	Former Golf Driving Range Landfill	1 current and 6 former
SYDNEY OLYMPIC PARK	Kevin Coombes AVENUE	Kronos Hill Landfill	1 current and 13 former
SYDNEY OLYMPIC PARK	Newington ROAD	<u>Wilson Park (Former oil gas plant site)</u>	1 current and 9 former
SYDNEY OLYMPIC PARK	Hill ROAD	Woo-la-ra Landfill	1 current and 4 former

Page 1 of 1

15 October 2019 For business

and industry \square

For local

government \square

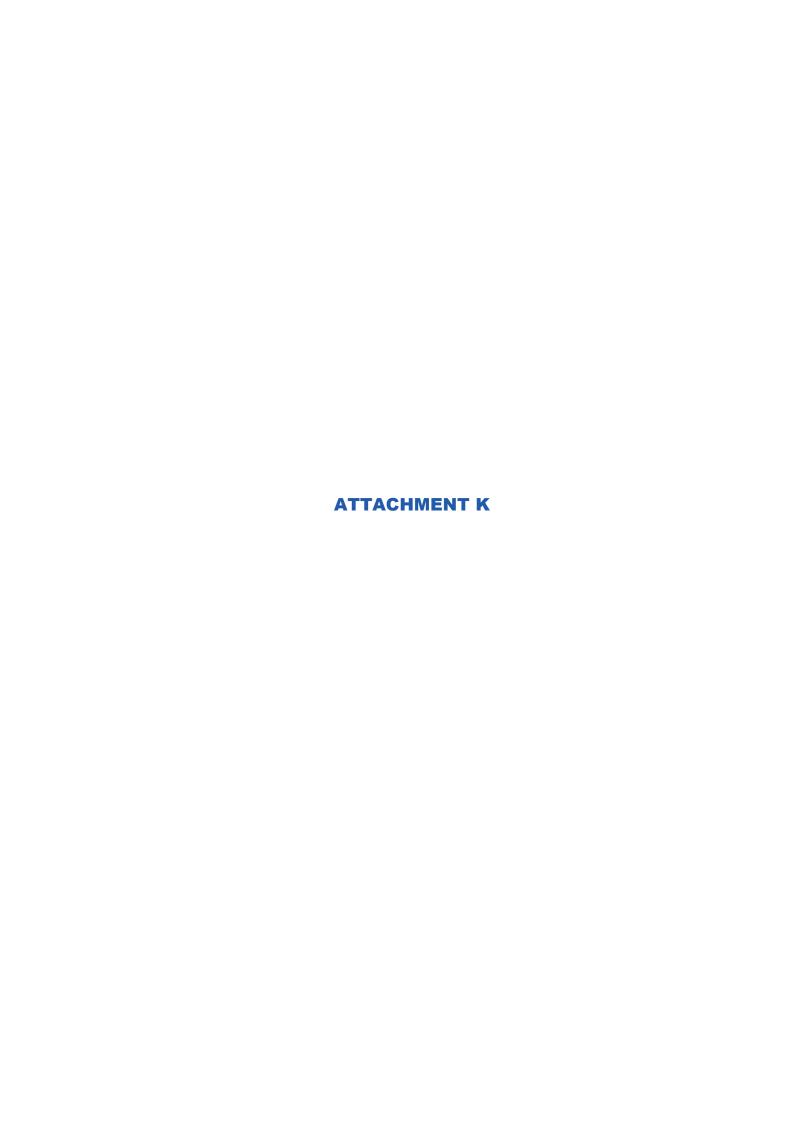
Contact us

- □ 131 555 (tel:131555)
- $info@\,epa.nsw.gov.au\ (mailto:info@\,epa.nsw.gov.au)$
- $\ \ \, \sqcup \ \ \, \mathsf{EPA} \; \mathsf{Office} \; \mathsf{Locations} \; (\mathsf{https://www.epa.nsw.gov.au/about-us/contact-us/locations})$

Accessibility (https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/help-index) Disclaimer (https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/disclaimer) Privacy (https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/privacy) Copyright (https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/copyright)

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Find us on



Licence Variation

Section 58(5) Protection of the Environment Operations Act 1997



VISY INDUSTRIAL PLASTICS PTY. LTD., ABN 98 095 313 705, LEVEL 17, 644 CHAPEL STREET, SOUTH YARRA VIC 3141

Attention: Mr. IVAN GROCHOLSKY

Notice Number 1048733
File Number 502020
Date 07-Jul-2005

NOTICE OF VARIATION OF LICENCE NO. 6953

BACKGROUND

- A. VISY INDUSTRIAL PLASTICS PTY. LTD. ("the licensee") is the holder of Environment Protection Licence No. 6953 ("the licence") issued under the *Protection of the Environment Operations Act 1997* ("the Act"). The licence authorises the carrying out of Scheduled Activity Premises Based at 11-13 PERCY ST, AUBURN, NSW.
- B. Licence varied as an outcome of the licence review conducted by the EPA under section 78 of the *Protection of the Environment Operations Act 1997.*

VARIATION OF LICENCE NO. 6953

- 1. By this notice the EPA varies licence No. 6953 as set out in the Appendix. The Appendix is a copy of the provisions of the licence which are varied by this notice, marked with the variations that are made to them.
- 2. The variations to the licence are indicated in the following way:
 - if a strike through mark appears through any word or other text (eg. Solids or) this indicates that the word or other text is deleted from the licence by this notice; and
 - if a double underline appears under any word or other text (eg. must be treated) this indicates that
 the word or other text is added to the licence by this notice.
- 3. Except as provided by section 84(2) of the Act, the variations to the licence by this notice begin to operate at the expiry of the period of 21 days after you receive notice of the variations, unless another date is specified in this notice.
- 4. Section 84(2) of the Act provides that a variation to a licence does not operate:

Protection of the Environment Operations Act 1997

Licence Variation



Section 58(5) Protection of the Environment Operations Act 1997

- until the expiry of the period of 21 days after you are given notice of the decision to vary the licence;
 or
- if an appeal against the decision is lodged within that period, until the Land and Environment Court confirms the decision or the appeal is withdrawn; or
- until you notify the EPA in writing that no appeal is to be made against the decision to vary the licence.

whichever first occurs.

Mr Steve Beaman

Manager

Sydney Waste
(by Delegation)

INFORMATION ABOUT THIS NOTICE

- Section 287 of the Act enables appeals to be made in connection with decisions about licences within 21 days after you are given notice of the decision.
- Details provided in this notice will be available on the EPA's Public Register in accordance with section 308 of the Act.
- This notice is issued under section 58(5) of the Act.



Environment Protection Authority

Environment Protection Licence

Section 55 Protection of the Environment Operations Act 1997

Licence number: 6953

Archived: 07-Jul-2005

• File number: 502020

• Licence Anniversary Date: 01-April

Review date not later than 21-Nov-200507-Jul-

Licence Type

Premises

Licensee

VISY INDUSTRIAL PLASTICS PTY. LTD. LEVEL 17, 644 CHAPEL STREET SOUTH YARRA VIC 3141

Licensed Premises

VISY INDUSTRIAL PACKAGING 11-13 PERCY ST

AUBURN NSW 2144

Fee Based Activity

<u>Scale</u>

Hazardous, Industrial or Group A Waste Generation > 10 - 100 T

or Storage (73)

EPA Region

Sydney Waste 59-61 Goulburn Street SYDNEY NSW 2000 Phone: 02 9995 5000

Fax: 02 9995 5999

PO Box A290 SYDNEY SOUTH

NSW 1232



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Information about this licence

Dictionary

The licence contains a dictionary, which defines terms used in the licence. It is found at the end of the licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- Ensure persons associated with you comply with this licence, as set out in section 64 of the Act.
- Control the pollution of waters and the pollution of air (see for example sections 120 132 of the Act).
- Report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Transfer of licence

Transfer of the licence to another person may be requested by the licensee using the form for this purpose available from the EPA.

Variation of licence conditions

Variations to the conditions of this licence may be requested by the licensee using the form for this purpose available from the EPA. The EPA may also vary a licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 3 years after the issue of the licence, as



set out in Part 3.6 of the Act. You will receive advance notice of the licence review. For licences held immediately before 1 July 1999, the first review will take place before 1 July 2002.

Fees and annual return to be sent to the EPA

The licence requires you to forward to the EPA an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints).

The Annual Return must be submitted within 60 days after the end of each reporting period. Where a licence is transferred, surrendered or revoked, a special reporting period applies.

For each licence fee period you must pay:

- · an administrative fee; and
- a load-based fee (if applicable).

Usually the licence fee period is the same as the reporting period.

See condition R1 and the accompanying form regarding the Annual Return requirements.

The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications
- licence conditions and variations
- · statements of compliance

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

Licence anniversary date

01-April

This licence is issued to

VISY INDUSTRIAL PLASTICS PTY. LTD. LEVEL 17, 644 CHAPEL STREET SOUTH YARRA VIC 3141

subject to the conditions which follow:



1 Administrative conditions

A1 What the licence authorises and regulates

- A1.1 Not applicable.
- A1.2 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, feebased activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	
Waste Activities	

Fee Based Activity	Scale
Hazardous, Industrial or Group A Waste Generation	> 10 - 100 T
or Storage (73)	

A1.3 Not applicable.

A2 Premises to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
VISY INDUSTRIAL PACKAGING
11-13 PERCY ST
AUBURN
NSW
2144
LOT 1, 2 & B DP/SP 507724

A3 Other activities

A3.1 Not applicable.

A4 Information supplied to the EPA

A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- (a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to air and water and applications to land

- P1 Location of monitoring/discharge points and areas
- P1.1 Not applicable.
- P1.2 Not applicable.



P1.3 Not applicable.

3 Limit conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Load limits

- L2.1 Not applicable.
- L2.2 Not applicable.

L3 Concentration limits

- L3.1 Not applicable.
- L3.2 Not applicable.
- L3.3 Not applicable.

L4 Volume and mass limits

L4.1 Not applicable.

L5 Waste

- L5.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.
- L5.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.
- L5.3 Except as provided by any other condition of this licence, only the hazardous and/or industrial and/or Group A waste listed below may be generated and/or stored at the premises.



Waste oil/water, hydrocarbon/water mixtures or emulsions [J120]

L5.4 The quantity of hazardous/and/or industrial and/or Group A waste generated and/or stored on the premises must not exceed 100 tonnes per year.

L6 Noise Limits

L6.1 Not applicable.

L7 Potentially offensive odour

- L7.1 No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.
- L7.2 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.
- Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

4 Operating conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
 - (a) must be maintained in a proper and efficient condition; and
 - (b) must be operated in a proper and efficient manner.



O3 Emergency response

O3.1 Within 3 months of the date of the issue of this licence, the licensee must develop, or update, an emergency response plan which documents the procedures to deal with all types of incidents (e.g. spill, explosions or fire) that may occur at the premises or outside of the premises (e.g. during transfer) which are likely to cause harm to the environment.

O4 Processes and management

- O4.1 The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes, in force as at 1 July 1999.
- O4.2 The licensee must ensure that waste identified for recycling is stored separately from other waste.

O5 Monitoring of waste movements within NSW

O5.1 Conditions O5.2 to O5.16 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in L5.3, within NSW.

Prerequisites for waste movements

- O5.2 If the waste is transported from the premises, the licensee must ensure that the waste is transported:
 - (a) to a place which has been licensed by the EPA to issue consignment authorisation numbers; and
 - (b) to a place that can otherwise lawfully accept that class of waste.
- O5.3 If the waste is transported from the premises, the licensee must;
 - (a) obtain a consignment authorisation number from the consignee;
 - (b) complete an approved waste data form in relation to the consigned waste in accordance with the instructions on the form and to the extent required, and give a copy of the form to the person transporting the waste;
 - (c) ensure that the waste data form:
 - (i) is completed accurately, and
 - (ii) is retained for a period of not less than 4 years from the time the form was completed, and
 - (iii) is made available for inspection by an authorised officer on request;
 - (d) ensure, if the waste is of such an amount as to require the person transporting it to be licensed, that the person transporting the waste is licensed.

Application for a consignment authorisation number

- O5.4 To obtain a consignment authorisation number as required by 05.3 (a), the licensee must apply in writing to the consignee. An application must include the following information:
 - (a) a statement identifying the classification of the waste in accordance with the requirements of condition 04.1;
 - (b) copies of all information used to classify the waste;



- (c) an estimate of the amount of waste to which the application applies;
- (d) whether the consignment will consist a single load or multiple loads;
- (e) an estimate of the total period required for transportation of the consignment;
- (f) the date of dispatch of at least the first load in the consignment.

Note: The licensee may nominate the dates of dispatch of as many loads as is feasible. This should be discussed with the consignee and will depend on the predictability of the rate of generation of the waste and the likelihood of the need for amendments to the dates nominated. If the waste is predictable, a schedule may be able to be submitted for the entire consignment, however if it is unpredictable, the date of only one future load may be able to be determined at a time (see also 05.9 about amending notified dates).

Note: The requirement for a written application for a consignment authorisation number does not preclude preliminary contact to obtain quotes and/or advice. Such preliminary contact does not require the formal provision of the above information that need only be supplied in the formal application.

O5.5 Once an application for a consignment authorisation number, as set out in 05.4 has been submitted, the licensee must not submit an application for the same consignment to another consignee until notification is received concerning the outcome of the application.

Notification of dates of dispatch of the second and subsequent loads in a consignment.

- O5.6 The licensee must provide the consignee with written notification of the date of dispatch of each load of waste.
- O5.7 The notification referred to in 05.6 must be received by consignee no later than the date of arrival of the preceding load at the destination.

Notification of a final load in a consignment.

O5.8 Unless the movement of an entire consignment of waste occurs in a single load, by the time the final load in a consignment is accepted at the destination, the licensee must have informed the consignee in writing, that no further loads are to be dispatched under that consignment authorisation number.

Note: The notifications referred to in conditions 05.6 and 05.8 may be attached to the waste data form of the preceding load.

Amendments to the nominated date(s) of dispatch

- O5.9 If the date of dispatch for a load of waste is changed, the licensee must give written notification of this to the consignee and nominate a revised date of dispatch.
- O5.10 A notification referred to in 05.9 must occur on or before the date of delivery as previously nominated.

Note: More than one amendment to dates of dispatch may occur.



Cancellation of consignment authorisations

O5.11 If the licensee determines that the delivery of a consignment of waste is to be discontinued for any reason, the consignee must be notified in writing before the nominated date of dispatch of the next expected load.

Notification of delayed delivery by transporter

O5.12 If the licensee receives written notification from a transporter who removed waste from the premises specifying a revised date of delivery to the destination which is more than 7 days after the date of dispatch, the licensee must note and record that date.

Record keeping

- O5.13 The licensee must record and retain all information related to each consignment of waste.
- Note: This includes waste data forms and copies of other documents such as notifications of revised delivery dates, regular and other reports, etc.
- O5.14 The records referred to in 05.13 must be kept so that:
 - (a) all records relating to individual consignment authorisation numbers are kept physically together;
 - (b) consignments transported by each transporter can be readily identified and accessed; and
 - (c) consignments sent to each destination can readily be identified and accessed.

Note: The licensee must keep all information for at least 4 years.

Exception reporting

- O5.15 The licensee must notify the EPA, in writing, within 48 hours of becoming aware of any suspected breaches of the Act, the Protection of the Environment Operations (Waste) Regulation 1996 or this licence.
- O5.16 The licensee must notify the EPA in writing within 48 hours of becoming aware of any of the following:
 - (a) the refusal by a person to whom the licensee has applied for a consignment authorisation number in accordance with 05.4 to issue such a number;
 - (b) the refusal of a transporter to transport waste after arriving at the licensee's premises for the purposes of transporting that waste;
 - (c) a transporter who transports, or attempts to transport, waste without a waste data form completed to the extent required;
 - (d) the refusal of a consignee to accept waste from the licensee;
 - (e) the failure of the licensee to receive written confirmation of receipt of waste from a consignee within 21 days of dispatch, or where a transporter has provided written notification of a revised date of delivery as set out in 05.12 within 21 days of that date;
 - (f) the notification by a transporter of a revised date of delivery which is more than 90 days after the date of dispatch of the waste.

Note: The EPA should be notified of exception reports by sending a facsimile to:



Manager, Hazardous Waste Regulation

NSW Environment Protection Authority

O6 Monitoring of interstate movements of controlled wastes

O6.1 Conditions O6.2 to O6.11 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in L5.3, into and out of NSW.

Note: The requirements of the NEPM apply to the interstate movement of any of the wastes listed in Appendix 1 of this licence.

Classification of controlled waste

O6.2 The licensee must accurately identify the waste, in accordance with 04.1, and determine if the waste is a controlled waste within the meaning of the NEPM.

Note: The waste producer must check with the agency in the State or Territory of destination to determine whether waste is classified as a controlled waste under the NEPM. Unless advised otherwise by the agency of the State or Territory of destination, any waste included in Appendix 1 of this licence is a controlled waste for the purposes of the NEPM.

Application for a consignment authorisation

O6.3 If the waste is transported from the premises to another participating State or Territory, the licensee must comply with all conditions attached to the consignment authorisation issued by an agency or a facility delegated by an agency in the destination State or Territory.

Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 1996 to obtain, prior to the waste being dispatched, a consignment authorisation from an agency, or a facility delegated by an agency, in the destination State or territory to allow the movement of controlled waste.

Waste movements

- O6.4 If the waste is transported from the premises to another participating State or Territory, the licensee must ensure that the waste is transported to a place that can lawfully be used as a waste facility for that waste.
- O6.5 The licensee must ensure that the waste transporter is licensed as required by the agency of each participating State or Territory through which the waste is transported.
- O6.6 The licensee must:
 - (a) retain a copy of the waste transport certificate for the waste for a period of not less than 4 years from the time the form was completed, and
 - (b) make the copy of the waste transport certificate available for inspection by an authorised officer on request.



Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 1996 to complete a waste transport certificate for the waste. This should be done in accordance with the instructions printed on the certificate and the required copy of the waste transport certificate should be forwarded to the agency in the State of destination.

Notification of delayed delivery by transporter

O6.7 If the licensee receives written notification from the transporter who removed waste from the licensee's premises specifying a revised date of delivery to the destination which is more than 7 days after the date of dispatch, the licensee must note and record that date.

Record keeping

- O6.8 The licensee must record and retain all information related to each consignment of waste.
- Note: This includes the waste transport certificates and copies of other documents such as consignment authorisations issued by an agency in the destination State or Territory, notifications of revised delivery dates by transporters, regular and other reports, etc.
- O6.9 The records referred to in 06.8 must be kept so that:
 - (a) all records relating to each consignment authorisation are kept physically together;
 - (b) consignments transported by each transporter can be readily identified and accessed, and
 - (c) consignments sent to each destination can readily be identified and accessed.

Note: The licensee must keep all information for at least 4 years.

Exception reporting

- O6.10 The licensee must notify the EPA in writing within 48 hours of becoming aware of a suspected breach of the Act, the Protection of the Environment Operations (Waste) Regulation 1996 or this licence.
- O6.11 The licensee must notify the EPA in writing within 48 hours of becoming aware of any of the following:
 - (a) the refusal by an agency, or facility delegated by an agency, in participating State or Territory to whom the licensee has applied for a consignment authorisation in accordance with 06.3, to issue such an authorisation:
 - (b) the refusal of a transporter to transport waste after arriving at the licensee's premises for the purposes of transporting that waste to another participating State or Territory to the extent required;
 - (c) a transporter who transports, or attempts to transport, waste to another participating State or Territory without a waste transport certificate completed to the extent required;
 - (d) the refusal of a destination in another participating State or Territory to accept from the licensee waste for which a consignment authorisation has been issued;
 - (e) the failure of the licensee to receive written confirmation of receipt of waste from a destination in another participating State or Territory within 28 days of dispatch.

Note: The EPA should be notified of exception reports by sending a facsimile to:

Manager, Hazardous Waste Regulation



NSW Environment Protection Authority

5 Monitoring and recording conditions

M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
 - (a)in a legible form, or in a form that can readily be reduced to a legible form;
 - (b)kept for at least 4 years after the monitoring or event to which they relate took place; and
 - (c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
 - (a) the date(s) on which the sample was taken;
 - (b) the time(s) at which the sample was collected;
 - (c) the point at which the sample was taken; and
 - (d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

M2.1 Not applicable.

M3 Testing methods - concentration limits

- M3.1 Not applicable.
- M3.2 Not applicable.

M4 Recording of pollution complaints

- M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M4.2 The record must include details of the following:
 - (a) the date and time of the complaint;
 - (b) the method by which the complaint was made;
 - (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;



- (d) the nature of the complaint;
- (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- (f) if no action was taken by the licensee, the reasons why no action was taken.
- M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M5 Telephone complaints line

- M5.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M5.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M5.3 Conditions M5.1 and M5.2 do not apply until 3 months after:
 - (a) the date of the issue of this licence or
 - (b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.

M6 Requirement to monitor volume or mass

- M6.1 Not applicable.
- M6.2 Not applicable.

6 Reporting conditions

R1 Annual return documents

What documents must an Annual Return contain?

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
 - (a) a Statement of Compliance; and
 - (b) a Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

- R1.3 Where this licence is transferred from the licensee to a new licensee,
 - (a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
 - (b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on
 - (a) in relation to the surrender of a licence the date when notice in writing of approval of the surrender is given; or
 - (b) in relation to the revocation of the licence the date from which notice revoking the licence operates.

Deadline for Annual Return

R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Notification where actual load can not be calculated

R1.6 Not applicable.

Licensee must retain copy of Annual Return

R1.7 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

- R1.8 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
 - (a) the licence holder; or
 - (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.
- R1.9 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.



R2 Notification of environmental harm

- Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.
- R2.1 Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

R3 Written report

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
 - (a) where this licence applies to premises, an event has occurred at the premises; or
 - (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
 - (a) the cause, time and duration of the event;
 - (b) the type, volume and concentration of every pollutant discharged as a result of the event;
 - (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
 - (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
 - (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
 - (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
 - (g) any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Regular reporting of transportation of certain wastes within NSW

R4.1 Conditions R4.2 to R4.5 apply to the transport of hazardous and/or industrial and/or Group A waste within NSW.

Regular reporting

- R4.2 The licensee must supply to the EPA, for each transporter that transported waste from the licensees premises, the information as set out in Appendix 2, table 1.
- R4.3 The licensee must supply to the EPA, for each destination within NSW which received waste from the licensee, the information as set out in Appendix 2, table 2.

Reporting periods

- R4.4 Reports to the EPA in accordance with R4.2 and R4.3 shall be supplied on or before:
 - (a) 30 April for the reporting of information relating to wastes transported from the premises between 1 January and 31 March of that year;
 - (b) 31 July for the reporting of information relating to wastes transported from the premises between 1 April and 30 June of that year;
 - (c) 31 October for the reporting of information relating to wastes transported from the premises between 1 July and 30 September of that year;
 - (d) 31 January for the reporting of information relating to wastes transported from the premises between 1 October and 31 December of the previous year.

Note: The EPA should be notified of exception reports by sending a facsimile to:

Manager, Hazardous Waste Regulation NSW Environment Protection Authority

Nil reports

R4.5 If waste has not been transported from the premises in any reporting period as set out in R4.4 the EPA must be advised in writing by the licensee, by the dates referred to in R4.4 in lieu of reporting as required in R4.2 and R4.3.

R5 Regular reporting of interstate movements of controlled wastes

R5.1 Conditions R5.2 to R5.5 apply to the movement of hazardous and/or industrial and/or Group A waste as listed in L5.3, into and out of NSW.

Note: The requirements of the NEPM apply to the interstate movement of any of the wastes listed in Appendix 1 of this licence.

Regular reporting

R5.2 The licensee must supply to the EPA, for each transporter that transported waste from the premises to a destination in another participating State or Territory, the information as set out in Appendix 2, table 3.

Reporting periods

- R5.3 Reports to the EPA in accordance with R5.2 shall be supplied on or before:
 - (a) 30 April for the reporting of information relating to wastes transported from the premises between 1 January and 31 March of that year;
 - (b) 31 July for the reporting of information relating to wastes transported from the premises between 1 April and 30 June of that year;
 - (c) 31 October for the reporting of information relating to wastes transported from the premises between 1 July and 30 September of that year;
 - (d) 31 January for the reporting of information relating to wastes transported from the premises between 1 October and 31 December of the previous year.

Nil reports

R5.4 If waste has not been transported from the premises in any reporting period as set out in R5.3, the EPA must be advised in writing by the licensee, by the dates referred to in R5.3 in lieu of reporting as defined in R5.2.

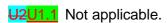
Interstate transport of controlled wastes

R5.5 The licensee must comply with the requirements of the NEPM.

General conditions

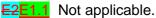
- G1 Copy of licence kept at the premises
- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

Pollution studies and reduction programs



Special conditions





Appendices

APPENDIX 1

WASTE DESCRIPTIONS AND CORRESPONDING WASTE CODES

The waste descriptions and waste codes shown below must be used to identify hazardous, industrial and Group A wastes on the waste data form for movements of those wastes within NSW, and to identify controlled wastes on the waste transport certificate for those wastes moved between NSW and other States and Territories. The waste codes must also be used to identify wastes when reporting the information required in the Tables in Appendix 2.

Description	Waste Code	Description	Waste Code
Acidic solutions or acids in solid form	B100	Organohalogen compounds - other than substances referred to in this list	M160
Animal effluent and residues (abattoir effluent, poultry and fish processing wastes)	K100	Perchlorates	D340
Antimony; antimony compounds	D170	Phenols, phenol compounds including chlorophenols	M150
Arsenic; arsenic compounds	D130	Phosphorus compounds excluding mineral phosphates	D360
Asbestos	N220	Polychlorinated dibenzo-furan (any congener)	M170
Barium compounds (excluding barium sulphate)	D290	Polychlorinated dibenzo-p-dioxin (any congener)	M180
Basic solutions or bases in solid form	C100	Residues from industrial waste treatment/disposal operations	T190
Beryllium; beryllium compounds	D160	Selenium; selenium compounds	D240
Boron compounds	D310	Sewage sludge and residues including nightsoil and septic tank sludge	K130
Cadmium; cadmium compounds	D150	Soils contaminated with a controlled waste	N120
Ceramic-based fibres with physico- chemical characteristics similar to those of asbestos	N230	Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials	M250
Chlorates	D350	Tannery wastes (including leather dust, ash, sludges and flours)	K140
Chromium compounds (hexavalent and trivalent)	D140	Tellurium; tellurium compounds	D250
Clinical and related wastes	R100	Thallium; thallium compounds	D180
Cobalt compounds	D200	Triethylamine catalysts for setting foundry sands	M230
Containers and drums which are contaminated with residues of substances referred to in this list	N100	Tyres	T140
Copper compounds	D190	Vanadium compounds	D270
Cyanides (inorganic)	A130	Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or are new and whose effects on human health and/or the environment are not known	T100
Cyanides (organic)	M210	Waste containing peroxides other than hydrogen peroxide	E100
Encapsulated, chemically-fixed, solidified or polymerised wastes	N160	Waste from heat treatment and tempering operations containing cyanides	A110
Ethers	G100	Waste from manufacture, formulation and use of wood- preserving chemicals	H170
Filter cake	N190	Waste from the production, formulation and use of biocides and phytopharmaceuticals	H100
Fire debris and fire washwaters	N140	Waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish	F100
Fly ash	N150	Waste from the production, formulation and use of organic solvents	G160



Grease trap waste	K110	Waste from the production, formulation and use of photographic chemicals and processing materials	T120
Halogenated organic solvents	G150	Waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	F110
Highly odorous organic chemicals (including mercaptans and acrylates)	M260	Waste from the production and preparation of pharmaceutical products	R140
Inorganic fluorine compounds excluding calcium fluoride	D110	Waste mineral oils unfit for their original intended use	J100
Inorganic sulfides	D330	Waste oil/water, hydrocarbons/water mixtures or emulsions	J120
Isocyanate compounds	M220	Waste pharmaceuticals, drugs and medicines	R120
Lead; lead compounds	D220	Waste resulting from surface treatment of metals and plastics	A100
Mercury; mercury compounds	D120	Waste tarry residues arising from refining, distillation, and any pyrolytic treatment	J160
Metal carbonyls Nickel compounds Non toxic salts Organic phosphorous compounds	D100 D210 D300 H110	Waste substances and articles containing or contaminated with polychlorinated biphenyls, polychlorinated napthalenes, polychlorinated terphenyls and/or polybrominated biphenyls	M100
Organic solvents excluding halogenated solvents	G110	Wool scouring wastes Zinc compounds	K190 D230



APPENDIX 2

Table 1

[Table 1 refers to the regular reporting requirements in R4.2. Its purpose is to provide information on the total amount of waste moved by each transporter from waste activities in NSW.]

1. The licensee must provide a copy of the information in the following table for <u>each</u> transporter used by the licensee in the reporting period.

Waste Activities Table 1: Waste Movements By Transporter and Waste Category				
Name of Licensed Waste Activity:			Waste Activity Licence No.:	
Reporting Period:			ANZSIC Code for Waste Activity:	
Name of Transporter:			Licence No. of Transporter	
Waste	class	Waste Code	Amount of Waste Reporting Per	
Hazardous Non- Liquid Waste		Code for each waste of this class	Total Weight for cod	
Hazardous Liquid Waste		Code	Weig	ght
		Code	Weig	ght
Industrial Non-Liquid Waste		Code	Weig	ght
		Code	Weig	ght
Group A Was		Code	Weig	ght

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		—∦E PA
Code	Weight	100 100 100 100 100 100 100 100 100 100

Appendix

[NOTES: **Waste code** refers to the codes listed in Appendix 1 of this licence and entered on the waste transport certificates.

Waste class refers to the classification of waste in accordance with Appendix 1 of the Protection of the Environment Operations Act 1997 and its regulations.

ANZSIC code means the Australian and New Zealand Standard Industrial Classification code published by the Australian Bureau of Statistics.]



Table 2:

[Table 2 refers to the reporting requirements in R4.3. Its purpose is to provide information on the total amount of waste sent to each destination within NSW. Cross referencing by ANZSIC code provides data on which types of industry are sending wastes to disposal and treatment facilities.]

1. The licensee must provide a copy of the information in the following table for <u>each</u> destination within NSW used by the licensee in the reporting period for the purposes of the receipt of controlled waste.

Waste Activities Table 2: Waste Movements By Destination (within NSW) and Waste Category				
Name of Licensed Waste Activity:			Waste Activity Licence No.:	
Reporting Period:			ANZSIC Code for Waste Activity	
Destination:				
Waste	class	Waste Code	Amount of Waste Reporting Per	
Hazai Liquid V	rdous Non- Vastes	Code for each waste of this class	Total Weight for	
		Code		ght
Industrial N Wasi		Code	Wei	ght
		Code	Wei	ght
Hazardou Wasi		Code	Wei	ght
		Code	Wei	ght
Group A Wasi		Code	Wei	ght

NOTES:



Waste code refers to the codes listed in Appendix 1 of this licence and entered on waste data forms. **Waste class** refers to the classification of waste in accordance with Schedule 1 of the Protection of the Environment Operations Act 1997 and its regulations.

ANZSIC code means the Australian and New Zealand Standard Industrial Classification code published by the Australian Bureau of Statistics.

Table 3:

[Table 3 refers to the regular reporting requirements in R5.2. Its purpose is to provide information on the total amounts of controlled wastes sent from NSW licensed waste activities to other States and Territories. Cross-referencing by ANZSIC code allows data on which types of industries are sending wastes interstate.]

1. The licensee must provide a copy of the information in the following table for <u>each</u> destination outside NSW used by the licensee in the reporting period for the purposes of the receipt of controlled waste.

		Waste Activitie		
	Waste Moven	nents By Inters	tate D	estination and Waste Category
Name of				Waste Activity
Licensed				Licence No.:
Waste				
Activity:				
Reporting				ANZSIC Code
Period:				Waste Activity:
Destination State		Destination		
or Territory:		Facility		
•				
Waste class		Waste Code		Amount of Waste Transported in Reporting Period (tonnes)
Hazardous	Non- Cod	de for each wast	e of	Total Weight for waste of this code
Liquid Waste		this type		
		Code		Weight
Industrial Non-Lic Waste	quid 	Code		Weight
		Code		Weight
Hazardous Liqu Waste	uid	Code		Weight
		Code		Weight
Group A Liquid Waste	d	Code		Weight



Other Types of Waste (eg Group B and C Liquid Wastes, Used Tyres)	Code	Weight	
---	------	--------	--

[NOTES: **Waste code** refers to the codes listed in Appendix 1 of this licence and entered on the waste transport certificates.

Waste class refers to the classification of waste in accordance with Appendix 1 of the Protection of the Environment Operations Act 1997 and its regulations.

ANZSIC code means the Australian and New Zealand Standard Industrial Classification code published by the Australian Bureau of Statistics.]

Dictionary

General Dictionary

In this licence, unless the contrary is indicated, the terms below have the following meanings:

·	
3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
BOD	Means biochemical oxygen demand
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991



EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 1998.
flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
industrial waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
inert waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
reprocessing of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997



solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
treatment of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TSP	Means total suspended particles
TSS	Means total suspended solids
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste code	Means the waste codes listed in Appendix 5 of the EPA document A Guide to Licensing Part B.
waste type	Means Group A, Group B, Group C, inert, solid, industrial or hazardous waste

Model Licence Dictionary

In this licence, unless the contrary is indicated, the terms below have the following meanings:

Agency	A body or bodies of a participating State or a participating Territory which that State or Territory has nominated for the purposes of the NEPM.
Chemical control order (CCO)	An order under sections 22 and 23 of the Environmentally Hazardous Chemicals Act 1985.
Consignee	The person to whom the waste is dispatched, and includes:
	(a) in the case of a waste facility that is licensed - the occupier;
	(b) in the case of a person carrying on mobile waste processing that is licensed - the person operating the mobile place;
	(c) in the case of a place that can be otherwise lawfully be used as a waste facility for that waste - the owner or occupier of that place.
Consignment	One or more shipments of a specified waste dispatched to a particular destination.
Consignment authorisation	An approval which includes a unique identifier granted by an agency, or a facility delegated by an agency, in the jurisdiction of destination to allow the movement of controlled waste.
Controlled waste	Any waste included in List 1 of Schedule A of the NEPM, provided that the waste possesses one or more of the characteristics in List 2, of Schedule A of the NEPM.
Date of dispatch	The date on which a load of waste is removed from the premises.
Destination	Where hazardous, industrial or Group A wastes are transported within NSW, the place described in the waste data form as the destination for the waste.
	Where controlled wastes are transported between NSW and another participating State or Territory, the place described in Part 3 of the waste transport certificate as the facility receiving the waste.
Facility	A place where controlled wastes are received.
Facility Operator	A person in charge of a facility.
Jurisdiction of	In relation to a particular consignment of waste means the State or Territory in which



destination	the facility is located to which the waste is intended to be transported.
Load	The amount of a consignment of waste placed on a vehicle for any single dispatch from the premises at which it was generated or stored.
Load number	A consecutive number identifying each load of waste within a consignment and starting with 1 for the first load of each consignment. One or more loads may make up a consignment.
NEPM	The National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure 1998.
Non-liquid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997.
Participating State or Territory	A State or Territory that is
	(a) a party to the Intergovernmental Agreement on the Environment made on 1 May 1992 between the Commonwealth, the States, the Australian Capital Territory, the Northern Territory and the Australian Local Government Association, a copy of which is set out in the Schedule to the Commonwealth Act; and
	(b) in which an Act that corresponds to the National Environment Protection Council Act 1994 of the Commonwealth is in force in accordance with the Agreement.
Recycling of waste	The processing of waste into a similar non-waste product.
Regulation	The Protection of the Environment Operations (Waste) Regulation 1996.
Transporter	A person responsible for moving controlled wastes either from one participating State or Territory to another or through participating States or Territories.
Waste activity	An activity, whether required to be licensed or not, carried on for business or other commercial purposes, that involves the generating or storage of any of the following waste classes:
	(a) hazardous waste,
	(b) industrial waste,
	(c) Group A waste.
Waste class	Means either hazardous, industrial or Group A waste.
Waste data form	A certificate in the form approved by the EPA.
Waste guidelines	The document called "Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes" issued by the EPA and in force as at 1 July 1999.
Waste producer	Means the licensee.
Waste transport certificate	A certificate in the form approved by the EPA as fulfilling the requirements of Schedule B of the National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure 1998.



Mr Bernie Weir

Environment Protection Authority

(By Delegation)

Date of this edition - 05-Aug-2004

Environment Protection Licence - Protection of the Environment Operations Act 1997

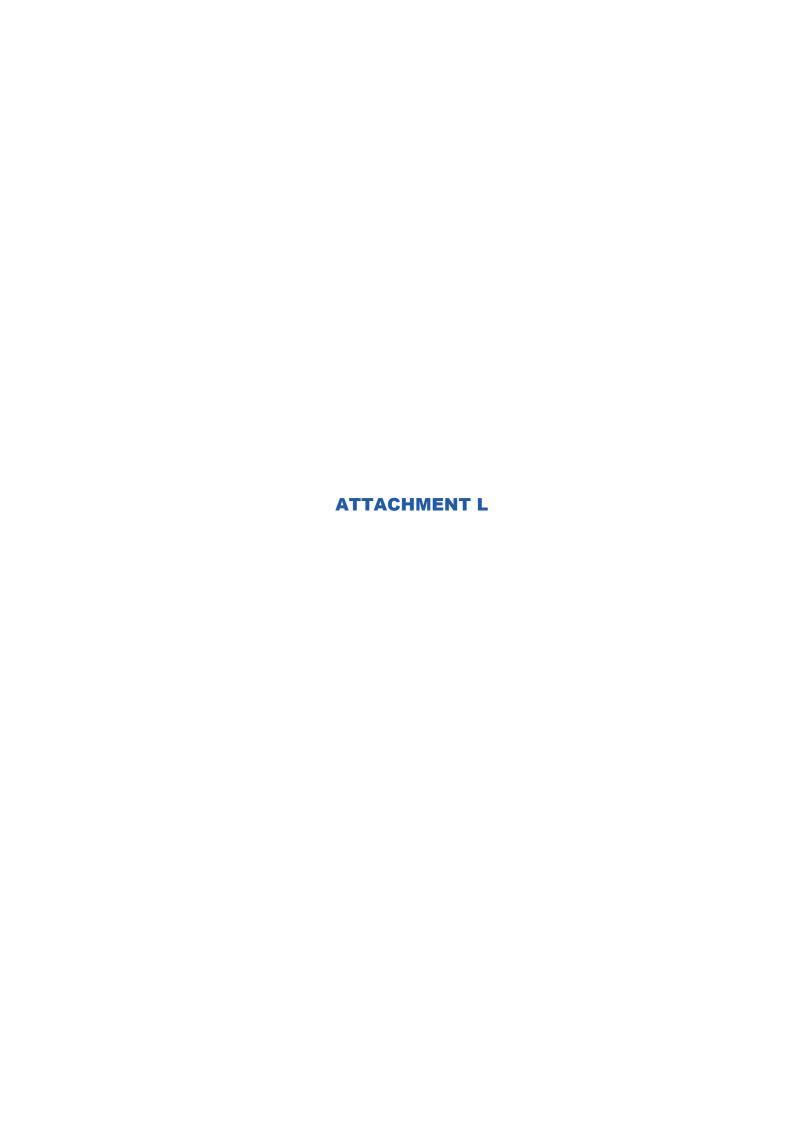
Licence Variation





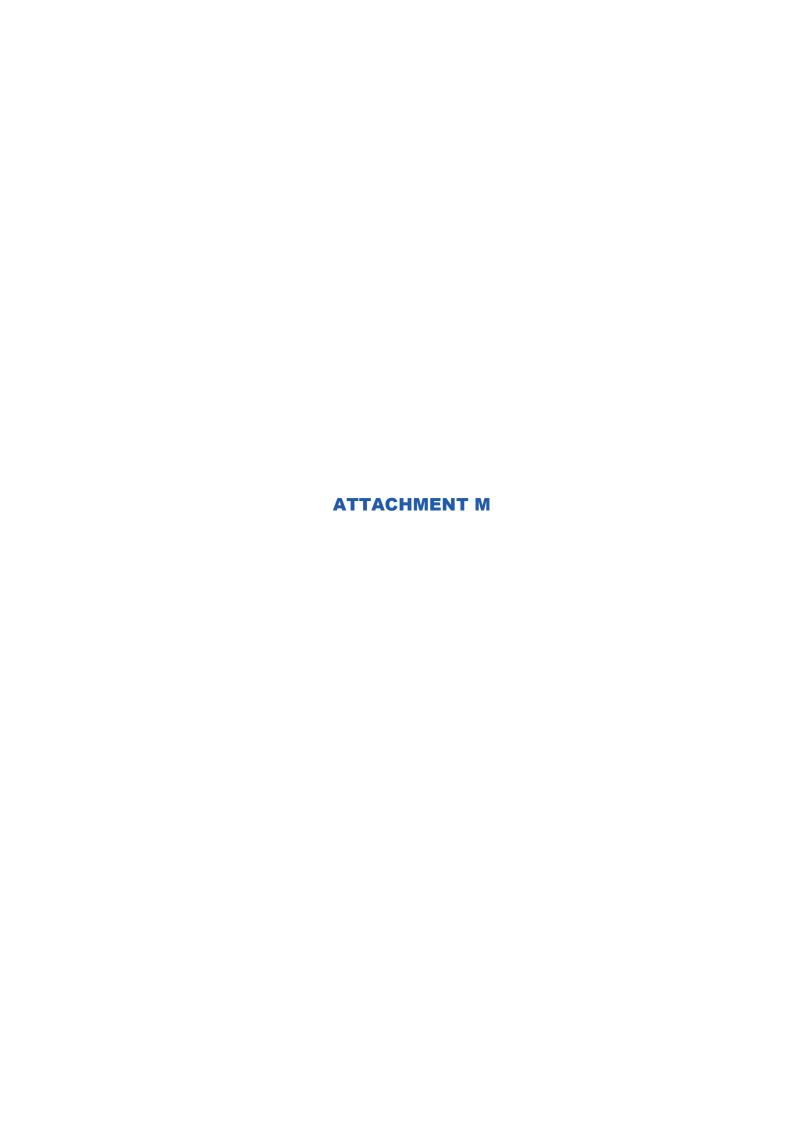
End Notes

- Licence varied by typographical correction, issued on 06-Nov-2002, which came into effect on 06-Nov-2002.
- 2 Licence varied by Admin corrections to archived record, issued on 06-Dec-2002, which came into effect on 06-Dec-2002.
- Licence transferred through application 142838, approved on 05-Aug-2004, which came into effect on 19-Jun-2004.

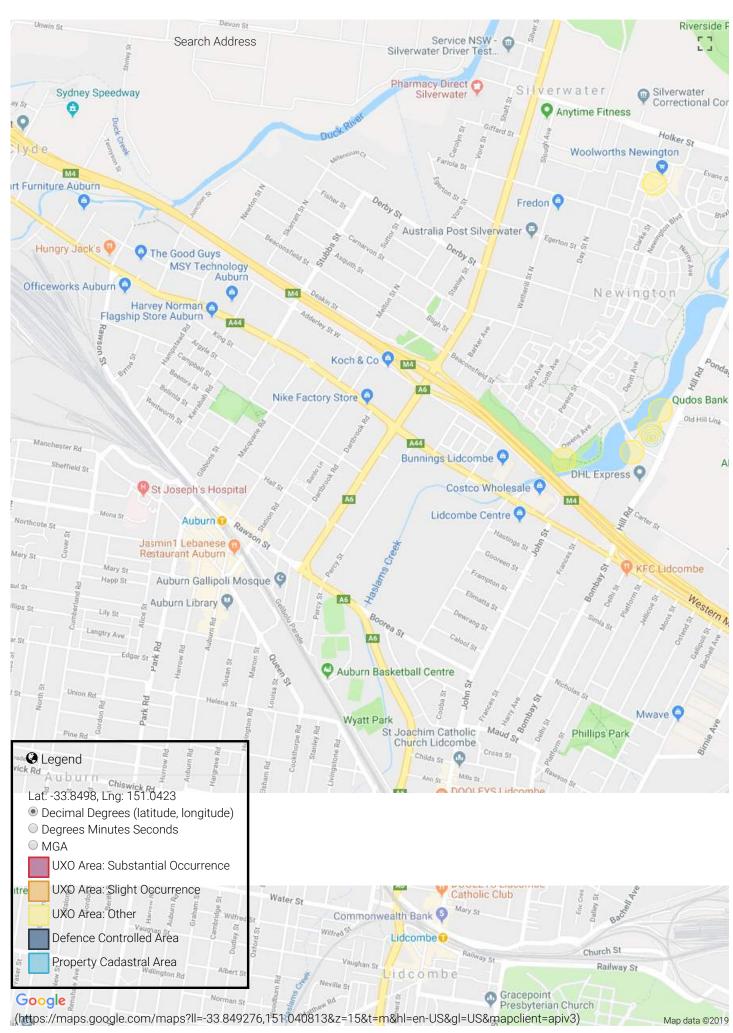


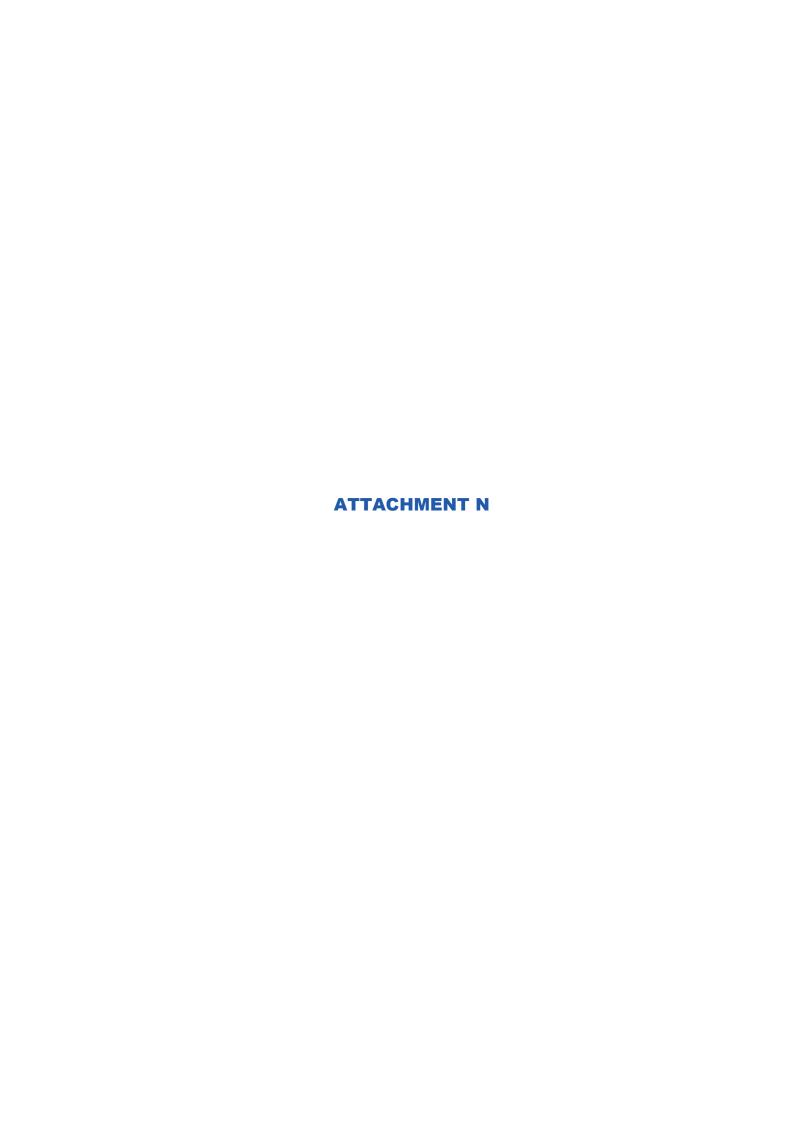
Suburb	SiteName	Address	ContaminationActivityType	ManagementClass	Latitude	Longitude
ARMIDALE	Martin Street Estate	Martin STREET	Other Industry	Regulation under CLM Act not required	-30.50559024	151.6431854
ARMIDALE	Caltex Armidale Girraween Service Station	6-8 Queen Elizabeth DRIVE	Service Station	Regulation under CLM Act not required	-30.50348872	151.6510748
ARMIDALE	Martin Street, Crown Land	Martin STREET	Other Industry	Contamination formerly regulated under the CLM Act	-30.50414076	151,6429516
ARMIDALE	Former Shell Depot	134 Niagara STREET	Other Petroleum	Regulation under CLM Act not required	-30.51180178	151.6488634
ARMIDALE	Caltex Service Station	144 Marsh STREET	Service Station	Regulation under CLM Act not required	-30.51709925	151.6675802
ARMIDALE	Caltex North Hill Service Station	2-4 Marsh STREET	Service Station	Regulation under CLM Act not required	-30.50320439	151.6727051
ARMIDALE	Mobil Armidale Service Station and Former Depot	10-12 McLennan STREET	Service Station	Regulation under CLM Act not required	-30.51107573	151.648242
ARWIDALE	Caltex Service Station	19/10541 New England HIGHWAY Service Station	Service Station	Regulation under CLM Act not required	-30.53210764	151.6160492
ARMIDALE	Armidale Dumaresq Council Grafton Road Depot	15-25 Grafton ROAD	Other Petroleum	Regulation under CLM Act not required	-30.52058076	151,6815261
ARNCLIFFE	7-Eleven Arncliffe	28 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.93428397	151.1525438
ARTARMON	7-Eleven (former Mobil) Artarmon Service Station	477 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.81053826	151.1774248
ASHBY	Ashby Dry Dock	via Clarence STREET	Other Industry	Contamination formerly regulated under the CLM Act	-29.44158377	153.1972304
ASHFIELD	Vehicle Workshop	445-449 Liverpool ROAD	Service Station	Regulation under CLM Act not required	-33.88826829	151.1167477
АЅОШТН	BP Service Station	462 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.68982678	151.106156
ATTUNGA	Attunga Limestone Mine (Waste Oil Site)	Garthowen ROAD	Other Industry	Regulation under CLM Act not required	-30.92920627	150.8579435
AUBURN	DIC Australia	323 Chisholm ROAD	Other Industry	Regulation under CLM Act not required	-33.87228962	151.0157032
AUBURN	Former Ajax chemical factory	9 Short STREET	Other Industry	Contamination currently regulated under CLM Act	-33.83671601	151.0292071

Suburb	SiteName	Address	ContaminationActivityType	ManagementClass	Latitude	Longitude
AUBURN	Janyon	Manchester ROAD	Other Industry	Regulation under CLM Act not required	-33.84467826	151.020745
AUBURN	Maintrain Facility - Sydney Trains Auburn	Manchester ROAD	Other Industry	Regulation under CLM Act not required	-33.84410947	151.0242502
AUBURN	Department of Corrective Services land adjacent to the former Auburn Landfill	Jamieson STREET	Landfill	Contamination formerly regulated under the CLM Act	-33,82928257	151.0590653
АМАВА	Awaba Colliery	Wilton ROAD	Other Industry	Regulation under CLM Act not required	-33.02098186	151.5383612
BALGOWLAH	BP Service Station	Cnr Sydney Road and Maretimo STREET	Service Station	Regulation under CLM Act not required	-33.79546175	151.2559309
BALGOWLAH	Part of Manly Council Maintenance Depot	8-10 Roseberry STREET	Other Petroleum	Regulation under CLM Act not required	-33.78928907	151.2679557
BALGOWNIE	Fuel Power Plus	99 Balgownie ROAD	Service Station	Contamination currently regulated under POEO Act	-34.38925632	150.8808544
BALLINA	Former Mobil Service Station	37-41 Cherry STREET	Service Station	Regulation under CLM Act not required	-28.86952673	153.5624436
BALLINA	Ballina Shell	273 River STREET	Service Station	Regulation under CLM Act not required	-28.86809272	153.5552789
BALLINA	Woolworths Petrol	Kerr STREET	Service Station	Regulation under CLM Act not required	-28.85824461	153.5605439
BALLINA	Ballina Mays Motors	River STREET	Other Petroleum	Regulation under CLM Act not required	-28.86935402	153.5585931
BALRANALD	Caltex Service Station	Sturt HIGHWAY	Service Station	Regulation under CLM Act not required	-34.66747746	143.5662034
BANKSIA	Woolworths Petrol Service Station Banksia	314 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.94567308	151.1416884
Banksia	Cooks Cove Development	Cooks Cove PARK	Landfill	Under assessment	-33.948464	151.153128
BANKSMEADOW	Orica Botany Groundwater Project	16-20 Beauchamp ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.9552673	151.2151954
BANKSMEADOW	Discovery Cove, Former Ampol Rail Terminal	1801 Botany ROAD	Other Petroleum	Regulation being finalised	-33.96162178	151.2184122
BANKSMEADOW	Caltex Terminal	1-3 Penrhyn ROAD	Other Petroleum	Contamination currently regulated under POEO Act	-33.96335328	151.2171062



24/06/2019 UXO Map





PID Calibration Certificate

Instrument

PhoCheck Tiger

Serial No.

T-113994



Air-Met Scientific Pty Ltd 1300 137 067

ltem	Test	Pass			Comment	S
Battery	Charge Condition	√				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PiD	✓	10.6ev			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm	N/A	N/A
Software	Version	✓		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1, 2, 3	4
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and	Certified	Gas bottle	Instrument Reading
		concentration		No	
PID Lamp		98ppm Isobutylene	NATA	SY137	97.5ppm

Calibrated by:

Southan

Sarah Lian

Calibration date:

29/05/2019

Next calibration due:

25/11/2019

airmet

4/06/2019

Instrument

YSI Quatro Pro Plus

Serial No.

18G103119

Air-Met Scientific Pty Ltd 1300 137 067

ltem	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	√	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle	Instrument Reading
				Number	
1. pH 10.00		pH 10.00		324189	pH 9.45
2. pH 7.00		pH 7.00		330737	pH 6.73
3. pH 4.00		pH 4.00		324985	pH 3.97
4. mV		238.4mV		324355/325421	238.9mV
5. EC		2.76mS		322349	2.75mS
6. D.O		0.00ppm		329994	0.00ppm
7. Temp		18°C		MultiTherm	18°C

Calibrated by:

gratic

Sarah Lian

Calibration date:

4/06/2019

Next calibration due:

4/07/2019

18/06/2019

Instrument

YSI Quatro Pro Plus

Serial No.

18G103121

Air-Met Scientific Pty Ltd 1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	√	
-	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	~	В
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of post-sampling bump test This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle	Instrument Reading
				Number	
1. pH 10.00		pH 10.00		324189	pH 9.54
2. pH 7.00		pH 7.00		330737	pH 6.80
3. pH 4.00		pH 4.00		324985	pH 4.11
4. mV		236.2mV		324355/325421	233.8mV
5. EC		2.76mS		322349	2.78mS
6. D.O		0.00ppm		10175	0.01ppm
7. Temp		20.7°C		MultiTherm	20.4°C

Calibrated by:

Kylie Boardman

Calibration date:

18/06/2019

Next calibration due:

18/07/2019

Multi Parameter Water Meter

Instrument

YSI Quatro Pro Plus

Serial No.

10H100319



Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	u u
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle	Instrument Reading
				Number	
1. pH 7.00		pH 7.00		330737	pH 6.98
2. pH 4.00		pH 4.00		330734	pH 4.04
3. pH 10.00		pH 10.00		324189	pH 9.60
3. mV		236.2mV		325420/325421	230.1mV
4. EC		2.76mS		329027	2.76mS
5. D.O		0.00ppm		329994	0.02ppm
6. Temp		22°C		MultiTherm	20.3°C

Calibrated by:

Kylie Boardman

Calibration date:

19/08/2019

Next calibration due:

18/09/2019

airmet

26/09/2019

Instrument

YSI Quatro Pro Plus

Serial No.

12D100011

Air-Met Scientific Pty Ltd 1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
_	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper	✓	
	Settings	✓	
Software	Version	✓	
Data logger	Operation	✓	
Download	Operation	✓	
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle	Instrument Reading
				Number	
1. pH 7.00		pH 7.00		320613	pH 6.96
2. pH 4.00		pH 4.00		330734	pH 4.08
3. pH 10.00		pH 10.00		324189	pH 9.67
3. mV		231.8mV		325420/325421	231.8mV
4. EC		2.76mS		329027	2.76mS
6. D.O		0.00 ppm		329994	0.12ppm
7. Temp		21.0°C		MultiTherm	20.7°C

Calibrated by:

Sarablica

Sarah Lian

Calibration date:

26/09/2019

Next calibration due:

27/10/2019

Instrument

PhoCheck Tiger

Serial No.

T-107188



Air-Met Scientific Pty Ltd 1300 137 067

Item	Test	Pass			Comment	s	
Battery	Charge Condition	1					
	Fuses	✓					
	Capacity	✓					
	Recharge OK?	✓					
Switch/keypad	Operation	✓					
Display	Intensity	✓					
	Operation (segments)	✓					
Grill Filter	Condition	✓					
	Seal	✓					
Pump	Operation	✓					
	Filter	✓					
	Flow	✓					
	Valves, Diaphragm	✓					
PCB	Condition	✓					
Connectors	Condition	✓					
Sensor	PID	✓	10.6 ev				
Alarms	Beeper	✓	Low	High	TWA	STEL	
	Settings	✓	50ppm	100ppm			
Software	Version	✓		7 14	1		
Data logger	Operation	✓					
Download	Operation	✓					
Other tests:							

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Diffusion mode

Aspirated mode

Sensor	Calibration gas and concentration	Certified	Gas bottle	Instrument Reading
PID Lamp	92ppm Isobutylene	NATA	SY245	92.3ppm

Sarah Lian

Calibrated by:

Calibration date:

1/10/2019

Sarable

Next calibration due:

29/03/2020

airmet

Air-Met Scientific Ptv Ltd

Instrument YSI Quatro Pro Plus

Serial No. 18J104341

Air-Met Scientific Pty Ltd 1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
-	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle	Instrument Reading
				Number	
1. pH 10.00		pH 10.00		324189	pH 9.88
2. pH 7.00		pH 7.00		330737	pH 7.02
3. pH 4.00		pH 4.00		324985	pH 4.04
4. mV		234mV		325420/325421	234mV
5. EC		2.76mS		322349	2.75mS
6. D.O		0.00ppm		329994	0.03ppm
7. Temp		20°C		MultiTherm	20.6°C

Calibrated by:

Sarable

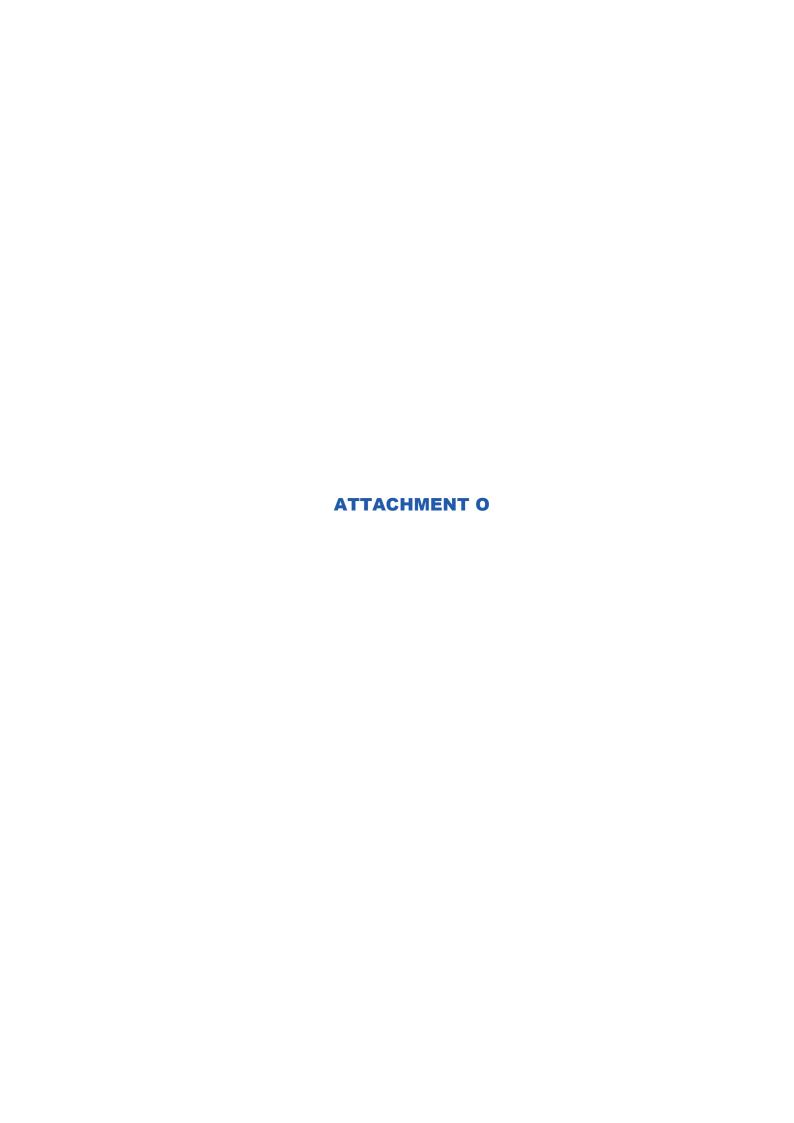
Sarah Lian

Calibration date:

4/10/2019

Next calibration due:

3/11/2019



Monitoring Well Log MW101



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901031 Hole Depth: 7.70 m Date Started: 30/05/2019

Date Completed: 30/05/2019

Detailed Site Investigation 6.77 Project Name: Top of Casing: (mAHD) Ground Level: (mAHD) 6.85

Location / Site: 11-13 Percy Street, Auburn NSW Client: **Fabcot Pty Ltd**

Contractor: **Fico Group Pty Limited** Easting: 318810.89

Method: Solid Flight Auger (Truck mounted) Northing: 6252615.99

	Method	Water Level	Depth (mBGL)	Sample Type	HC Odour	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
											Grass cover				
			0.60	D	Z Z Z	MW101/0.15-0.25	0.1		CL		CLAY with Sand - greyish orange (10YR 7/4), 85% clay, 15% sand, stiff to very stiff.	dry			7
		F	- - 1 - -								CLAY - greyish orange (10YR 7/4), mottled dark yellowish orange (10YR 6/6) and very pale orange (10YR 8/2), 100% clay, stiff to very stiff.	dry			
an			- - - - - 2		Z				CL			damp			4
umad.com.a			2.80								Mottled light brown (5YR 5/6) from 2.5-2.7m.				
TAILED SITE INVESTIGATION.GPJ GL.GDT 10/17/19 4:42:27 PM - drawn by laurie white at www.reumad.com.au			<u>3</u>								CLAY - dark yellowish orange (10YR 6/6), mottled very pale orange (10YR 8/2), 100% clay, firm.	damp			
by laurie wh	SFA		4					Natural			Very pale orange (10YR 8/2) slightly mottled dark	moist	3.7		
PM - drawn			· · -								yellowish orange (10YR 6/6) at 4m, very stiff.		42		
19 4:42:27			5		Z				CL		Hard lenses 5.2-5.5m.				
3DT 10/17/		⊻	- - - - - 6										Seepage at 5.7m.		1
N.GPJ GL.			- - - -								Firm 6.5-6.7m.				
IGATIO			- 7.00 -								CLAY - moderate reddish brown (10R 4/6), mottled	moist			
INVEST			: - -		Z				CL		dark yellowish orange (10YR 6/6), 95% clay, 5% sand, very stiff.				
D SITE			-8							7///	End of Hole at 7.700 m Target depth.			7	1

Abbreviations

Hydrocarbon Odour High Medium Low H M L Z Zero

Sample Type

D U B R C J ASB Disturbed Undisturbed Bulk Representative Continuous Jar Asbestos

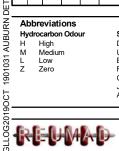
Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP Occket Penetrometer



Encountered Groundwater

Additional Comments

Well developed 31/05/2019, bailed 15L dry.



Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By: Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 30/05/2019 Date: 17/10/2019

MW102 Monitoring Well Log



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street

Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901031

Hole Depth: 5.20 m

Date Started: 30/05/2019 Date Completed: 30/05/2019

5.915

318835.11

2.9

Ground Level: (mAHD)

Easting:

Depth to Groundwater: (mBGL)

Detailed Site Investigation 5.84 Project Name: Top of Casing: (mAHD)

Location / Site: 11-13 Percy Street, Auburn NSW

Client: **Fabcot Pty Ltd**

Contractor: **Fico Group Pty Limited**

Method: Solid Flight Auger (Truck mounted) Northing: 6252659.87

Method Water Level Depth (mBGL)	Sample Type HC Odour	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
ETAILED SITE INVESTIGATION.GPJ. GL.GDT 10/17/19 4:42:30 PM - drawn by laurie white at www.reumad.com.au SFA	D Z Z Z Z Z Z Z	MW102/0.1-0.2	0.1	Natural	CL SC CL CL		CLAY with Sand - light brown (5YR 5/6), 80% clay, 20% sand, firm. Gravelly SAND / CLAY - moderate yellowish brown (10YR 5/4), 35% clay, 35% sand, 30% gravel, medium dense. CLAY - light brown (5YR 5/6), 80% clay, 20% sand, very stiff. CLAY - very pale orange (10YR 8/2), mottled dark yellowish orange (10YR 6/6), 100% clay, firm. Mottled moderate red (5R 4/6) 1.9-2.4m, rare ironstone. SAND with Clay - greyish orange pink (10R 8/2), mottled dark yellowish orange (10YR 6/6), 10% clay, 90% sand, very loose to loose, very fine grained sand. CLAY with Sand - greyish orange pink (10R 8/2), mottled dark yellowish orange (10YR 6/6), 70% clay, 30% sand, soft. End of Hole at 5.200 m Target depth.	dry dry dry to damp damp wet	GW encountered at 3.4m, left for 15 minutes GWL at 2.9m.		∯ Gatio

Abbreviations Hydrocarbon Odour

High Medium Low H M L Z Zero

Sample Type Disturbed

D U B R C J ASB Undisturbed Bulk Representative

Continuous Jar Asbestos

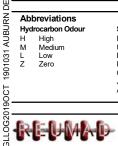
Strength Testing
SPT Standard Penetration Test



Encountered Groundwater

Additional Comments

Well developed 31/05/2019, bailed 18L.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 30/05/2019 Date: 17/10/2019

Date Completed:

Easting:

Northing:



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street

Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901031

Hole Depth: 4.00 m 30/05/2019 Date Started:

30/05/2019

318850.14

6252700.96

Project Name: **Detailed Site Investigation** Top of Casing: (mAHD) 4.53 Ground Level: (mAHD) 4.628

Location / Site: 11-13 Percy Street, Auburn NSW

Fabcot Pty Ltd

Contractor: **Fico Group Pty Limited**

Client:

Method: Solid Flight Auger (Truck mounted)

USCS Symbol Depth (mBGL Sample Type Material Type Water Level Details Constr (mdd) ₽ Material Description Observations / Comments Graphic Method Well Well В 0.04 **BITUMEN** dry FILL - black (N1), 15% clay, 75% sand, 10% gravel, Low bituminous odour MW 103/0.2-0.3 dry 1.1 medium compaction. 0.15-0.25m. BITUMEN. FILL - black (N1), 15% clay, 75% sand, 10% gravel, medium dense, dark reddish brown (5YR 3/2) at 0.5m. 0.5 damp CLAY - dark reddish brown (5YR 3/2), 85% clay, 10% 0.70 sand, 5% gravel, soft. CL 1.00 1.00 CLAY - pale yellowish brown (10YR 6/2), 100% clay, damp 10/17/19 4:42:33 PM - drawn by laurie white at www.reumad.com.au very soft. CL 1.40 CLAY - dark reddish brown (5YR 3/2), 85% clay, 10% damp CL sand, 5% gravel, soft. SAND with Clay - pale yellowish brown (10YR 6/2), moist Slight organic odour. D MW 103/1.6-1.8 15% clay, 85% sand, very loose. SFA wet Natural SP GDT g SITE INVESTIGATION.GPJ End of Hole at 4.000 m Target depth. DETAILED

Abbreviations

High M L Z Zero

1901031 AUBURN

le Type Disturbed

Undisturbed Bulk U B R C Representative

Continuous Jar Asbestos

Strength Testing
SPT Standard Penetration Test



Encountered Groundwater

Additional Comments

Well developed 31/05/2019, bailed 10L dry.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 30/05/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street

Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901031

Hole Depth: 4.00 m Date Started: 31/05/2019

Date Completed:

Detailed Site Investigation 4.37 Project Name: Top of Casing: (mAHD)

11-13 Percy Street, Auburn NSW Location / Site: **Fabcot Pty Ltd**

Contractor: **Fico Group Pty Limited**

Client:

(Truck mounted) Method: Solid Flight Auger

Ground Level: (mAHD) 4.455

31/05/2019

Depth to Groundwater: (mBGL) 1.3 Easting: 318869.35

Northing: 6252746.81

D U B R C J ASB Continuous Jar Asbestos



Encountered Groundwater Stabilised Groundwater



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 31/05/2019 Date: 17/10/2019

MW105 Monitoring Well Log



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901031

Hole Depth: 3.00 m

31/05/2019 Date Started: Date Completed: 31/05/2019

Detailed Site Investigation Project Name:

Location / Site: 11-13 Percy Street, Auburn NSW

Client: **Fabcot Pty Ltd**

Contractor: **Fico Group Pty Limited** Easting: N/A

Method: Solid Flight Auger (Truck mounted) Northing: N/A

Method	Water Level	Depth (mBGL)	Sample Type	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
		0.04	D	MW105/0.2-0.3	0.4	Ē			BITUMEN . FILL - moderate yellowish brown (10YR 5/4), 90% sand, 10% gravel, medium compaction.	dry	
		0.70			0.1		CL		CLAY with Sand - moderate brown (5YR 4/4), 60% clay, 30% sand, 10% gravel, firm.	damp	
/.reumad.com.au	Ā	_ _ _ <u>1</u> 	D	MW105/0.8-1.0	0.1		PT	1 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3	PEAT - moderate yellowish brown (10YR 5/4), soft, very loose, organic matter, frequent rootlets.	moist to wet	Low organic odour.
rawn by laurie white at www SFA		- - - -				Natural			CLAY - dark reddish brown (5YR 3/2), 80% clay, 15% sand, 5% gravel, soft, very fine grained sand.	wet	
IETAILED SITE INVESTIGATION.GPJ. GL. GDT 10/17/19 4:42:40 PM - drawn by laune white at www.reumad.com.au SFA		- <u>2</u> 					CL		Mottled dark yellowish orange (10YR 6/6) at 1.8m, rare rootlets, rare ironstones.		
ESTIGATION.GPJ GL.G		2.50 3					CL		CLAY - very pale orange (10YR 8/2), mottled dark yellowish orange (10YR 6/6), 95% clay, 5% sand, stiff. Root at 2.7m. Soft at 2.8m.	wet	
TAILED SITE INV		- - -							End of Hole at 3.000 m Target depth.		

Abbreviations Hydrocarbon Odour

High Medium Low H M L Z Zero

Sample Type Disturbed

D U B R C J ASB Undisturbed Bulk Representative

Continuous Jar Asbestos

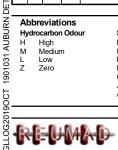
Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP Pocket Penetrometer



Encountered Groundwater Stabilised Groundwater

Additional Comments

No well installed. Resurfaced with concrete.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 31/05/2019 Date: 17/10/2019



Geo-Logix Pty Ltd Building Q2, Level 3

Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au Project Number: 1901031
Hole Depth: 4.00 m

Date Started: 03/06/2019

Date Completed: 03/06/2019

4.695

Project Name: Detailed Site Investigation Top of Casing: (mAHD) 4.60

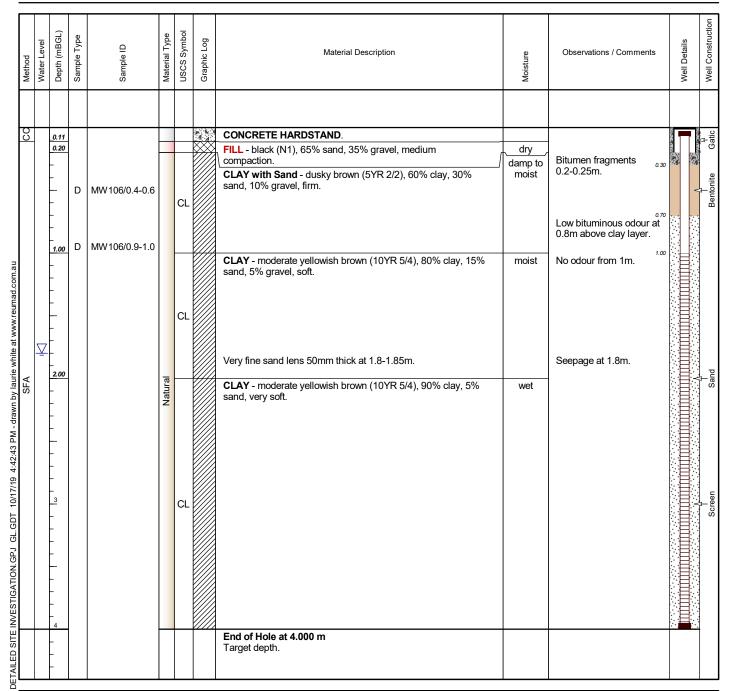
Location / Site: 11-13 Percy Street, Auburn NSW

Ground Level: (mAHD)

Client: Fabcot Pty Ltd

Contractor: Fico Group Pty Limited Easting: 318833.69

Method: Solid Flight Auger (Truck mounted) Northing: 6252775.32



Abbreviations

H High
M Medium
L Low
Z Zero

1901031 AUBURN

Sample Type

D Disturbed
Undisturbed
B Bulk
Representative

R Representative
C Continuous
J Jar
ASB Asbestos

Strength Testing

SPT Standard Penetration Test
DCP Dynamic Cone Penetromete
PP Pocket Penetrometer



Encountered Groundwater
Stabilised Groundwater

Additional Comments

Well developed 03/06/2019, bailed 6L dry, left to recharge, bailed 5L dry.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 03/06/2019 Date: 17/10/2019

Project Number:

Top of Casing: (mAHD)

Ground Level: (mAHD)

Easting:

Depth to Groundwater: (mBGL)



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Hole Depth: 4.00 m

Date Started: 03/06/2019

Date Completed: 03/06/2019

1901031

7.17

7.274

318773.78

2.6

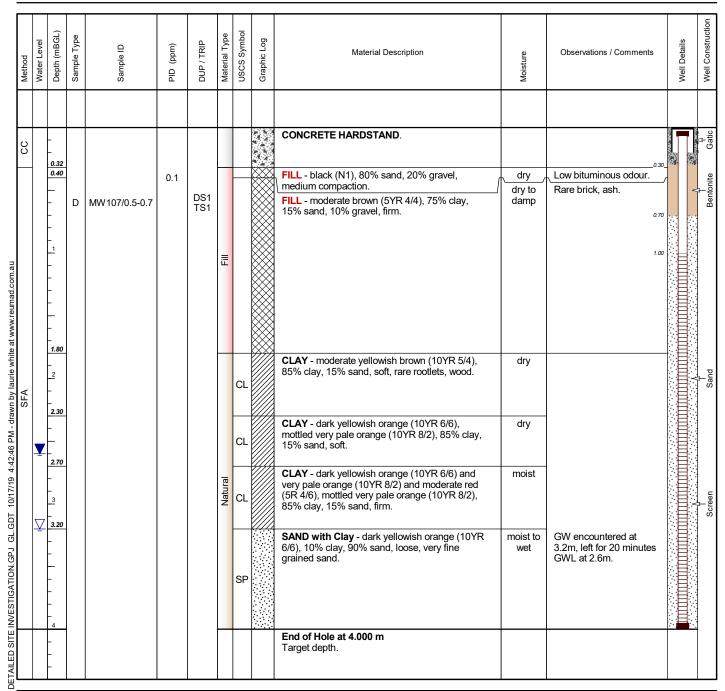
Project Name: **Detailed Site Investigation**

Location / Site: 11-13 Percy Street, Auburn NSW

Client: Fabcot Pty Ltd

Contractor: Fico Group Pty Limited

Method: Solid Flight Auger (Truck mounted) Northing: 6252741.87



Abbreviations Hydrocarbon Odour

H High
M Medium
L Low
Z Zero

1901031 AUBURN

Sample Type

D Disturbed
U Undisturbed
B Bulk
R Representative

R Representativ
C Continuous
J Jar
ASB Asbestos

Strength Testing

SPT Standard Penetration Test
DCP Dynamic Cone Penetromete



Encountered Groundwater
Stabilised Groundwater

Additional Comments

Well developed 03/06/2019, bailed 4L dry, left to recharge, bailed 2L dry.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes Morgan Singleton-Fookes Date: 03/06/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901031 Hole Depth: 4.00 m

03/06/2019 Date Started: Date Completed: 03/06/2019

7.157

Detailed Site Investigation 7.07 Project Name: Top of Casing: (mAHD)

Location / Site: 11-13 Percy Street, Auburn NSW Ground Level: (mAHD)

Client: **Fabcot Pty Ltd**

Contractor: **Fico Group Pty Limited** Easting: 318769.29

Method: Solid Flight Auger (Truck mounted) Northing: 6252718.23

Method	Water Level	Depth (mBGL)	Sample Type	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
TAILED SITE INVESTIGATION GPJ. GL. GDT. 10/17/19. 4:42:49 PM - drawn by laurie white at www.reumad.com.au SFA CC	<u> </u>		D D	MW108/0.3-0.4	1.7	Natural Fill Fill	CL		CONCRETE HARDSTAND. FILL - dusky brown (5YR 2/2), 10% clay, 40% sand, 50% gravel, poorly compacted. FILL - moderate brown (5YR 4/4), 70% clay, 25% sand, 5% gravel, soft. CLAY with Sand - moderate brown (5YR 3/4), mottled dark yellowish orange (10YR 6/6), 70% clay, 25% sand, 5% gravel, firm, rare ironstone. Sandy CLAY - pale yellowish brown (10YR 6/2), 50% clay, 45% sand, 5% gravel, firm. Clayey SAND - dark yellowish orange (10YR 6/6), mottled very pale orange (10YR 8/2), 15% clay, 85% sand, very loose, very fine grained sand.	damp damp damp wet	0.30		Screen Sand Bentonite Gatic
TAILED		-							Target depth.				

Abbreviations

Hydrocarbon Odour High Medium Low H M L Z Zero

Sample Type Disturbed

D U B R C J ASB Undisturbed Bulk Representative

Continuous Jar Asbestos

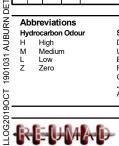
Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP Pocket Penetrometer



Encountered Groundwater

Additional Comments

Well developed 03/06/2019, bailed 15L.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Morgan Singleton-Fookes Checked By: Morgan Singleton-Fookes

Date: 03/06/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901031 Hole Depth: 4.00 m Date Started: 03/06/2019

03/06/2019 Date Completed:

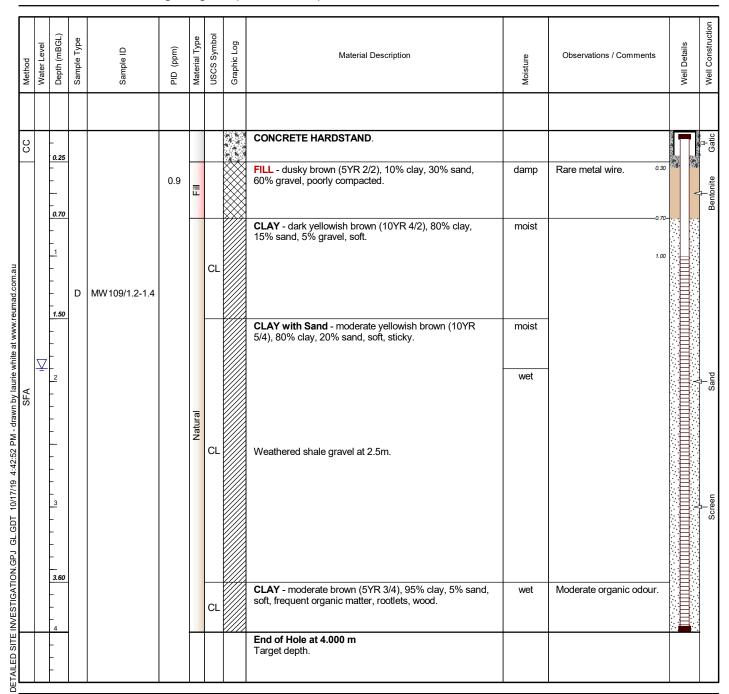
Project Name: **Detailed Site Investigation** Top of Casing: (mAHD) 6.96 7.089

Location / Site: 11-13 Percy Street, Auburn NSW Ground Level: (mAHD)

Client: **Fabcot Pty Ltd**

Contractor: **Fico Group Pty Limited** Easting: 318750.58

Method: Solid Flight Auger (Truck mounted) Northing: 6252681.31



Abbreviations

High M L Z Zero

1901031 AUBURN

le Type

Disturbed Undisturbed Bulk U B R C Representative

Continuous Jar Asbestos

Standard Penetration Test



Encountered Groundwater Stabilised Groundwater

Additional Comments

Well developed 04/06/2019, bailed 5L dry, left to recharge, bailed 5L dry.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 03/06/2019 Date: 17/10/2019

MW110 Monitoring Well Log



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102

www.geo-logix.com.au

Project Number: 1901031

Hole Depth: 4.50 m 03/06/2019

Date Started:

Date Completed: 03/06/2019

Detailed Site Investigation 7.23 Project Name: Top of Casing: (mAHD)

Location / Site: 11-13 Percy Street, Auburn NSW Ground Level: (mAHD) 7.337

Client: **Fabcot Pty Ltd** Depth to Groundwater: (mBGL) 2.8 Contractor: **Fico Group Pty Limited** Easting: 318744.15

(Truck mounted) Method: Solid Flight Auger Northing: 6252725.55

Method	Water Level	Depth (mBGL)	Sample Type	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
FAILED SITE INVESTIGATION GPJ GL.GDT 10/17/19 4:42:55 PM - drawn by laune white at www.reumad.com.au SFA			D	MW110/0.2-0.3	1.4 0.8	Natural	CL CL CL SP		CONCRETE HARDSTAND. FILL - dusky brown (5YR 2/2), 30% sand, 70% gravel. CLAY with Sand - light brown (5YR 5/6), 60% clay, 30% sand, 10% gravel, firm, rare rootlets. Sandy CLAY - greyish orange (10YR 7/4), 55% clay, 45% sand, soft, very fine grained sand. CLAY - pale yellowish brown (10YR 6/2), 95% clay, 5% sand, stiff. CLAY with Sand - moderate red (5R 4/6), mottled very pale orange (10YR 8/2), 75% clay, 25% sand, stiff, rare rootlets. CLAY with Sand - dark yellowish orange (10YR 6/6), mottled moderate red (5R 4/6) and very pale orange (10YR 8/2), 75% clay, 25% sand, firm. CLAY with Sand - dark yellowish orange (10YR 6/6), mottled very pale orange (10YR 8/2), 65% clay, 30% sand, 15% gravel, soft, becoming softer with depth, ironstone at 2.8m. SAND with Clay - dark yellowish orange (10YR 6/6), 10% clay, 90% sand, very loose, very fine grained sand. End of Hole at 4.500 m Target depth.	damp damp damp damp moist moist wet	1.30 1.50 Low organic odour. GW encountered at 3.7m, left for 20 minutes GWL at 2.8m.		Screen Sand Bentonite Gatic

Abbreviations Hydrocarbon Odour

High Medium Low H M L Z Zero

1901031 AUBURN DE

Sample Type Disturbed

D U B R C J ASB Undisturbed Bulk Representative

Continuous Jar Asbestos

Strength Testing
SPT Standard Penetration Test



Encountered Groundwater Stabilised Groundwater

Additional Comments

Well developed 03/06/2019, bailed 13L.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 03/06/2019 Date: 17/10/2019

Depth to Groundwater: (mBGL)



Fabcot Pty Ltd

Client:

Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102

www.geo-logix.com.au

Project Number: 1901031 Hole Depth: 5.00 m

Date Started: 04/06/2019 Date Completed: 04/06/2019

3.1

Detailed Site Investigation 5.85 Project Name: Top of Casing: (mAHD)

Location / Site: 11-13 Percy Street, Auburn NSW Ground Level: (mAHD) 5.954

Contractor: **Fico Group Pty Limited** Easting: 318781.01

Method: Solid Flight Auger (Truck mounted) Northing: 6252806.81

Method	Water Level	Depth (mBGL)	Sample Type	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
ETAILED SITE INVESTIGATION.GPJ GL.GDT 10/17/19 4:42:59 PM - drawn by laurie white at www.reumad.com.au SFA CC		- 0.14 - 0.30 	D	MW111/0.2-0.3	0.6	Natural	CL CL CL CL	本本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本 本	CONCRETE HARDSTAND. FILL - dusky brown (5YR 2/2), 65% sand, 35% gravel. CLAY with Sand - 80% clay, 20% sand, firm. Sandy CLAY - dark yellowish orange (10YR 6/6), mottled very pale orange (10YR 8/2), 60% clay, 40% sand, soft, very fine grained sand. Clayey SAND - dark yellowish orange (10YR 6/6), mottled very pale orange (10YR 8/2), 20% clay, 80% sand, loose. CLAY with Sand - moderate brown (5YR 3/4), 80% clay, 20% sand, soft, occasional rootlets / organic matter. Hard lens 2.3-2.4m. PEATY - dark yellowish orange (10YR 6/6). CLAY with Sand - moderate brown (5YR 3/4), 80% clay, 20% sand, soft. Sandy lens 4.5-4.7m. CLAY with Sand - moderate brown (5YR 3/4), 80% clay, 20% sand, soft. End of Hole at 5.000 m Target depth.	damp damp damp damp wet wet wet	GW encountered at 3.7m, left for 20 minutes GWL at 3.1m. Low organic odour.		Screen Sand Bentonite Gatic

Abbreviations Hydrocarbon Odour

High Medium Low H M L Z Zero

Sample Type

D U B R C J ASB Disturbed Undisturbed Bulk Representative

Continuous Jar Asbestos

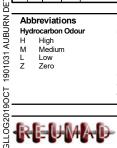
Strength Testing
SPT Standard Penetration Test



Encountered Groundwater Stabilised Groundwater

Additional Comments

Well developed 04/06/2019, bailed 20L.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: Morgan Singleton-Fookes Morgan Singleton-Fookes

Date: 04/06/2019 Date: 17/10/2019



Geo-Logix Pty Ltd Building Q2, Level 3

Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 5.00 m

21/08/2019 Date Started: Date Completed: 21/08/2019

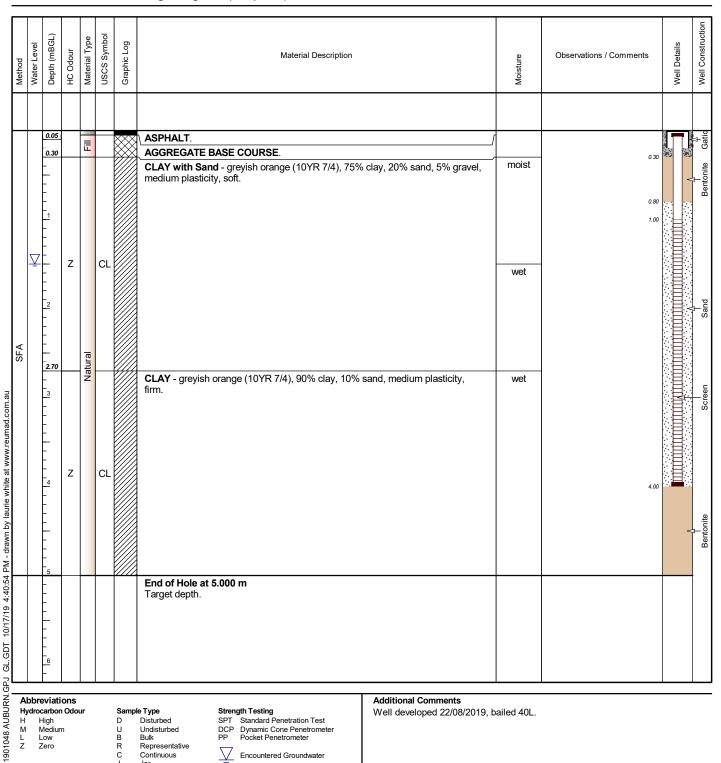
Detailed Site Investigation Project Name: Ground Level: (mAHD) 5.23 5.13

Location / Site: 11-13 Percy Street, Auburn NSW Top of Casing: (mAHD)

Fabcot Pty Ltd Client: Contractor: **Numac Drilling**

Easting: 318805.71

Method: Solid Flight Auger (Geoprobe) Northing: 6252755.25



Abbreviations

High M L Z Zero Sample Type Disturbed Undisturbed Bulk U B R C Representative Continuous Jar Asbestos

Strength Testing
SPT Standard Penetration Test



Additional Comments

Well developed 22/08/2019, bailed 40L.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Ted Lilly Morgan Singleton-Fookes

Date: 21/08/2019 Date: 17/10/2019

MW113 Monitoring Well Log



Geo-Logix Pty Ltd Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102

www.geo-logix.com.au

Hole Depth: 5.80 m 21/08/2019 Date Started: Date Completed: 21/08/2019

1901048

7.32

7.24

Detailed Site Investigation Project Name:

11-13 Percy Street, Auburn NSW

Ground Level: (mAHD) Top of Casing: (mAHD)

Project Number:

Client: **Fabcot Pty Ltd**

Location / Site:

Contractor: **Numac Drilling** Easting: 318746.88

Method: Solid Flight Auger (Geoprobe) Northing: 6252756.47

Method	Water Level	Depth (mBGL)	HC Odour	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
22	- - - - - - -	1.30	Z		CL		CLAY - pale greyish brown (5YR 6/2), 90% clay, 10% sand, medium plasticity, firm, trace organics, organic odour. CLAY - greyish yellowish brown (10YR 5/2), 90% clay, 10% sand, medium	moist			
SFA	- - - - - - - - - - - - - - - - - - -	-	Z	Natural	CL		plasticity, stiff.	HUST	2.10 2.70 2.80		
	- 3. - 4 	-	Z	-	CL		CLAY - greyish orange (10YR 7/4), 85% clay, 5% sand, 10% gravel, medium plasticity, firm. Sandy CLAY - light grey (N7), 55% clay, 45% sand, low plasticity, soft.	wet			
	obrevi drocar Hig Med Low Zer	riation rbon (gh edium	Odou	r		Sampl D U B R C	End of Hole at 5.800 m Target depth. Strength Testing Disturbed Undisturbed Undisturbed DCP Dynamic Cone Penetrometer Bulk PP Pocket Penetrometer Representative Continuous Encountered Groundwater Encountered Groundwater	pailed 40L.			

D U B R C J ASB Undisturbed Bulk Representative Continuous Jar Asbestos





Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By: **Ted Lilly** Morgan Singleton-Fookes Date: 21/08/2019 Date: 17/10/2019

Date Completed:



Geo-Logix Pty Ltd Building Q2, Level 3

Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 5.80 m 21/08/2019 Date Started:

21/08/2019

Detailed Site Investigation 7.33 Project Name: Ground Level: (mAHD) Location / Site: 11-13 Percy Street, Auburn NSW Top of Casing: (mAHD) 7.25

Client: **Fabcot Pty Ltd**

Contractor: **Numac Drilling** Easting: 318729.55

Method: Solid Flight Auger (Geoprobe) Northing: 6252808.07

Method	Water Level	Depth (mBGL)	HC Odour	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
20		- . 0.25 - - - - -	Z				CONCRETE. FILL - greyish orange (10YR 7/4), medium plasticity, well compacted.	damp			7. ↑ Gatio
		1.50 - - - - - - - - - - -	Z		CL		CLAY - greyish orange (10YR 7/4), 90% clay, 10% sand, medium plasticity, firm. CLAY - light grey (N7), 90% clay, 10% sand, medium plasticity, stiff.	moist moist	1.40		A Bentonite
:umad.com.au SFA		- 3	Z		CL				2.30		
irawn by iaurie wnite at www.re	Ţ	4.00 - - - - - -		Natural			Sandy CLAY - light grey (N7), 60% clay, 40% sand, medium plasticity, soft.	wet			in Sand
GL.GDT 10/1/19 4:41:00 PM - grawn by laune write at www.reumag.com.au		5	Z		CL		End of Hole at 5.800 m				Screen

Abbreviations

High Medium Low H M L Z Zero

Sample Type

D U B R C J ASB Disturbed Undisturbed Bulk Representative Continuous Jar Asbestos

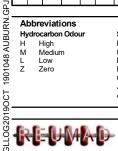
Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP Pocket Penetrometer



Encountered Groundwater Stabilised Groundwater

Additional Comments

Well developed 23/08/2019, bailed 30L.



Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By: **Ted Lilly** Morgan Singleton-Fookes Date: 21/08/2019 Date: 17/10/2019

MW115 Monitoring Well Log

Date Completed:

Ground Level: (mAHD)

Top of Casing: (mAHD)



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 3.50 m 23/08/2019 Date Started:

23/08/2019

4.49

4.40

Detailed Site Investigation Project Name:

Location / Site: 11-13 Percy Street, Auburn NSW

Fabcot Pty Ltd

Contractor: **Numac Drilling**

Client:

Method: Solid Flight Auger (Geoprobe) Northing:

Easting: 318804.59 6252676.85

Method Water Level	Depth (mBGL)	HC Odour	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
	-	Z	Ē			FILL - greyish orange (10YR 7/4), 75% clay, 25% sand, medium plasticity, well compacted.	damp	Disturbed native. Loose gravel at surface, some		1
	0.30			CL		CLAY - greyish orange (10YR 7/4), 85% clay, 15% sand, medium plasticity, stiff.	moist	bricks & concrete in fill.		
SFA	7 0.80 - 11 	Z	Natural	CL		Sandy CLAY - light grey (N7) and greyish orange (10YR 7/4), 55% clay, 45% sand, medium plasticity, soft.	wet			
	4					End of Hole at 3.500 m Target depth.				
	Dreviat rocarbo High Mediu Low Zero	n Odo	our		Sampl D U B R C	le Type Strength Testing Disturbed SPT Standard Penetration Test Undisturbed DCP Dynamic Cone Penetrometer Bulk PP Pocket Penetrometer Representative Continuous Jar	bailed 40L.			_

D U B R C J ASB Undisturbed Bulk Representative

Continuous Jar Asbestos



Encountered Groundwater Stabilised Groundwater



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: **Ted Lilly** Morgan Singleton-Fookes

Date: 23/08/2019 Date: 17/10/2019

MW116 Monitoring Well Log



Geo-Logix Pty Ltd Building Q2, Level 3

Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 3.50 m

23/08/2019 Date Started: Date Completed: 23/08/2019

Detailed Site Investigation 4.39 Project Name: Ground Level: (mAHD) 4.30

Location / Site: 11-13 Percy Street, Auburn NSW Top of Casing: (mAHD)

Client: **Fabcot Pty Ltd** Contractor: **Numac Drilling**

Easting: 318829.41

Method: Solid Flight Auger (Geoprobe) Northing: 6252701.93

Method	Water Level	Depth (mBGL)	HC Odour	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
		_ _ 	Z	Fill			FILL - greyish orange (10YR 7/4), 85% clay, 15% sand, medium plasticity, well compacted.	damp	Loose gravel at surface.		nt. Gat.
	∇	- - - - 1					CLAY - medium light grey (N6), 90% clay, 10% sand, medium plasticity, soft.	moist	0.45 0.50		ال Bent.
om.au SFA		- - - - - - 2	Z	Natural	CL			wet			Sand
5 GE.GDI 10/17/19 4.41.03 PM - GIAWH BY IAURE WHIRE ALWWW.FEUMAG.COTT.AU											Screen
GE.GD1 10/17/18 4.41.0		- - - 4					End of Hole at 3.500 m Target depth.				

Abbreviations

High Medium Low H M L Z Zero

Sample Type

D U B R C J ASB Disturbed Undisturbed Bulk Representative

Continuous Jar Asbestos

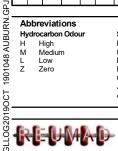
Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP Pocket Penetrometer



Encountered Groundwater Stabilised Groundwater

Additional Comments

Well developed 23/08/2019, bailed 10L dry.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: **Ted Lilly** Morgan Singleton-Fookes

Date: 23/08/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 6.40 m

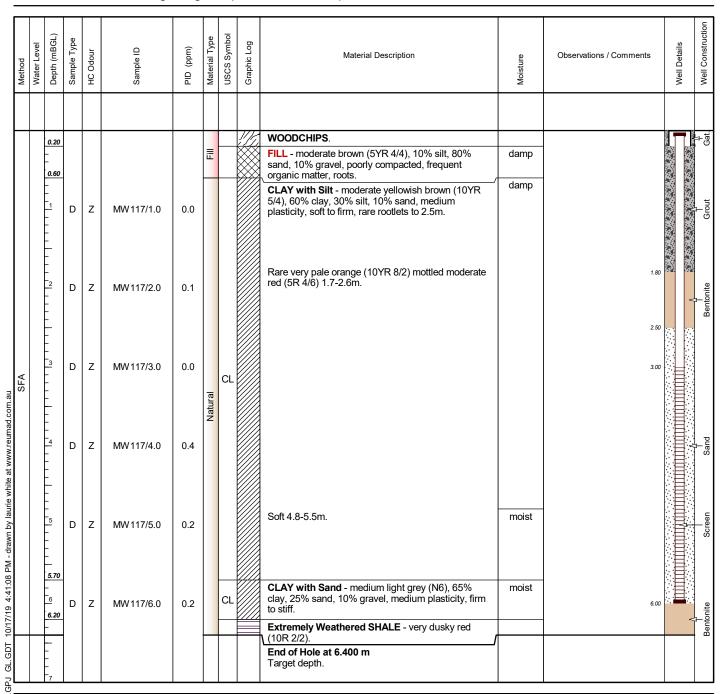
02/10/2019 Date Started: 02/10/2019 Date Completed:

Project Name: **Detailed Site Investigation** Ground Level: (mAHD) 4.66 15 Percy Street, Auburn NSW Top of Casing: (mAHD) 4.59 Location / Site:

Client: **Fabcot Pty Ltd**

Contractor: **Numac Drilling** Easting: 318887.96

Method: Solid Flight Auger (Comacchio Geo 205) Northing: 6252772.95



Abbreviations

High M L Z Zero

1901048 AUBURN

Sample Type

Disturbed Undisturbed Bulk

R C Representative Continuous Jar Asbestos J ASB

Strength Testing
SPT Standard Penetration Test



Additional Comments

Well developed 3/10/2019 and 4/10/2019, bailed 32L.



Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes

Date: 02/10/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 4.20 m 02/10/2019 Date Started:

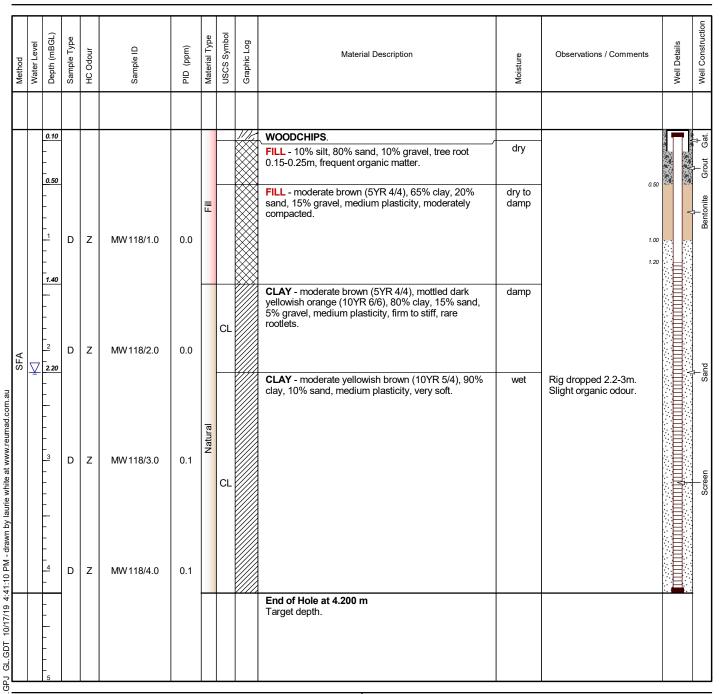
02/10/2019 Date Completed:

Project Name: **Detailed Site Investigation** Ground Level: (mAHD) 5.43 15 Percy Street, Auburn NSW Top of Casing: (mAHD) Location / Site: 5.36

Client: **Fabcot Pty Ltd**

Contractor: **Numac Drilling** Easting: 318879.78

Method: Solid Flight Auger (Comacchio Geo 205) Northing: 6252828.62



Abbreviations

High M L Z Zero

1901048 AUBURN

Sample Type

Disturbed Undisturbed Bulk Representative

R C Continuous Jar Asbestos J ASB

Strength Testing
SPT Standard Penetration Test



Encountered Groundwater

Additional Comments

Well developed 3/10/2019, bailed 5L dry and 4/10/2019, bailed 5L dry.



Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes

Date: 02/10/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 4.50 m

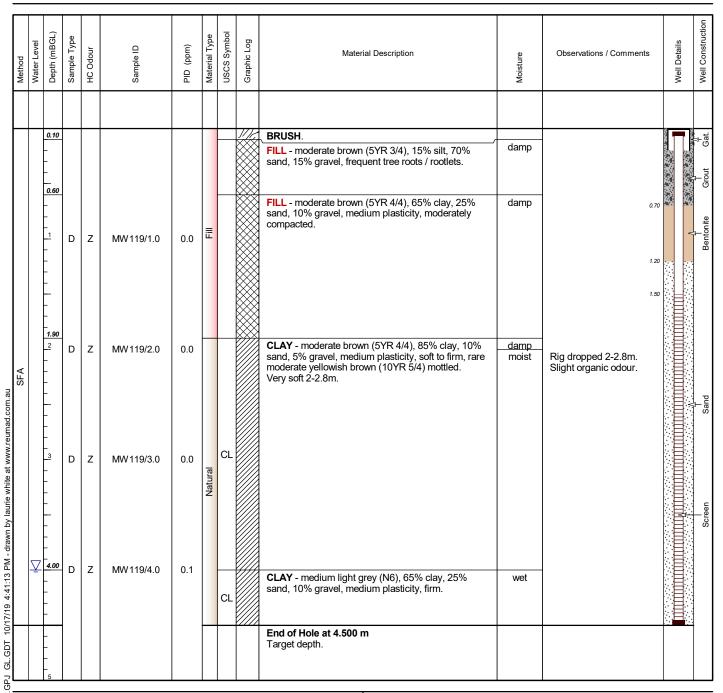
02/10/2019 Date Started: 02/10/2019 Date Completed:

Project Name: **Detailed Site Investigation** Ground Level: (mAHD) 5.44 Location / Site: 15 Percy Street, Auburn NSW Top of Casing: (mAHD) 5.38

Client: **Fabcot Pty Ltd**

Contractor: **Numac Drilling** Easting: 318847.15

Method: Solid Flight Auger (Comacchio Geo 205) Northing: 6252849.25



Abbreviations

High M L Z Zero

1901048 AUBURN

le Type Disturbed

Undisturbed Bulk Representative

R C Continuous Jar Asbestos J ASB

Strength Testing
SPT Standard Penetration Test



Encountered Groundwater

Additional Comments

Well developed 3/10/2019, bailed 25L.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes

Date: 02/10/2019 Date: 17/10/2019

Date Completed:



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 6.00 m 02/10/2019 Date Started:

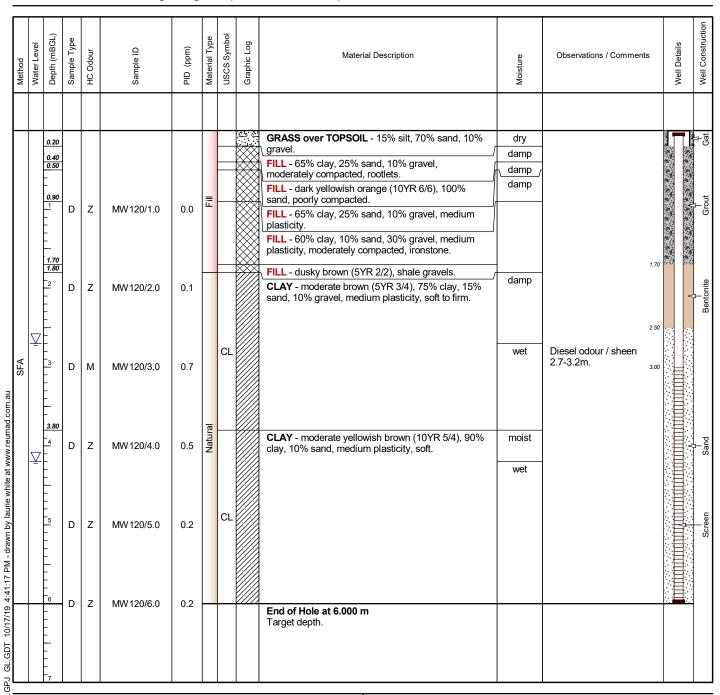
02/10/2019

Project Name: **Detailed Site Investigation** Ground Level: (mAHD) 5.56 Location / Site: 15 Percy Street, Auburn NSW Top of Casing: (mAHD) 5.53

Client: **Fabcot Pty Ltd**

Contractor: **Numac Drilling** Easting: 318804.63

Method: Solid Flight Auger (Comacchio Geo 205) Northing: 6252867.55



Abbreviations

High M L Z Zero

1901048 AUBURN

Sample Type Disturbed

Undisturbed Bulk Representative

R C Continuous Jar Asbestos

Strength Testing
SPT Standard Penetration Test



Encountered Groundwater Stabilised Groundwater

Additional Comments

Well developed 3/10/2019, bailed 28L



Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes

Date: 02/10/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 7.00 m

03/10/2019 Date Started: Date Completed: 03/10/2019

Detailed Site Investigation 6.82 Project Name: Ground Level: (mAHD) Location / Site: 15 Percy Street, Auburn NSW Top of Casing: (mAHD) 6.74

Client: **Fabcot Pty Ltd**

Contractor: **Numac Drilling** Easting: 318741.07

Method: Solid Flight Auger (Comacchio Geo 205) Northing: 6252871.06

_						<u>_</u>				2001110 200 200)				
Method	Water Level	Depth (mBGL)	Sample Type	HC Odour	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
		0.15 -								GRASS over TOPSOIL - 15% silt, 80% sand, 5% gravel.	damp			∯ Gat.
	1	- - - - - - - - - - - - - - - - - - -	D	Z	MW 121/1.0	0.0		CL		CLAY - dark yellowish orange (10YR 6/6), mottled very pale orange (10YR 8/2), 85% clay, 10% sand, 5% gravel, medium plasticity, soft to firm, occasional rootlets.			20	
		-2 2.10 - - - - - -	D	Z	MW 121/2.0	0.0				Sandy CLAY - moderate yellowish brown (10YR 5/4), 55% clay, 40% silt, 5% sand, soft.	damp	2	30	Bentonite
SFA		- - - - -	D	Z	MW 121/3.0	0.1	Natural	CL					50	Bel
reumad.com.au	Ā	3.80 -4 - - -	D	Z	MW 121/4.0	0.1				Sandy CLAY - light brown (5YR 5/6), 45% clay, 35% silt, 10% sand, 10% gravel. Very soft 4-4.2m.	damp moist wet			Sand
iy iadile wilite at www		- - - - - - - -	D	Z	MW 121/5.0	0.0		CL			wet			Screen
I.ZU FIM - Grawn E		- - - - - - - - - - - - - - - - - - -	D	Z	MW 121/6.0	0.1						6	50	iite
J. GL.GDI 10/17/19 4:41.20 FM - Grawn by laune write at www.reumad.com.au		- - - - - - - - - - - - - - - - - - -	D	Z	MW 121/7.0	0.1		CL		CLAY with Sand - pale yellowish brown (10YR 6/2) and moderate yellowish brown (10YR 5/4), 45% clay, 30% silt, 10% sand, 15% gravel, stiff, shale gravels. End of Hole at 7.000 m Target depth.				Bentonite

Abbreviations

High Medium Low H M L Z Zero

Sample Type

D U B R C J ASB Disturbed Undisturbed Bulk Representative

Continuous Jar Asbestos

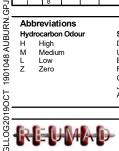
Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP Pocket Penetrometer



Encountered Groundwater Stabilised Groundwater

Additional Comments

Well developed 3/10/2019 and 4/10/2019, bailed 30L.



Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes

Date: 03/10/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 12.00 m

24/09/2019 Date Started: Date Completed: 24/09/2019

Detailed Site Investigation 5.81 Project Name: Ground Level: (mAHD) 5.75

Location / Site: 11-13 Percy Street, Auburn NSW

Terratest Pty Ltd

Top of Casing: (mAHD)

Client: **Fabcot Pty Ltd**

Contractor:

Easting: 318835.78

Method: Solid Flight Auger (Geoprobe) Northing: 6252661.03

Method	Water Level	Depth (mBGL)	HC Odour	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
7	-	0.10 r - 1 - 2.00	Z		CL		TOPSOIL. CLAY with Silt - light brown (5YR 5/6), 65% clay, 30% silt, 5% sand, medium plasticity, soft. CLAY with Silt - light brown (5YR 5/6), mottled greyish orange pink (10R 8/2),	moist			4
SFA			z		CL		75% clay, 20% silt, 5% sand, medium plasticity, soft, trace organics. CLAY & SAND with Silt - light brown (5YR 6/4), 40% clay, 20% silt, 40% fine grained sand, low plasticity, very soft.	wet			1
7	-	<u>6</u>		Natural			Weathered SHALE - pale greyish brown (5YR 6/2).	moist	7.30		
Air Hammer	-	9 110 - 111	Z					wet	8.40 8.70		director de de de de de de de de de de de de de
	obrev droca	viation igh edium	Odou	ır		U	End of Hole at 12.000 m Target depth. E Type Strength Testing Disturbed SPT Standard Penetration Test Undisturbed DCP Dynamic Cone Penetrometer Bulk PP Pocket Penetrometer	pailed 20L.			

D U B R C J ASB Continuous Jar Asbestos



Encountered Groundwater Stabilised Groundwater



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: **Ted Lilly** Morgan Singleton-Fookes

Date: 24/09/2019 Date: 17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 14.00 m

25/09/2019 Date Started: Date Completed: 25/09/2019

Detailed Site Investigation 5.05 Project Name: Ground Level: (mAHD) Location / Site: 11-13 Percy Street, Auburn NSW Top of Casing: (mAHD) 4.95

Client: **Fabcot Pty Ltd**

Contractor: Terratest Pty Ltd Easting: 318826.34

Method: Solid Flight Auger (Geoprobe) Northing: 6252733.80

Method	Water Level	Depth (mBGL)	HC Odour	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
										95	W - 1
	[0.03	Z	≣		\bowtie	ASPHALT. FILL - dark reddish brown (5YR 3/2), 35% clay, 30% silt, 20% sand, 15%	moist			5
	$\overline{\Delta}$	0.80 1					gravel, well compacted.	wet			
	ŀ	2.00	Z		CL		CLAY & SAND with Silt - light brown (5YR 5/6), 40% clay, 20% silt, 40% sand, medium plasticity, soft.				
		2.00					Silty Clayey SAND - dark yellowish orange (10YR 6/6), 35% clay, 25% silt, 40% sand, medium plasticity, soft.	wet			
		3					40 / Sairu, Medium plasticity, Soit.				
1		_	Z		SC						
SFA	ŀ	4									
	ŀ	4.50				///	Silty Clayey SAND - moderate reddish orange (10R 6/6), 35% clay, 25% silt,	wet			_
	ŀ	5					40% sand, medium plasticity, firm.				
	f	_ 6									
	f		Z		SC						
		7									
	L	7.50		Natural							
	-	8		z			Weathered SHALE - very dusky red (10R 2/2).	wet			
	ŀ	-									
	ŀ	9						moist	9.30		
	f	10									\
حَ	f	_10						wet	10.30		
Air Rotary			Z						11.00		
¥									11.00		
	L	12									\
		_									
		13									10000
	L	_									ΰ
_	_	14					- L (III L			ĽΒ	
	ŀ	-					End of Hole at 14.000 m Target depth.				
	hre	viati	one				Additional Comments	1			
	droca Hi M		Odou	ır				pailed 20L.			

Sample Type D U B R C J ASB Disturbed Undisturbed Bulk Representative

Continuous Jar Asbestos



Encountered Groundwater Stabilised Groundwater



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: Checked By: **Ted Lilly** Morgan Singleton-Fookes

Date: 25/09/2019 Date: 17/10/2019

Date Completed:



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 11.80 m 24/09/2019 Date Started:

25/09/2019

Detailed Site Investigation 7.12 Project Name: Ground Level: (mAHD) Location / Site: 11-13 Percy Street, Auburn NSW Top of Casing: (mAHD) 7.01

Client: **Fabcot Pty Ltd**

Contractor: Terratest Pty Ltd Easting: 318768.05

Method: Solid Flight Auger (Geoprobe) Northing: 6252715.80

Method	Water Level	Depth (mBGL)	HC Odour	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Well Details	Well Construction
CC	\vdash	0.18				× 4.0	CONCRETE HARDSTAND.			8	7 ≱ ∓:≗
		0.50	Z	≣		\bowtie	TILL - medium dark grey (N4), 100% gravel, well compacted.	moist			∯ Gatic
		0.80 1.10	Z	_	CL	$\Rightarrow\Rightarrow$	FILL - moderate brown (5YR 4/4), 60% clay, 15% silt, 15% sand, 10% gravel,	moist	Anthropogenics including wood and	Г	
	$\overline{\Delta}$	1.10		-	CL		medium plasticity, moderately compacted.	moist	porcelain.		
		-					CLAY - moderate orange pink (10R 7/4), 70% clay, 15% silt, 10% sand, 5% gravel, medium plasticity, firm.	wet			A Gatt
		2					CLAY - pale brown (5YR 5/2), 60% clay, 30% silt, 10% sand, medium				
			_				plasticity, soft.				
			Z		CL						
		_3									
		-									
		4.00									
							Silty Clayey SAND - dark yellowish orange (10YR 6/6), 35% clay, 25% silt, 40% fine grained sand, soft.	wet			
∢		-					40% line grained saild, soit.				
SFA		5									
		6									
n.au		_		Natural							
o d		-	z	Nat	sc						
in ma		7									
W.E											
Mar Mar											
E E		_8									
ĕ		-							8.5	ю 👫	
y lan		9.00									A Bentonite
GL.CDT 10/17/19 4:41:29 PM - drawn by laune white at www.reumad.com.au Air Rotary							Weathered SHALE - very dusky red (10R 2/2).	wet	9.5	50	Bent
- I		_							9.5	~	
[_10							10.0	v : <u>E</u>	
otar		-	Z								Sand
Air Rotary		<u>1</u> 1									S L
											Screen
Ī											
ַל <u>ו</u>		_12					End of Hole at 11.800 m Target depth.				
<u> </u>		_					i aigot dopul.				

Abbreviations

High Medium Low H M L Z Zero

Sample Type

D U B R C J ASB Disturbed Undisturbed Bulk Representative Continuous Jar Asbestos

Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP Pocket Penetrometer

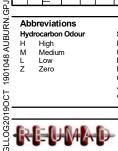


Stabilised Groundwater

Encountered Groundwater

Additional Comments

Well developed 25/09/2019, bailed 20L.



Log Drawn By: Laurie White

Contact: laurie.white@reumad.com.au

Logged By: **Ted Lilly** Checked By: Morgan Singleton-Fookes Date: 24/09/2019 - 25/09/2019 Date:

17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102 www.geo-logix.com.au

Project Number: 1901048 Hole Depth: 12.00 m 03/10/2019 Date Started:

Date Completed: 04/10/2019

Detailed Site Investigation 4.69 Project Name: Ground Level: (mAHD) Location / Site: 15 Percy Street, Auburn NSW Top of Casing: (mAHD) 4.58

Client: **Fabcot Pty Ltd**

Contractor: **Numac Drilling** Easting: 318885.52

Method: Solid Flight Auger, Air Hammer (Comacchio Geo 205) Northing: 6252769.02

Metriod. Solid Flight Adger, All Hamilier (Comaccilio Geo 203)			THO (SOMEODING GOO 200)	NOLL	9.	0232									
Method	Water Level	Depth (mBGL)	Sample Type	HC Odour	Sample ID	PID (ppm)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments	Woll Details	weii Details	Well Construction
Г		0.20								WOODCHIPS.	damp			7	Gatio
		0.70							\bowtie	FILL - moderate brown (5YR 4/4), 10% silt, 80% sand, 10% gravel, occasional rootlets.					Ĭ
		_1	D	z	MW 204/1.0	0.0	正		\bowtie	FILL - 60% clay, 25% sand, 15% gravel, medium	damp				
		1.60							\bowtie	plasticity, moderately compacted.					
		2	D	Z	MW 204/2.0	0.0				CLAY with Silt - moderate yellowish brown (10YR 5/4), 60% clay, 30% silt, 10% sand, medium plasticity, soft to firm.	damp		190		
		_								Becoming mottled medium light grey (N6) 2.5-4m.					
SFA		_3	D	Z	MW 204/3.0	0.0									
		_						CL						7	
		4	D	Z	MW 204/4.0	0.1									
			U	_	10100 204/4.0	0.1									
		_													
		5 5.20	D	z	MW 204/5.0	0.0									
		5.20								CLAY with Sand - medium light grey (N6), 65%	damp				
								CL		clay, 25% sand, 10% gravel, medium plasticity, soft to firm.					
n.au	$\frac{1}{\sqrt{2}}$	6.00							////	Extremely Weathered SHALE - very dusky red	wet				
l.con		_	D	z	MW 204/6.5	0.0	<u>a</u>			(10R 2/2).				P-3	
ma		7					Natural						5.90		
W.re							_								<u>i</u>
at w		_												\triangleleft	T Bentonite
hite		_8	D	Z	MW 204/8.0	0.0									ğ
ē sĕ		8.50										ł	3.30		
lan m		9								Weathered SHALE.	wet		9.00		
Irawn by Iaurie Air Hammer												•	"" [:]		
-dra		_	D	Z	MW 204/9.5	0.0								∄::	
Δ		<u>1</u> 0] }	Sand
11:32		_												\blacksquare	"
9 4:		<u>1</u> 1	_	_											e u
17/1		Γ.	D	Z	MW204/11.0	0.0									Screen
GL.GDT 10/17/19 4:41:32 PM - drawn by laurie white at www.reumad.com.au Air Hammer		-													
	_	12								End of Hole of 12 000 m			<u> i</u>	₫	
ᇹ										End of Hole at 12.000 m Target depth.					

Abbreviations

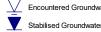
High Medium Low H M L Z Zero

Sample Type

D U B R C J ASB Disturbed Undisturbed Bulk Representative

Continuous Jar Asbestos

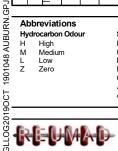
Strength Testing
SPT Standard Penetration Test
DCP Dynamic Cone Penetrometer
PP ocket Penetrometer



Encountered Groundwater

Additional Comments

Well developed 4/10/2019, bailed 40L



Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes

Date: 03/10/2019 - 04/10/2019 Date:

17/10/2019



Geo-Logix Pty Ltd

Building Q2, Level 3 Unit 2309 / 4 Daydream Street Warriewood NSW 2102

Date Started: Date Completed:

Project Number:

Hole Depth:

13.50 m 03/10/2019

1901048

www.geo-logix.com.au

Ground Level: (mAHD)

04/10/2019

5.45

5.37

Project Name: **Detailed Site Investigation**

Location / Site: 15 Percy Street, Auburn NSW Top of Casing: (mAHD)

Client:

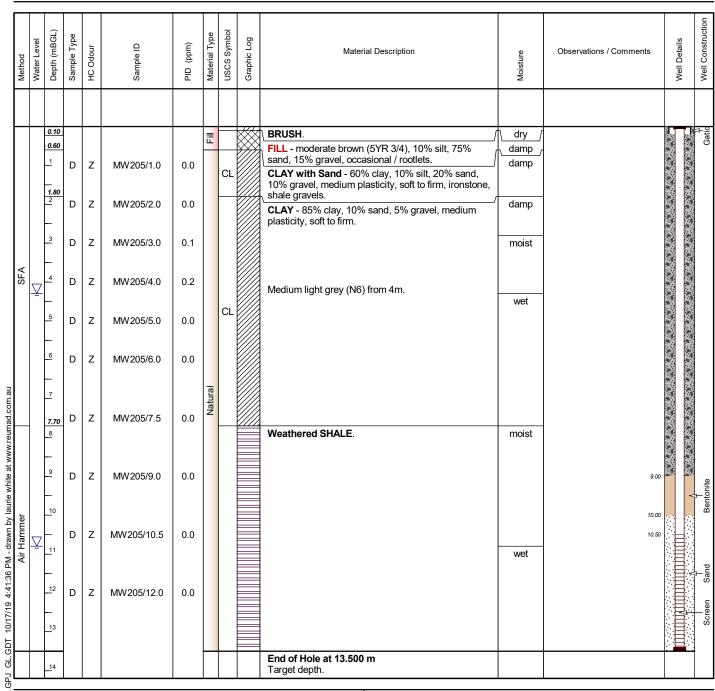
Fabcot Pty Ltd

Contractor: **Numac Drilling** Easting:

318844.92

Method: Solid Flight Auger, Air Hammer (Comacchio Geo 205)

Northing: 6252850.17



Abbreviations

High M L Z Zero

1901048 AUBURN

le Type Disturbed

Undisturbed Bulk U B R C Representative

Continuous Jar Asbestos J ASB

Strength Testing
SPT Standard Penetration Test



Stabilised Groundwater

Additional Comments

Well developed 4/10/2019, bailed 45L

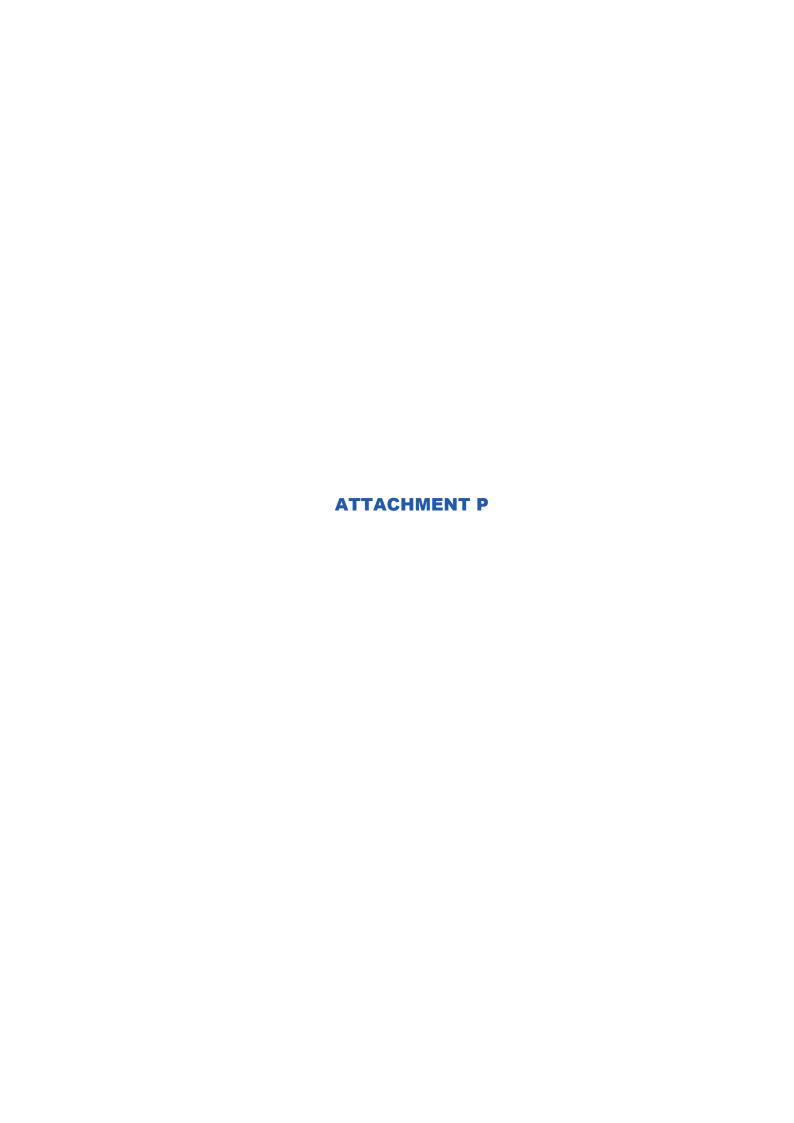


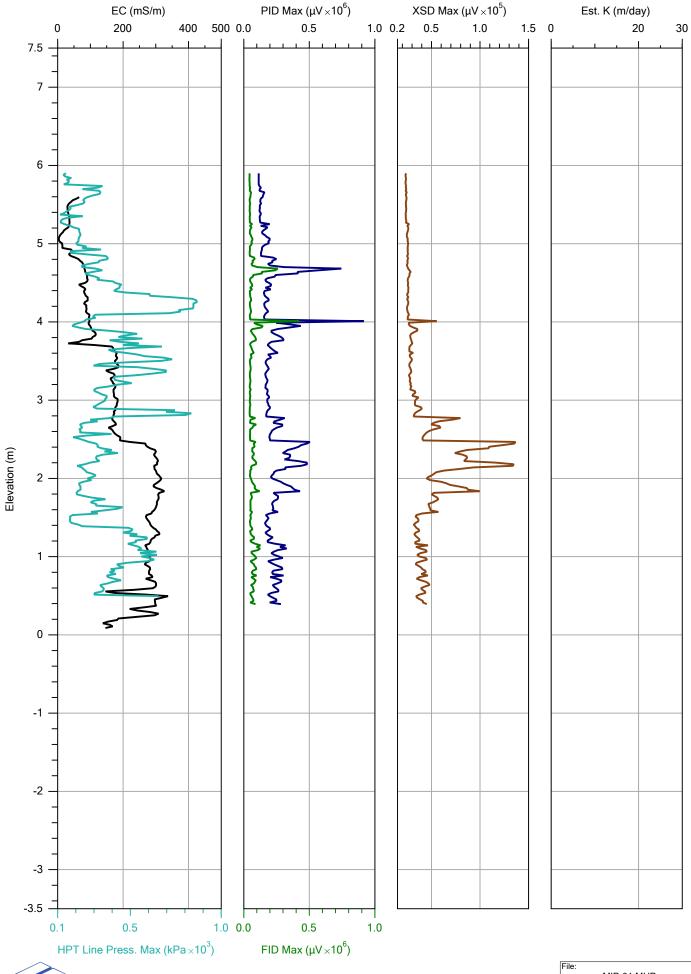
Log Drawn By: Laurie White Contact: laurie.white@reumad.com.au

Logged By: Checked By:

Morgan Singleton-Fookes

Date: 03/10/2019 - 04/10/2019 Date: 17/10/2019







		riie.
		MIP-01.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	19/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 56.5 2.8 PASS High 290.0 299.0 3.1 PASS

MIP-01.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-01.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Mon Aug 19 2019 08:04:20

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 54 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Aug 19 2019 08:09:39

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.424	0.0	106.340
TOP with FLOW>0	16.242	275.3	111.980
BOTTOM with FLOW=0	15.220	0.0	104.940
BOTTOM with FLOW>0	16.069	275.7	110.800

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.20 psi (1.4 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31054A,0.0000,0.0000,0.0000,0.0000,9.9570e-1,-1.5260

LOG START TIME: Mon Aug 19 2019 08:19:54

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 13.55 ft (4.130 m)

LOG END TIME: Mon Aug 19 2019 09:19:56

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

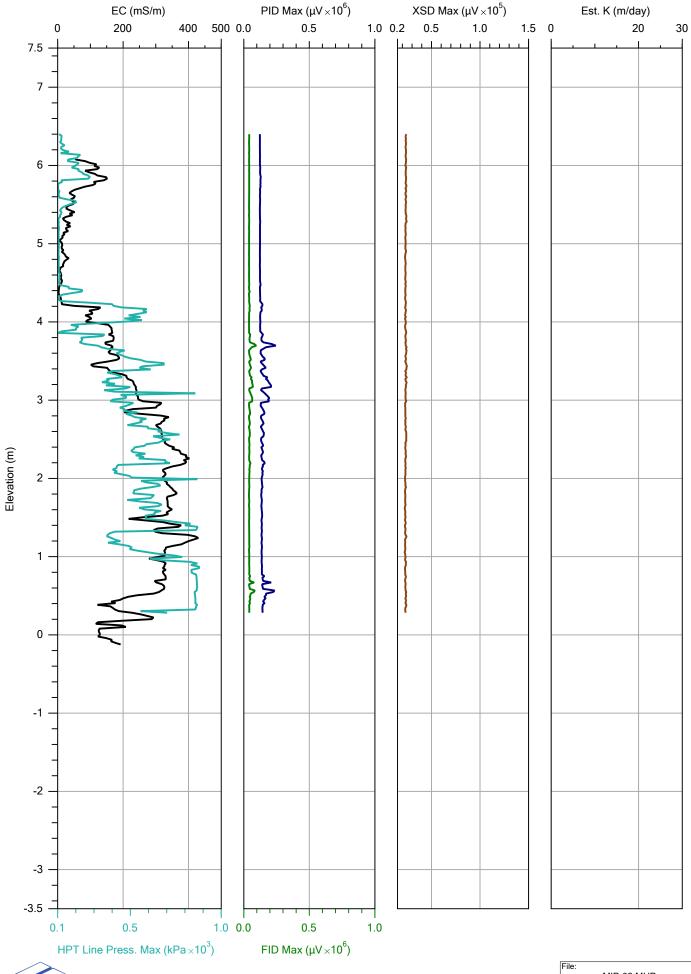
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Aug 19 2019 09:22:13

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		i iic.
		MIP-02.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	19/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 55.2 0.3 PASS High 290.0 296.7 2.3 PASS

MIP-02.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-02.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Mon Aug 19 2019 09:51:08

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4
0 1 1 1 1

TRIP TIME: 54 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Aug 19 2019 09:56:38

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.485	0.0	106.760
TOP with FLOW>0	15.829	284.9	109.140
BOTTOM with FLOW=0	15.256	0.0	105.180
BOTTOM with FLOW>0	15.525	282.5	107.040

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31054A,0.0000,0.0000,0.0000,0.0000,9.9570e-1,-1.5260

LOG START TIME: Mon Aug 19 2019 10:03:32

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 15.30 ft (4.663 m)

LOG END TIME: Mon Aug 19 2019 11:01:25

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

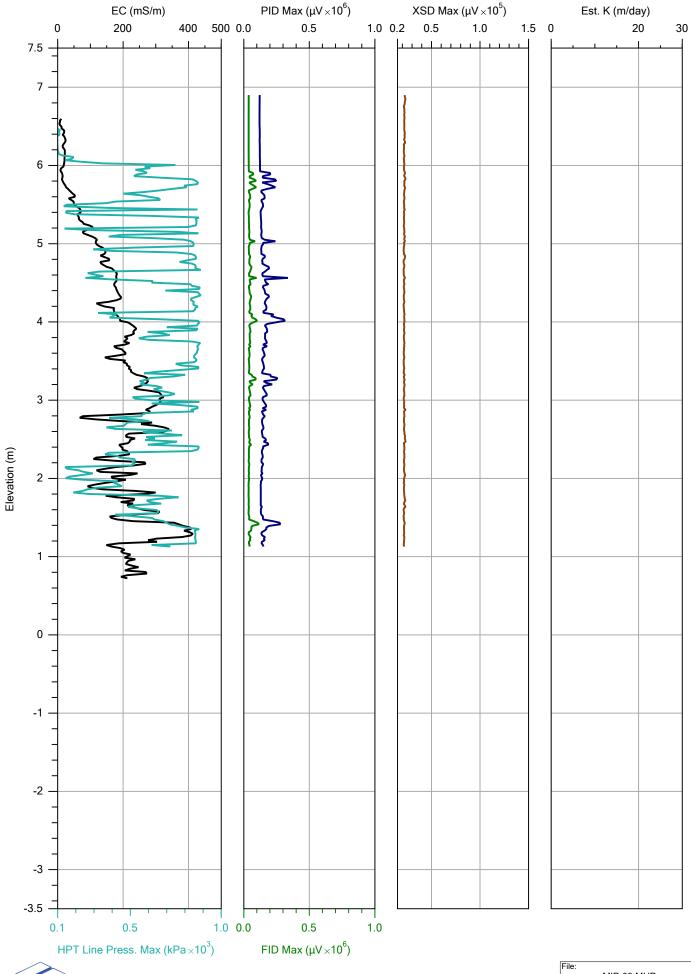
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Aug 19 2019 11:01:40

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		File:
		MIP-03.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	19/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 55.8 1.5 PASS High 290.0 297.3 2.5 PASS

MIP-03.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-03.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Mon Aug 19 2019 11:37:38

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 54 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Aug 19 2019 11:43:19

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.445	0.0	106.490
TOP with FLOW>0	15.827	278.1	109.120
BOTTOM with FLOW=0	15.235	0.0	105.040
BOTTOM with FLOW>0	15.618	277.3	107.680

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31054A,0.0000,0.0000,0.0000,0.0000,9.9570e-1,-1.5260

LOG START TIME: Mon Aug 19 2019 11:48:36

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 14.45 ft (4.404 m)

LOG END TIME: Mon Aug 19 2019 12:39:26

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

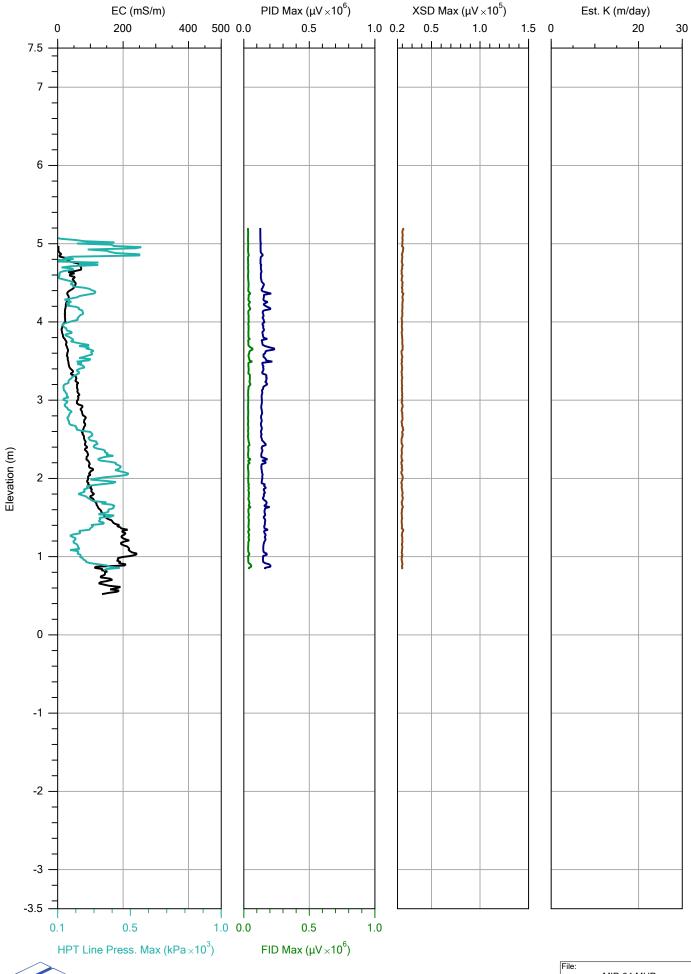
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Aug 19 2019 12:39:30

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		i iic.
		MIP-04.MHP
Company:	Operator:	Date:
Numac	Alex-Calum	19/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 57.3 4.3 PASS High 290.0 300.1 3.5 PASS

MIP-04.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Calum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-04.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Mon Aug 19 2019 14:30:42

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 54 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Aug 19 2019 14:36:37

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.341	0.0	105.770
TOP with FLOW>0	15.635	276.6	107.800
BOTTOM with FLOW=0	15.135	0.0	104.350
BOTTOM with FLOW>0	15.405	277.7	106.210

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.4 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31054A,0.0000,0.0000,0.0000,0.0000,9.9570e-1,-1.5260

LOG START TIME: Mon Aug 19 2019 14:39:39

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 14.60 ft (4.450 m)

LOG END TIME: Mon Aug 19 2019 15:12:38

LATITUDE: 0.00000000 LONGITUDE: 0.00000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP-04.post.tim

COMPOUND: TCE-BZ CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Mon Aug 19 2019 15:13:01

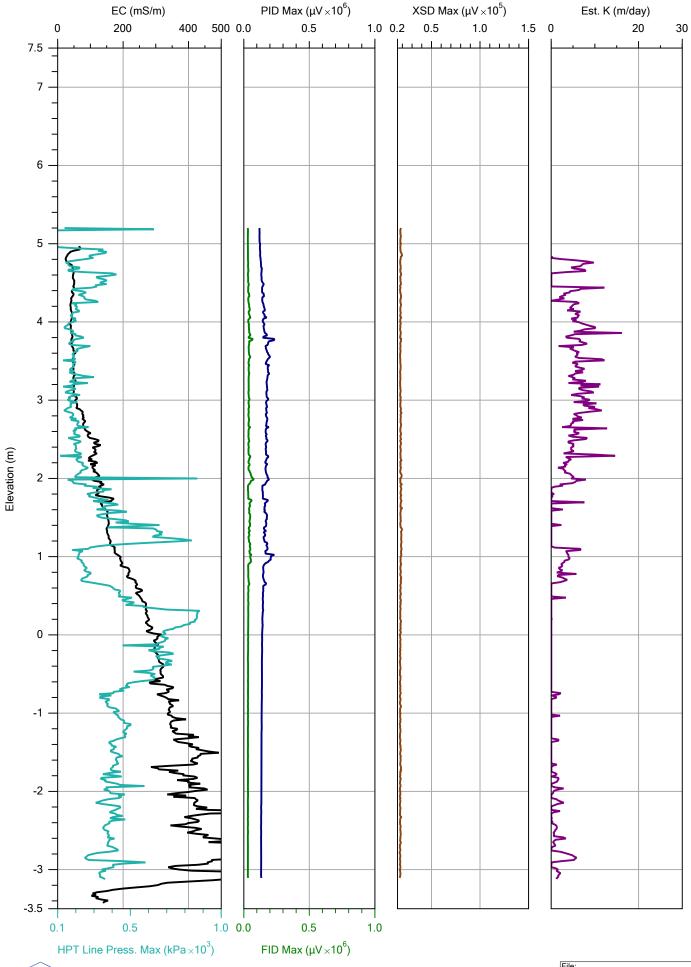
RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Aug 19 2019 15:14:24

POST-LOG HPT REFERENCE TESTS BYPASSED





		riie.
		MIP-05.MHP
Company:	Operator:	Date:
Numac	Alex-Calum	19/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 57.4 4.3 PASS High 290.0 299.0 3.1 PASS

MIP-05.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Calum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-05.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Mon Aug 19 2019 15:56:11

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 54 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Aug 19 2019 16:03:37

TEST HPT PRESSURE (psi) FLOW (mL/min) HPT PRESSURE (kPa) TOP with FLOW=0 15.395 0.0 106.140 TOP with FLOW>0 15.703 280.7 108.270 BOTTOM with FLOW=0 15.177 0.0 104.640 BOTTOM with FLOW>0 15.490 277.5 106.800

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

Probe advancement with HPT flow valve and/or pump switch turned off at 0.00 ft (0.000 m).

LOG START TIME: Mon Aug 19 2019 16:09:47

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 27.55 ft (8.397 m)
LOG END TIME: Mon Aug 19 2019 17:23:36

LATITUDE: 0.000000000 LONGITUDE: 0.00000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP-05.post.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Mon Aug 19 2019 17:31:38

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Aug 19 2019 17:37:03

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.541	0.0	107.150
TOP with FLOW>0	15.878	265.7	109.480
BOTTOM with FLOW=0	15.300	0.0	105.490
BOTTOM with FLOW>0	15.789	265.5	108.860

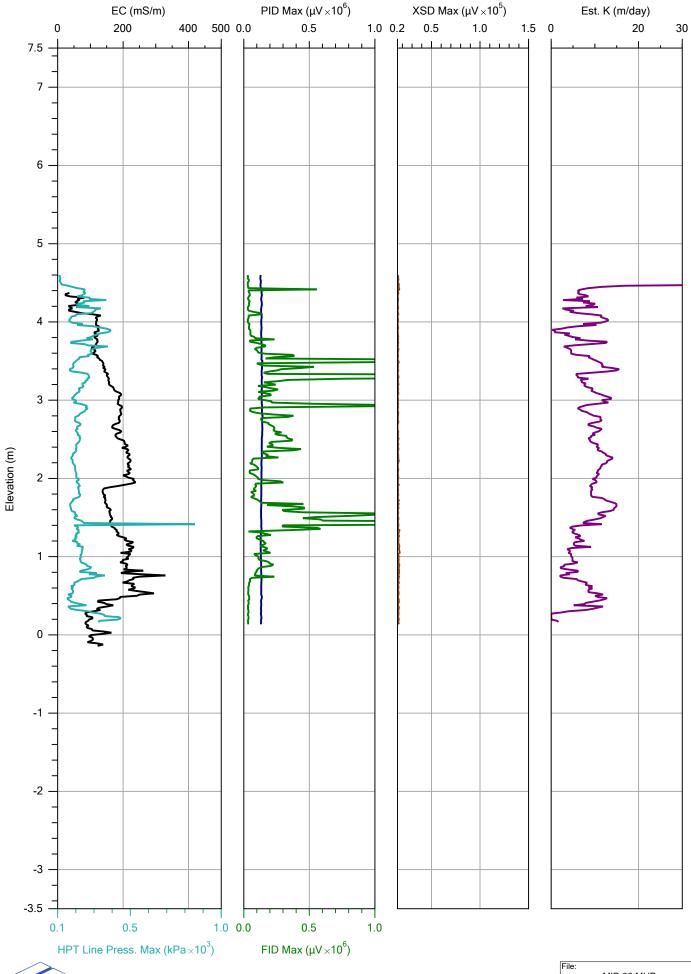
EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.24 psi (1.7 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	56.1	2.0	PASS
High	290.0	301.4	3.9	PASS





		MIP-06.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	20/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 57.4 4.3 PASS High 290.0 299.7 3.4 PASS

MIP-06.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-06.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 33.3 mL/min

RESPONSE TEST START TIME: Tue Aug 20 2019 07:55:54

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 54 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Aug 20 2019 08:01:10

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.503	0.0	106.890
TOP with FLOW>0	15.839	275.9	109.200
BOTTOM with FLOW=0	15.268	0.0	105.270
BOTTOM with FLOW>0	15.648	275.0	107.890

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Tue Aug 20 2019 08:06:28

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 14.80 ft (4.511 m)

LOG END TIME: Tue Aug 20 2019 08:56:03

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

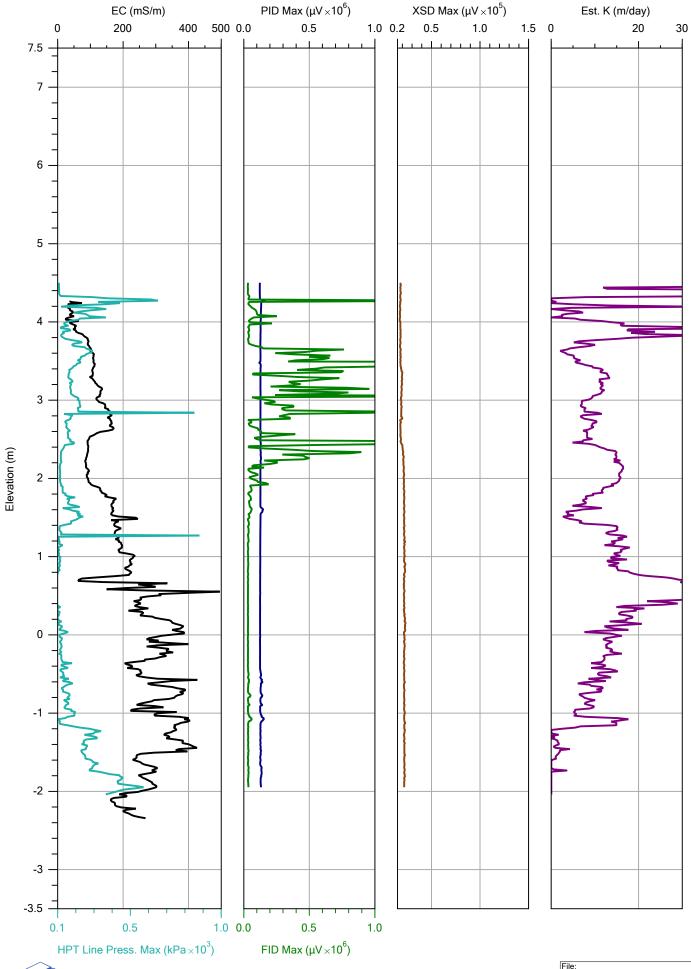
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Aug 20 2019 08:56:07

POST-LOG HPT REFERENCE TESTS BYPASSED





		riie.
		MIP-07.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	20/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 58.6 6.5 PASS High 290.0 300.8 3.7 PASS

MIP-07.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-07.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.1 mL/min

RESPONSE TEST START TIME: Tue Aug 20 2019 09:35:26

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 54 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Aug 20 2019 09:41:11

HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
15.510	0.0	106.940
15.860	277.6	109.350
15.275	0.0	105.310
15.633	280.6	107.790
	15.510 15.860 15.275	15.510 0.0 15.860 277.6 15.275 0.0

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.24 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Tue Aug 20 2019 09:46:00

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 21.70 ft (6.614 m)

LOG END TIME: Tue Aug 20 2019 10:47:59

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

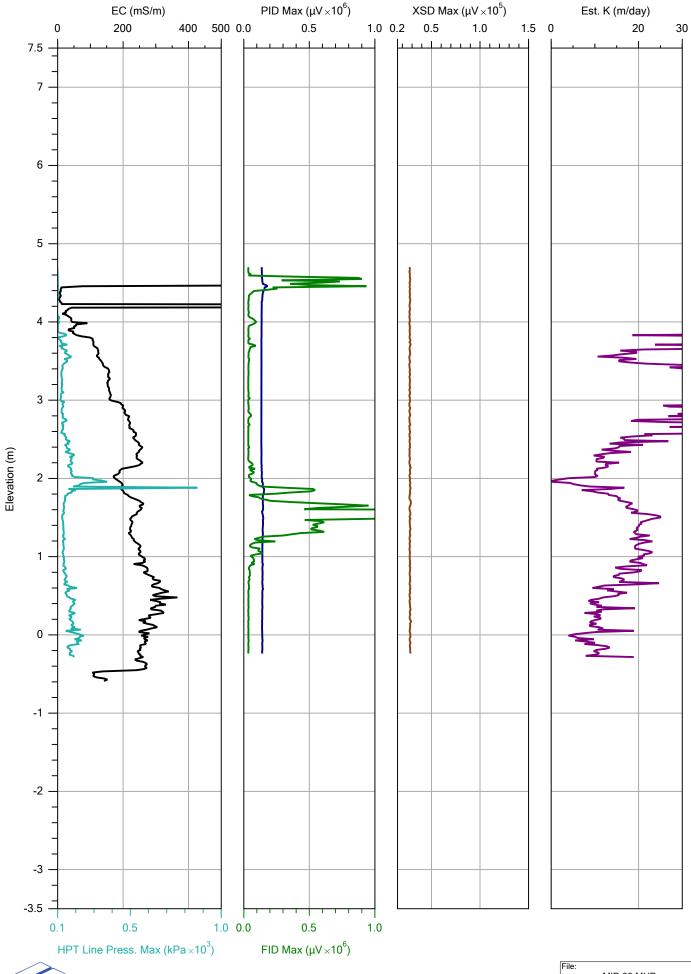
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Aug 20 2019 10:48:06

POST-LOG HPT REFERENCE TESTS BYPASSED





		i iic.
		MIP-08.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	20/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 50.8 7.7 PASS High 290.0 274.5 5.4 PASS

MIP-08.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-08.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Tue Aug 20 2019 13:19:32

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Aug 20 2019 13:24:33

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.489	0.0	106.790
TOP with FLOW>0	16.218	274.6	111.820
BOTTOM with FLOW=0	15.272	0.0	105.300
BOTTOM with FLOW>0	15.971	275.1	110.110

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

Temperature out of range (79.9 deg C) at 0.00 ft (0.000 m)

LOG START TIME: Tue Aug 20 2019 13:31:13

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 16.60 ft (5.060 m)
LOG END TIME: Tue Aug 20 2019 14:21:33

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

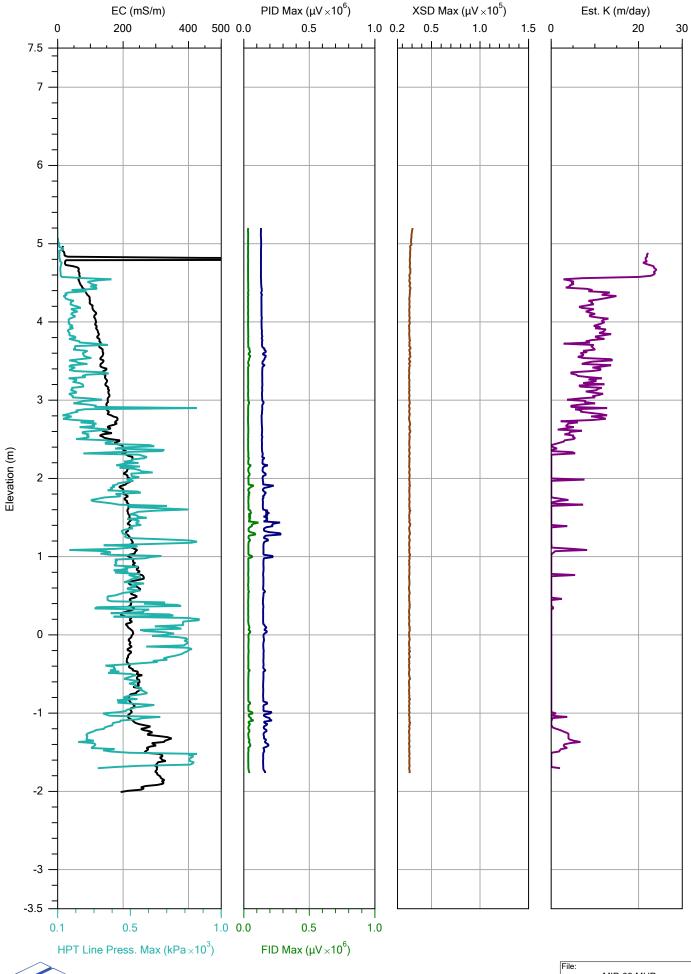
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Aug 20 2019 14:21:40

POST-LOG HPT REFERENCE TESTS BYPASSED





		riie.
		MIP-09.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	20/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 57.3 4.2 PASS High 290.0 299.1 3.1 PASS

MIP-09.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-09.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Tue Aug 20 2019 14:45:36

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Aug 20 2019 14:50:23

HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
15.504	0.0	106.890
16.144	277.6	111.310
15.305	0.0	105.520
15.986	277.5	110.220
	15.504 16.144 15.305	15.504 0.0 16.144 277.6 15.305 0.0

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.20 psi (1.4 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Tue Aug 20 2019 14:53:43

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 22.90 ft (6.980 m)

LOG END TIME: Tue Aug 20 2019 15:57:52

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

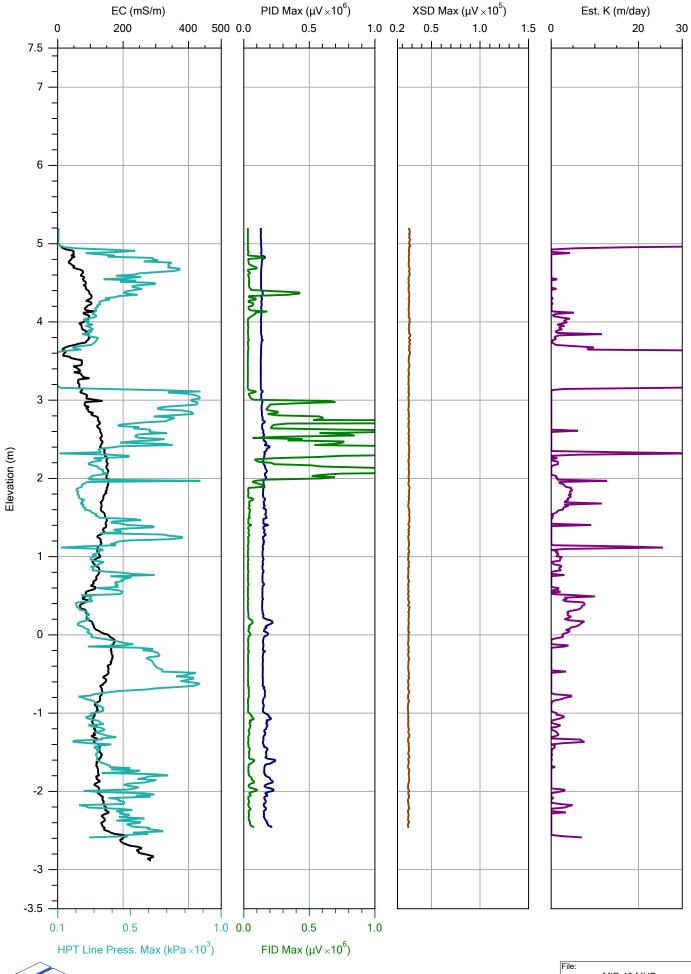
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Aug 20 2019 16:02:36

POST-LOG HPT REFERENCE TESTS BYPASSED





		riie.
		MIP-10.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	20/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 56.6 3.0 PASS High 290.0 298.6 3.0 PASS

MIP-10.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-10.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Tue Aug 20 2019 16:26:01

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Aug 20 2019 16:31:50

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.536	0.0	107.110
TOP with FLOW>0	16.212	283.9	111.780
BOTTOM with FLOW=0	15.324	0.0	105.650
BOTTOM with FLOW>0	16.002	283.7	110.330

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Tue Aug 20 2019 16:33:37

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 25.80 ft (7.864 m)

LOG END TIME: Tue Aug 20 2019 17:43:56

LATITUDE: 0.00000000 LONGITUDE: 0.00000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP-10.post.tim

COMPOUND: TCE-BZ CONCENTRATION: 5-5 ppm FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Tue Aug 20 2019 17:54:24

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4
0 1 1 1 1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Aug 20 2019 18:00:22

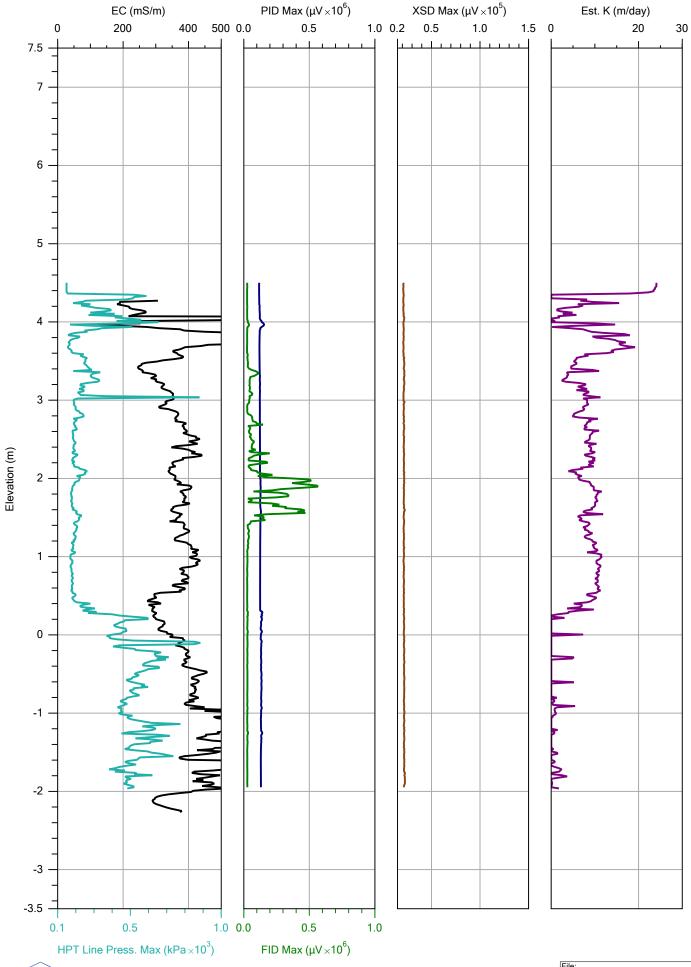
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0 TOP with FLOW>0 BOTTOM with FLOW=0 BOTTOM with FLOW>0	15.608	0.0	107.610
	16.360	260.6	112.800
	15.369	0.0	105.960
	16.080	259.7	110.870

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10% ACTUAL FLOW=0 HPT DIFF.: 0.24 psi (1.6 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	57.8	5.1	PASS
High	290.0	300.1	3.5	PASS





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		MIP-11.MHP
Company:	Operator:	Date:
Numac	Alex-Cailum	21/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 55.6 1.0 PASS High 290.0 301.3 3.9 PASS

MIP-11.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Cailum
PROJECT ID: 1901048
CLIENT: Geo-Logix
UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-11.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.2 mL/min

RESPONSE TEST START TIME: Wed Aug 21 2019 08:29:08

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Aug 21 2019 08:34:26

TEST HPT PRESSURE (psi) FLOW (mL/min) HPT PRESSURE (kPa) TOP with FLOW=0 106.520 15.450 0.0 TOP with FLOW>0 111.830 16.219 281.2 BOTTOM with FLOW=0 104.950 15.222 0.0 BOTTOM with FLOW>0 16.011 281.0 110.390

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Wed Aug 21 2019 08:38:33

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 21.45 ft (6.538 m)

LOG END TIME: Wed Aug 21 2019 10:05:36

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

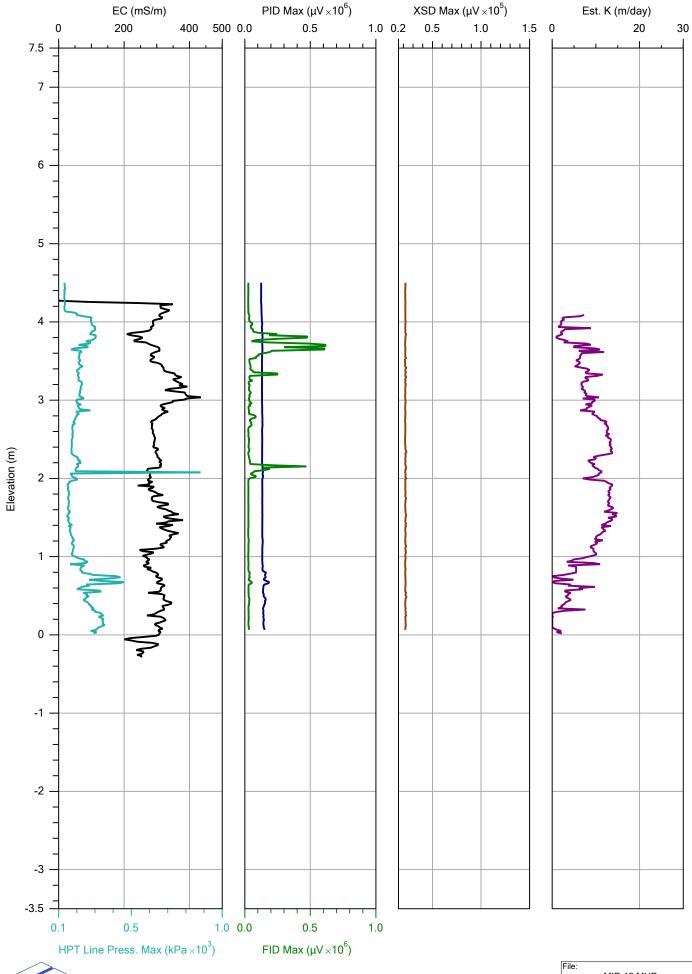
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Aug 21 2019 10:05:42

POST-LOG HPT REFERENCE TESTS BYPASSED





		riie.
		MIP-12.MHP
Company:	Operator:	Date:
Numac	Alex	21/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 58.2 5.9 PASS High 290.0 301.1 3.8 PASS

MIP-12.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac
OPERATOR: Alex
PROJECT ID: 1901048
CLIENT: Geo-Logix
UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-12.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.2 mL/min

RESPONSE TEST START TIME: Wed Aug 21 2019 11:10:16

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Aug 21 2019 11:15:28

TEST HPT PRESSURE (psi) FLOW (mL/min) HPT PRESSURE (kPa) TOP with FLOW=0 106.780 15.487 0.0 TOP with FLOW>0 280.0 112.960 16.383 BOTTOM with FLOW=0 105.180 15.255 0.0 279.4 BOTTOM with FLOW>0 16.180 111.560

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Wed Aug 21 2019 11:20:11

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 14.95 ft (4.557 m)

LOG END TIME: Wed Aug 21 2019 12:14:39

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

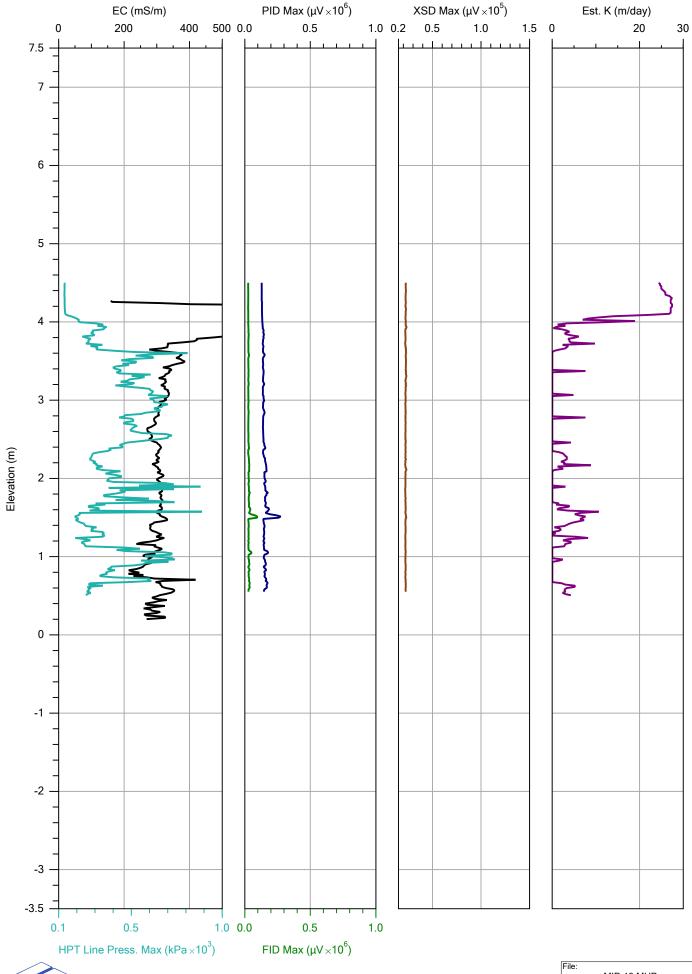
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Aug 21 2019 12:14:54

POST-LOG HPT REFERENCE TESTS BYPASSED





	· · · · · · · · · · · · · · · · · · ·	riie.
		MIP-13.MHP
Company:	Operator:	Date:
Numac	Alex	21/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 58.8 6.9 PASS High 290.0 303.7 4.7 PASS

MIP-13.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac OPERATOR: Alex PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-13.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Wed Aug 21 2019 13:17:15

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Aug 21 2019 13:22:54

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.429	0.0	106.380
TOP with FLOW>0	16.336	277.8	112.640
BOTTOM with FLOW=0	15.215	0.0	104.900
BOTTOM with FLOW>0	16.129	276.7	111.210

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Wed Aug 21 2019 13:27:46

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 13.35 ft (4.069 m)

LOG END TIME: Wed Aug 21 2019 14:10:42

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

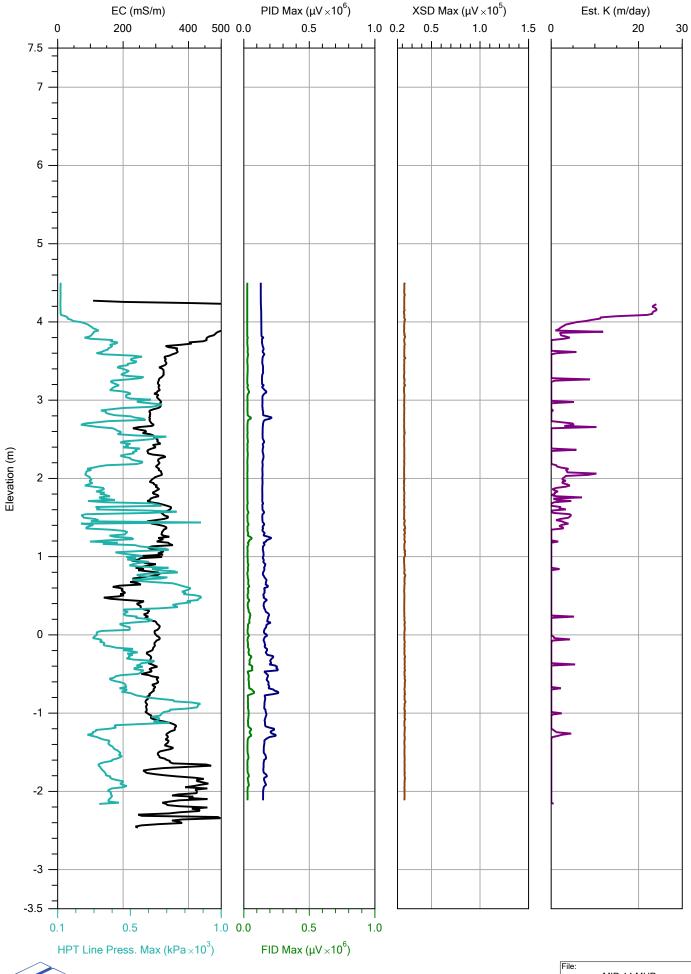
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Aug 21 2019 14:10:53

POST-LOG HPT REFERENCE TESTS BYPASSED





		i iic.
		MIP-14.MHP
Company:	Operator:	Date:
Numac	Alex	21/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 55.9 1.7 PASS High 290.0 298.5 2.9 PASS

MIP-14.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac OPERATOR: Alex PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-14.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Wed Aug 21 2019 15:09:58

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Aug 21 2019 15:16:49

TEST HPT PRESSURE (psi) FLOW (mL/min) HPT PRESSURE (kPa) TOP with FLOW=0 106.270 15.414 0.0 TOP with FLOW>0 276.8 112.270 16.284 BOTTOM with FLOW=0 15.198 0.0 104.780 BOTTOM with FLOW>0 16.066 276.9 110.770

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Wed Aug 21 2019 15:22:05

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 22.10 ft (6.736 m)

LOG END TIME: Wed Aug 21 2019 16:24:47

LATITUDE: 0.00000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP-14.post.tim

COMPOUND: TCE-BZ CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Wed Aug 21 2019 16:59:42

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Aug 21 2019 17:06:17

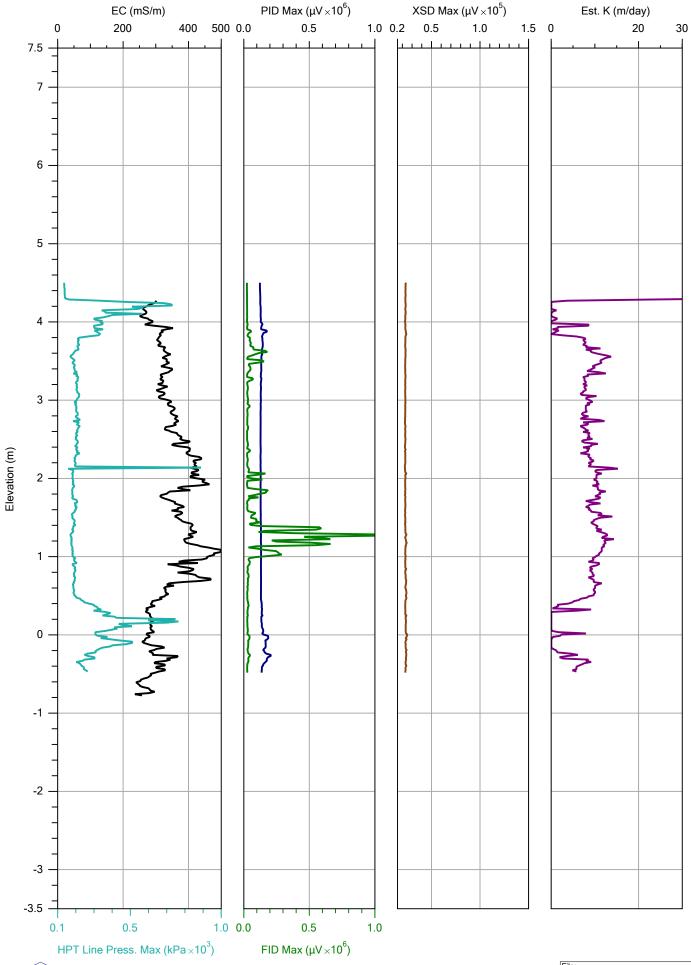
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0 TOP with FLOW>0 BOTTOM with FLOW=0 BOTTOM with FLOW>0	15.464	0.0	106.620
	16.362	278.5	112.810
	15.261	0.0	105.220
	16.149	275.1	111.350

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10% ACTUAL FLOW=0 HPT DIFF.: 0.20 psi (1.4 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	57.5	4.6	PASS
High	290.0	297.8	2.7	PASS





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		MIP-15.MHP
Company:	Operator:	Date:
Numac	Alex	22/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 56.7 3.0 PASS High 290.0 269.2 7.2 PASS

MIP-15.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac OPERATOR: Alex PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-15.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Thu Aug 22 2019 08:09:26

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Aug 22 2019 08:15:10

TEST HPT PRESSURE (psi) FLOW (mL/min) HPT PRESSURE (kPa) TOP with FLOW=0 15.384 0.0 106.070 TOP with FLOW>0 120.940 17.541 283.6 BOTTOM with FLOW=0 15.172 0.0 104.610 BOTTOM with FLOW>0 17.297 278.3 119.260

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

LOG START TIME: Thu Aug 22 2019 08:39:41

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 16.55 ft (5.044 m)

LOG END TIME: Thu Aug 22 2019 09:33:40

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

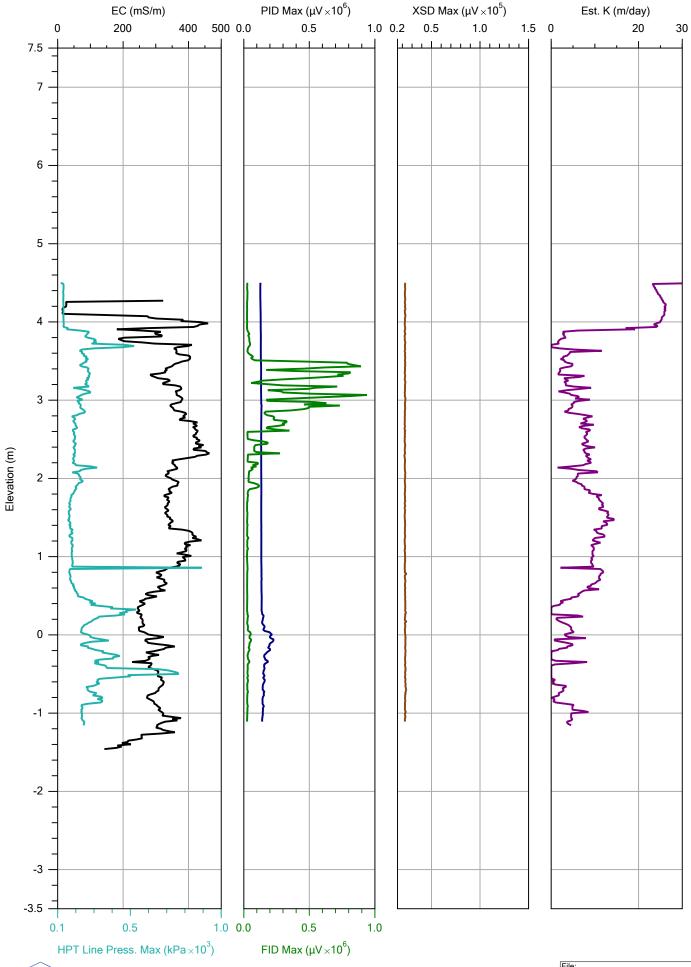
POST TEST TIME: Thu Aug 22 2019 09:33:46

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED

******* USER NOTES *******

HPT pressure around 10kPa above normal readings during pre-log response test. Response test still successful and wihtin parameter.





		riie.
		MIP-16.MHP
Company:	Operator:	Date:
Numac	Alex	22/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 55.4 0.7 PASS High 290.0 298.8 3.0 PASS

MIP-16.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac OPERATOR: Alex PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-16.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Thu Aug 22 2019 10:24:16

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4
0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Aug 22 2019 10:29:44

(kPa)

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.4 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

Probe advancement with HPT flow valve and/or pump switch turned off at 0.00 ft (0.000 m).

Probe advancement with HPT flow valve and/or pump switch turned off at 0.00 ft (0.000 m).

Probe advancement with HPT flow valve and/or pump switch turned off at 0.05 ft (0.015 m).

Probe advancement with HPT flow valve and/or pump switch turned off at 0.15 ft (0.046 m).

Probe advancement with HPT flow valve and/or pump switch turned off at 0.15 ft (0.046 m).

Probe advancement with HPT flow valve and/or pump switch turned off at 0.25 ft (0.076 m).

LOG START TIME: Thu Aug 22 2019 10:35:02

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1 1

LOG END DEPTH: 18.80 ft (5.730 m)

LOG END TIME: Thu Aug 22 2019 12:14:54

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

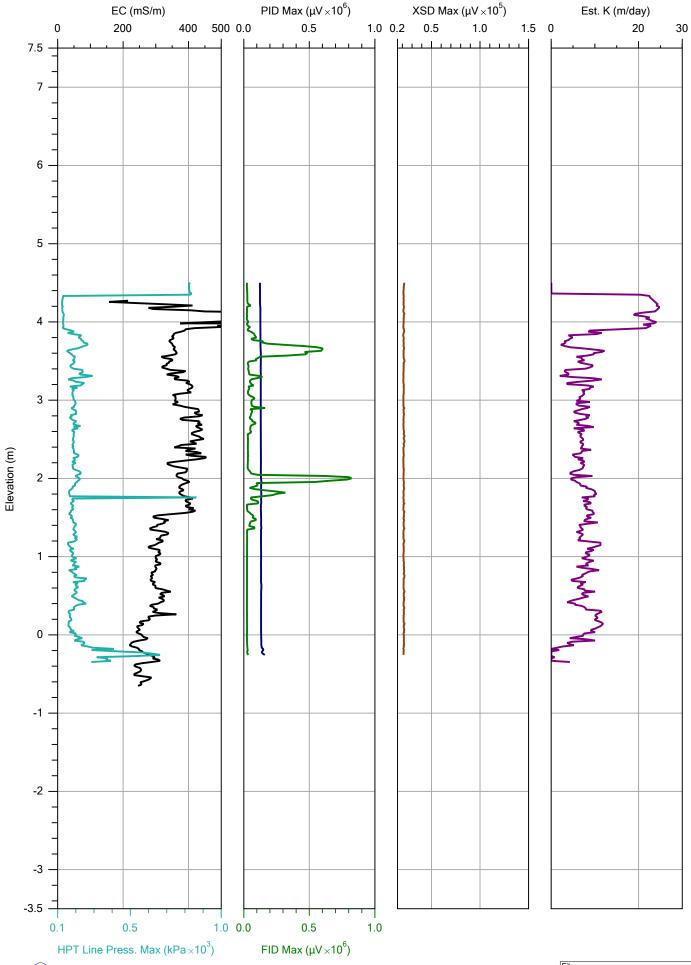
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Aug 22 2019 12:15:18

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		MIP-17.MHP
Company:	Operator:	Date:
Numac	Alex	22/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 57.2 3.9 PASS High 290.0 299.3 3.2 PASS

MIP-17.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac OPERATOR: Alex PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-17.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Thu Aug 22 2019 13:28:11

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Aug 22 2019 13:35:06

TEST HPT PRESSURE (psi) FLOW (mL/min) HPT PRESSURE (kPa) TOP with FLOW=0 15.449 106.510 0.0 274.3 TOP with FLOW>0 117.580 17.053 BOTTOM with FLOW=0 105.100 15.243 0.0 BOTTOM with FLOW>0 16.850 276.1 116.180

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.4 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31041A,0.0000,0.0000,0.0000,0.0000,9.9620e-1,-1.0800

LOG START TIME: Thu Aug 22 2019 13:42:31

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 16.15 ft (4.923 m)

LOG END TIME: Thu Aug 22 2019 14:36:21

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

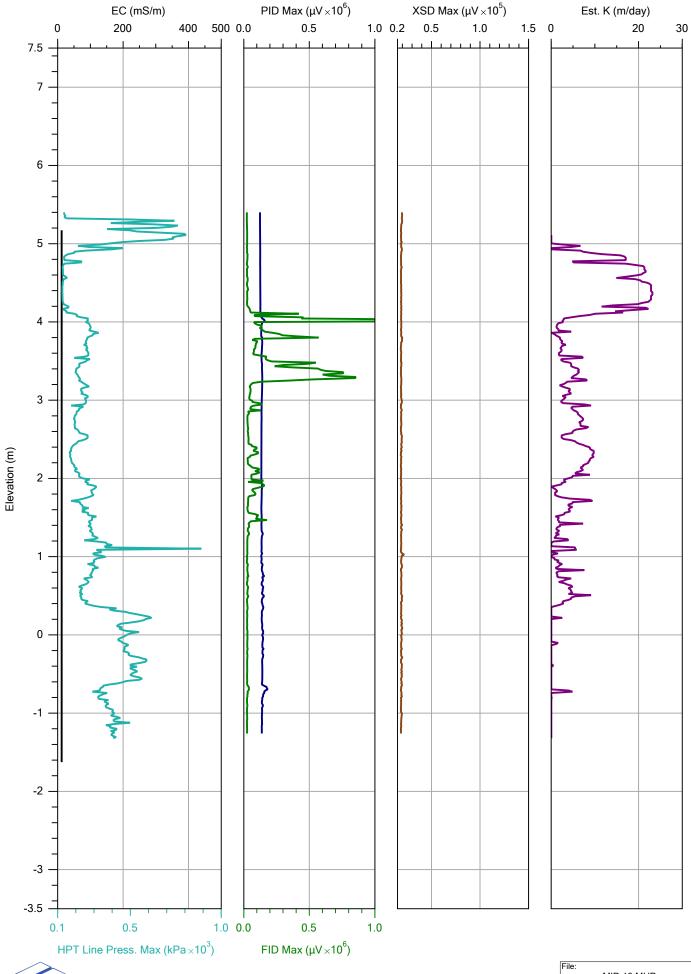
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Aug 22 2019 14:36:30

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		riie.
		MIP-18.MHP
Company:	Operator:	Date:
Numac	Alex	22/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

EC PRE-LOG TESTS BYPASSED

MIP-18.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac
OPERATOR: Alex
PROJECT ID: 1901048
CLIENT: Geo-Logix
UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-18.pre.tim

COMPOUND: TCE-BZ CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Thu Aug 22 2019 15:40:12

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Aug 22 2019 15:52:28

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.444	0.0	106.480
TOP with FLOW>0	17.463	274.5	120.400
BOTTOM with FLOW=0	15.234	0.0	105.030
BOTTOM with FLOW>0	17.252	275.1	118.950

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.4 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31041A,0.0000,0.0000,0.0000,0.0000,9.9620e-1,-1.0800

LOG START TIME: Thu Aug 22 2019 15:56:42

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 22.30 ft (6.797 m) LOG END TIME: Thu Aug 22 2019 17:27:46

LATITUDE: 0.00000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP-18.post.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40 mL/min

RESPONSE TEST START TIME: Thu Aug 22 2019 17:43:32

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Aug 22 2019 17:49:13

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.523	0.0	107.030
TOP with FLOW>0	17.213	290.8	118.680
BOTTOM with FLOW=0	15.305	0.0	105.520
BOTTOM with FLOW>0	17.010	289.8	117.280

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

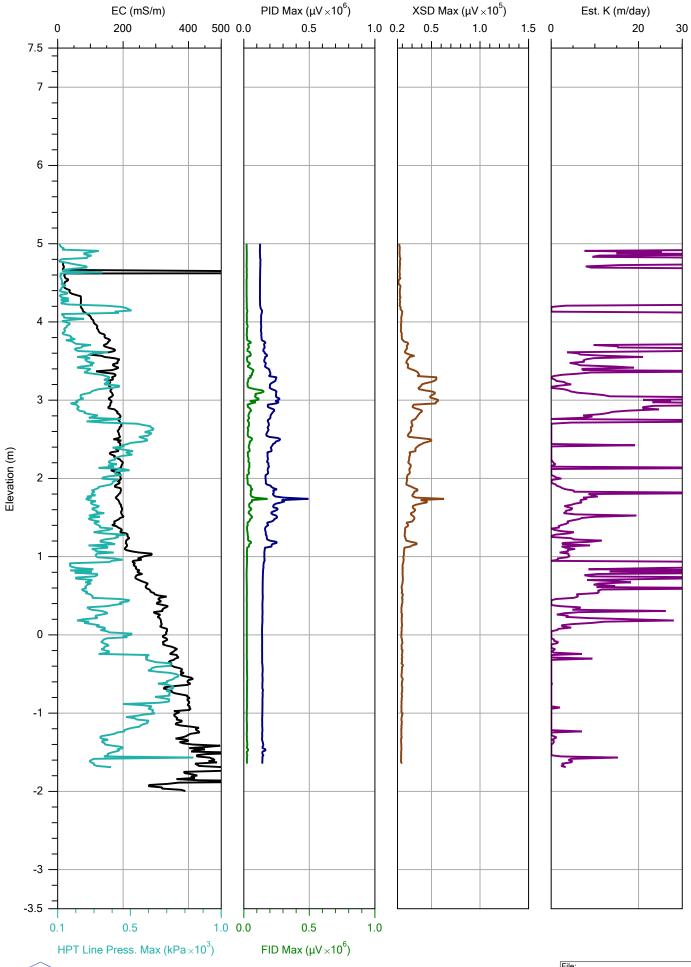
ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

EC POST-LOG TESTS BYPASSED

******* USER NOTES *******

EC dipole down. EC data not accurate.





		riie.
		MIP-19.MHP
Company:	Operator:	Date:
Numac	Alex-Calum	23/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 57.0 3.5 PASS High 290.0 301.5 4.0 PASS

MIP-19.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Calum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-19.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.3 mL/min

RESPONSE TEST START TIME: Fri Aug 23 2019 06:43:05

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Aug 23 2019 06:51:46

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.555	0.0	107.250
TOP with FLOW>0	16.714	276.6	115.240
BOTTOM with FLOW=0	15.342	0.0	105.780
BOTTOM with FLOW>0	16.519	275.4	113.900

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31041A,0.0000,0.0000,0.0000,0.0000,9.9620e-1,-1.0800

LOG START TIME: Fri Aug 23 2019 06:58:43

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 22.20 ft (6.767 m)

LOG END TIME: Fri Aug 23 2019 08:10:07

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

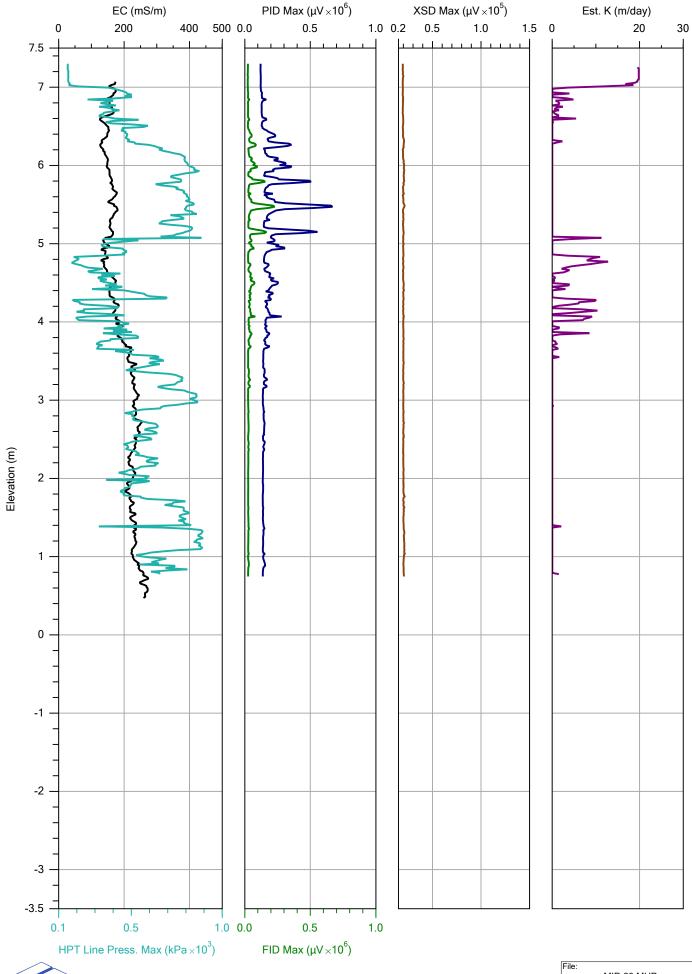
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Aug 23 2019 08:10:31

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		riie.
		MIP-20.MHP
Company:	Operator:	Date:
Numac	Alex-Calum	23/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 57.3 4.2 PASS High 290.0 299.4 3.2 PASS

MIP-20.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Calum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-20.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Fri Aug 23 2019 08:54:12

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Aug 23 2019 08:59:52

TEST HPT PRESSURE (psi) FLOW (mL/min) HPT PRESSURE (kPa) TOP with FLOW=0 107.720 15.623 0.0 TOP with FLOW>0 278.6 17.631 121.560 BOTTOM with FLOW=0 15.399 0.0 106.170 BOTTOM with FLOW>0 17.309 271.1 119.340

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31041A,0.0000,0.0000,0.0000,0.0000,9.9620e-1,-1.0800

LOG START TIME: Fri Aug 23 2019 09:07:00

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 21.65 ft (6.599 m)

LOG END TIME: Fri Aug 23 2019 10:05:23

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

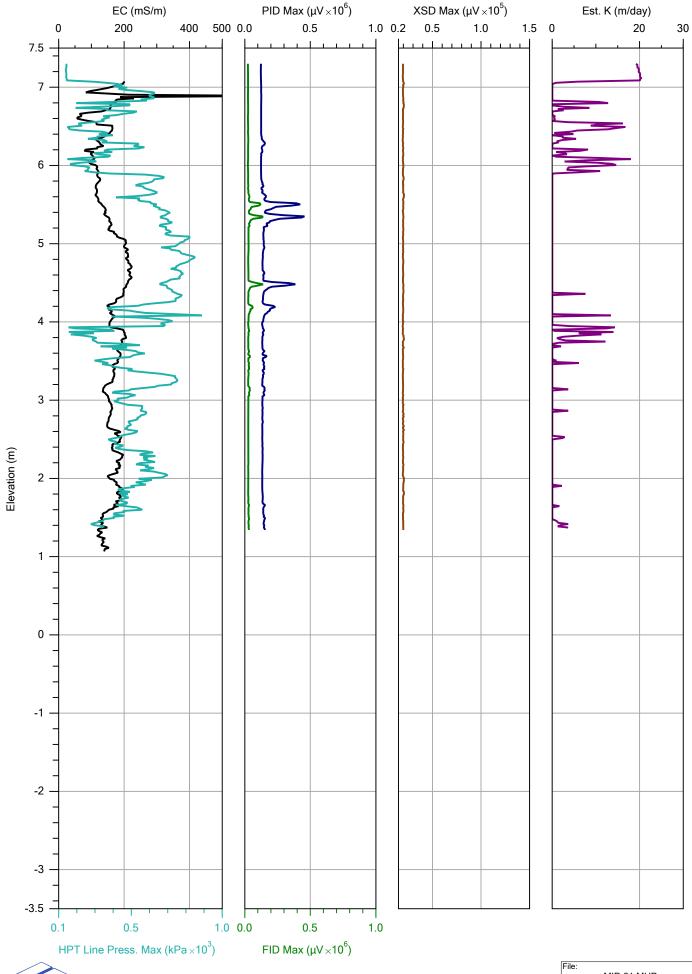
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Aug 23 2019 10:05:31

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		riie.
		MIP-21.MHP
Company:	Operator:	Date:
Numac	Alex-Calum	23/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 56.6 2.9 PASS High 290.0 299.7 3.3 PASS

MIP-21.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Calum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-21.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Fri Aug 23 2019 11:12:24

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Aug 23 2019 11:17:31

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.654	0.0	107.930
TOP with FLOW>0	17.668	286.9	121.820
BOTTOM with FLOW=0	15.447	0.0	106.510
BOTTOM with FLOW>0	17.466	286.5	120.420

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.4 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31041A,0.0000,0.0000,0.0000,0.0000,9.9620e-1,-1.0800

LOG START TIME: Fri Aug 23 2019 11:23:11

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 19.70 ft (6.005 m)

LOG END TIME: Fri Aug 23 2019 12:14:32

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

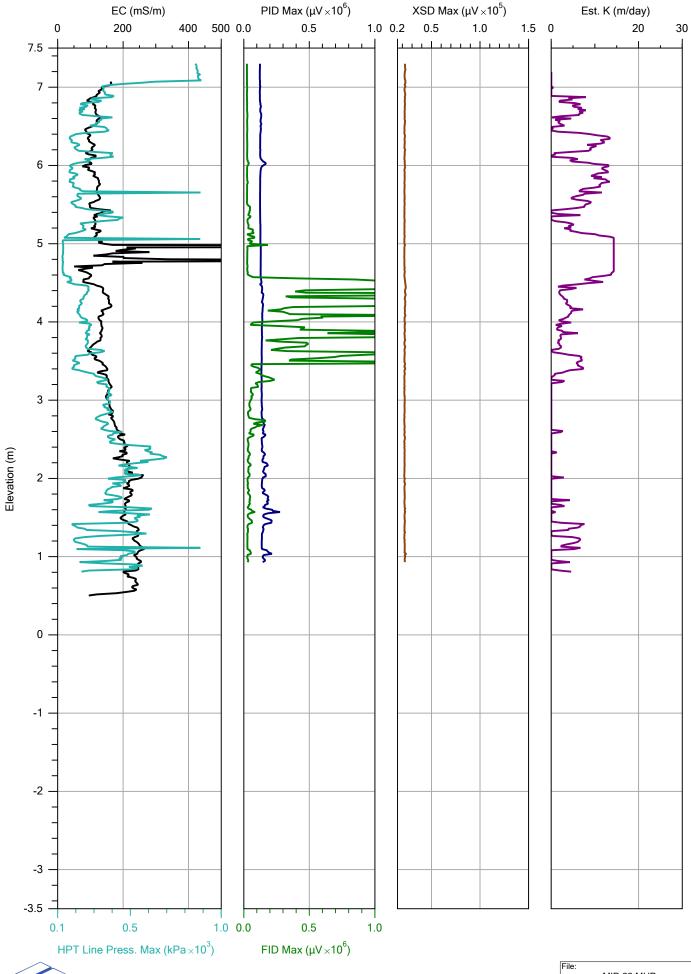
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Aug 23 2019 12:14:46

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED





		riie.
		MIP-22.MHP
Company:	Operator:	Date:
Numac	Alex-Calum	23/08/2019
Project ID:	Client:	Location:
1901048	Geo-Logix	

Pre-Log EC Load Tests

Test Target (mS/m) Actual (mS/m) % Diff P/F Low 55.0 56.6 3.0 PASS High 290.0 299.2 3.2 PASS

MIP-22.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows

Version: 1.6 Build: 14139

COMPANY: Numac

OPERATOR: Alex-Calum PROJECT ID: 1901048 CLIENT: Geo-Logix UNITS: METRIC

PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole

100 INCH STRING POT USED

ROD LENGTH: 2 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP-22.pre.tim

COMPOUND: TCE-BZ

CONCENTRATION: 5-5 ppm

FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Fri Aug 23 2019 13:15:43

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

TRIP TIME: 62 sec Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Aug 23 2019 13:20:57

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.634	0.0	107.790
TOP with FLOW>0	17.369	278.7	119.760
BOTTOM with FLOW=0	15.399	0.0	106.170
BOTTOM with FLOW>0	17.149	279.5	118.240

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%

ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None

HPT IDEAL COEFFS: 2.2696e1,-2.2356

HPT SENSOR CAL NUMBERS: XD31041A,0.0000,0.0000,0.0000,0.0000,9.9620e-1,-1.0800

LOG START TIME: Fri Aug 23 2019 13:24:33

ATTENUATION CHANGES

DEPTH (ft) DEPTH (m) DET1 DET2 DET3 DET4 0.00 0.000 1 1 1 1

LOG END DEPTH: 21.55 ft (6.568 m)
LOG END TIME: Fri Aug 23 2019 14:51:00

LATITUDE: 0.000000000 LONGITUDE: 0.000000000

ELEVATION: 0.000 METERS 0.00 FEET

GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP-22.post.tim

COMPOUND: TCE-BZ
CONCENTRATION: 5-5 ppm
FLOW: 40.0 mL/min

RESPONSE TEST START TIME: Fri Aug 23 2019 15:15:26

RESPONSE TEST ATTENUATION CHANGES

TIME DET1 DET2 DET3 DET4 0 1 1 1 1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Aug 23 2019 15:20:32

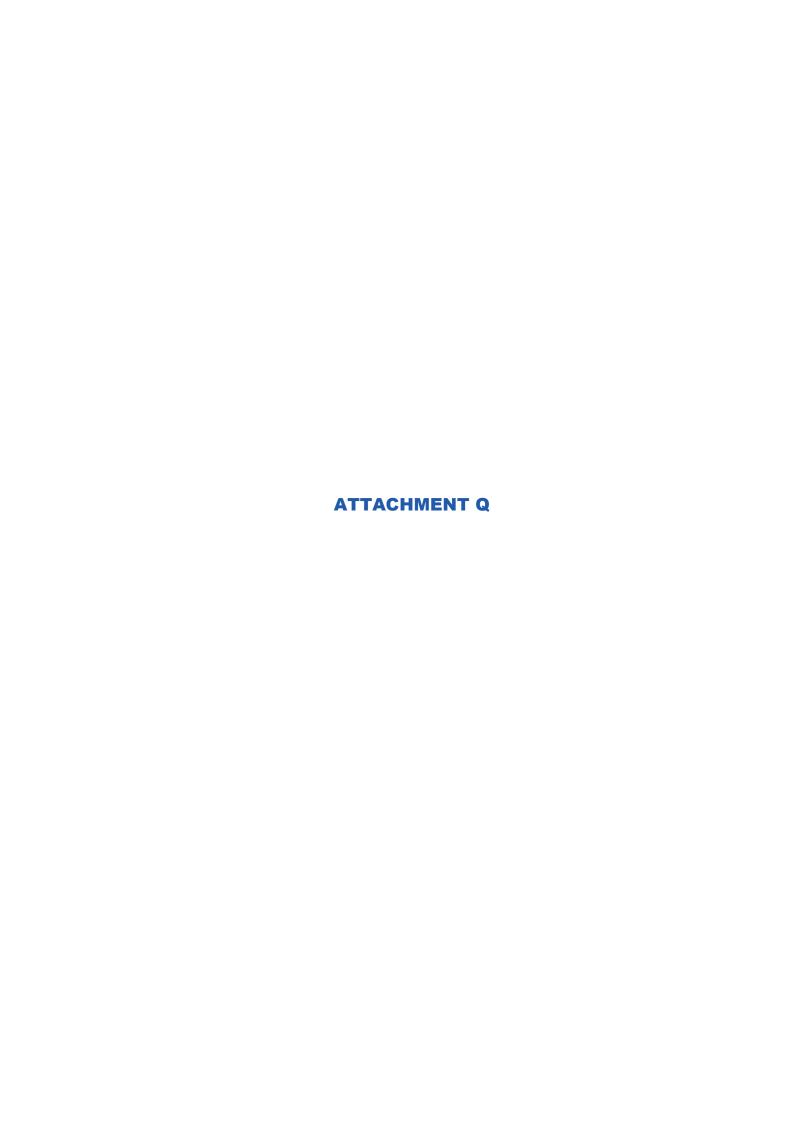
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0 TOP with FLOW>0 BOTTOM with FLOW=0 BOTTOM with FLOW>0	15.653	0.0	107.920
	18.227	273.0	125.670
	15.421	0.0	106.330
	18.022	273.7	124.260

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10% ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	57.0	3.7	PASS
High	290.0	287.3	0.9	PASS





WELL ID: MWIOI

PROJECTI	PROJECT INFORMATION									
PROJECT NAME: AUGUEN PROJECT NUMBER: 1901031										
DATE OF INST	ALLATION: 30	105/19		INITIALS: MP	5					
DATE: 31				WEATHER: P	Cloudy	13°C				
DATE: 31/05/19 WEATHER: P. Cloudy 13°C PURGE METHOD: Bailer										
PURGE VOLUME CALCULATION										
$\left(\frac{7.7}{Total\ depth\ (m)} - \frac{3.190}{Water\ level\ (m)}\right) \times \frac{3}{Well\ volumes} \times 2\frac{50\ mm}{Well} \text{ or } 7.8\frac{100\ mm}{Well} = \frac{2.7}{Calculated\ Purge\ Volume} Litres$										
FIELD PAR	AMETERS			T 10 16						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
		15.	Bailed	dry.						
			6	1						
		7.								
TOTAL PURGE	VOLUME (L):	15 h.	APPROX. PURG	E RATE (LPM):						
OBSERVATIONS DURING DEVELOPMENT										
NOTES: (WELL	CONDITION, COLOUR	, CLARITY, ODOUR)	Good, v.	silty, or	ganic o	dour.				
Sl. ch										
	Sl. Sheen on water > organic?									
RECHARGE BE	EHAVIOUR:	FAST RECHA	ARGING		SLOW RECHARG	ING (<80% RECHARC	GE AFTER 2 HRS)			



WELL ID: MW102

PROJECT	INFORMATION									
PROJECT NA	ME: Auburr			PROJECT NUMBER: 1901031						
DATE OF INS	TALLATION: 30/	105/19		INITIALS: MP	5					
DATE: 31	TALLATION: 30/			WEATHER: P.	Moude 1	3°C				
	100: Railer				0	The Stage				
	0,00									
PURGE VC	LUME CALCUL	ATION								
$\left(\frac{5 \cdot 2}{Total \ depth \ (m)} - \frac{2 \cdot 75}{W \ ater \ level \ (m)}\right) \times \frac{3}{Well \ volumes} \times 2 \frac{50 \ mm}{Well} \ or \ 7.8 \frac{100 \ mm}{Well} = \frac{14 \cdot 7}{Calculated \ Purge \ Volume} Litres$										
FIELD PAR	RAMETERS									
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
		182								
							72			
TOTAL PURG	E VOLUME (L):	182.	APPROX. PURG	E RATE (LPM):						
S TOWNS OF THE SECOND	Walt				Herman	Washington and	A VISA II			
OBSERVA	TIONS DURING	DEVELOPMENT		يحاياه بالإرد						
NOTES: (WELL	CONDITION, COLOUR	, CLARITY, ODOUR)	Good, V.	silty, sl	L. odour	- chemica	alp			
			,	J.						
RECHARGE B	EHAVIOUR:	FAST RECH	ARGING X		SLOW RECHARG	ING (<80% RECHARG	E AFTER 2 HRS)			



WELL ID: MW103

Ç											
PROJECT	INFORMATION										
PROJECT NA	ME: Auburr	``		PROJECT NUMBE	R: 190103	31					
DATE OF INS	TALLATION: 30	105/19		INITIALS: MP	5						
DATE: 3	1/05/19			WEATHER: P.	Cloudy	13°C					
	HOD: Bailer			,	0						
PURGE VO	DLUME CALCUL	ATION									
$\left(\frac{4.0}{Total\ depth\ (m)} - \frac{1.748}{Water\ level\ (m)}\right) \times \frac{3}{Well\ volumes} \times 2\frac{50\ mm}{Well} \text{ or } 7.8\frac{100\ mm}{Well} = \frac{13.5}{Calculated\ Purge\ Volume} \text{Litres}$											
FIELD PAR	RAMETERS				Orts or						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0,1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)				
		10%	Purged	dry.							
			0								
							_				
_											
TOTAL PURG	E VOLUME (L):	10%	APPROX. PURG	E RATE (LPM):							
		10 K.									
OBSERVA	TIONS DURING	DEVELOPMENT									
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR) GOOD, SINTY, Sh. organic odour											
							ich				
RECHARGE B	EHAVIOUR:	FAST RECHA	ARGING L		SLOW RECHARG	ING (<80% RECHARG	E AFTER 2 HRS)				



WELL ID: MWIOH

PROJECT	INFORMATION						
PROJECT NAM	ME: Auburi	1		PROJECT NUMBE	R: 19010	31	
	TALLATION: 31/	05/19		INITIALS: MP	S		
DATE: 31	105/19			WEATHER: P		15°C	
PURGE METH	on: Bailer				đ		
PURGE VO	LUME CALCUL	ATION					
$\left(\frac{\mathcal{U}}{Total c}\right)$	$\frac{O}{depth(m)} - \frac{Wa}{Wa}$	1.094 ter level (m)) × 1	3 Well volumes ×	2 2 50 mm or 7.8	$\frac{100 \text{ mm}}{\text{Well}} = \frac{100 \text{ mm}}{\text{Calor}}$	17.4 Culated Purge V	olume Litres
FIELD PAR	AMETERS					130	
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 ₁ 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
		101	Purged	dry.			
~ 2.5 hr	S .		0	J			
		81					
TOTAL PURGE	E VOLUME (L):	18.2	APPROX. PURG	E RATE (LPM):			
OBSERVAT	TIONS DURING	DEVELOPMENT				70.70	
NOTES: (WELL	CONDITION, COLOUR	CLARITY ODOLIR)	Code	04, 0		- 1-010	
1101201 (1122		, obtain, oboon,	G000, 5	ilty, sl.	organic E	BJOU!	
RECHARGE BI	EHAVIOUR:	FAST RECHA	ARGING		SLOW RECHARG	ING (<80% RECHARC	GE AFTER 2 HRS)



WELL ID: MW106

							25 24 1/4
	INFORMATION						
PROJECT NAI	ME: Auburi	n		PROJECT NUMBE	R: 19010	31	
	FALLATION: 03	106/19		INITIALS: MP	5		
	106/19			WEATHER:	Cloudy	13°C	
PURGE METH	on: Bailer	•			- U		
PURGE VO	LUME CALCUL	ATION	10000				FOR INS
$\left(\frac{\mathcal{U}}{Total}\right)$	$\frac{.}{(M)}$ depth (m) $ \frac{Ma}{Ma}$	(1.215) ter level (m) × $\frac{1}{1}$	3 Well volumes	$2\frac{50 mm}{Well}$ or 7.8	$\frac{100 mm}{Well} = \frac{100 mm}{Calor}$	16.7 culated Purge V	olume Litres
FIELD PAR	AMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0_1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
		6h	Baile	d dry.			
~3hrs							
		5h	Baile	d dry.			
				J			
TOTAL PURGE	E VOLUME (L):	11	APPROX. PURG	E RATE (LPM):			
OBSERVAT	TIONS DURING	DEVELOPMENT		1,01		38.034.6	
NOTES: (WELL	CONDITION, COLOUR	, CLARITY, ODOUR)	Goad, ver	y silty/c	loudy, :	sl. organ	ic obour
				· ·			
RECHARGE B	EHAVIOUR:	FAST RECHA	ARGING		SLOW RECHARG	SING (<80% RECHARG	GE AFTER 2 HRS)
						, , , , , , , , , , , , , , , , , , , ,	·····-/ -\



WELL ID: MW107

PROJECT	NFORMATION						
PROJECT NAM	ME: Aubarr)		PROJECT NUMBE	R: 19010	31	
DATE OF INST	TALLATION: 03	106/19		INITIALS: MP	S		
DATE: 03	706/19			WEATHER:	Poudu 13	000	
PURGE METH	oo: Bailer				7		
						hamber and h	
	LUME CALCUL						
$\left(\frac{1}{Total}\right)$	$\frac{O}{depth(m)} - \frac{G}{Wa}$	(1.601) ter level (m)	3 Well volumes	$2\frac{50 mm}{Well}$ or 7.8	$\frac{100 \ mm}{Well} = \frac{100 \ mm}{Calc}$	B. H culated Purge V	olume Litres
FIELD PAR	AMETERS		31 K W			B DE	
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
		HL	Baile	d dru.			
~2his.							
		21					
TOTAL PURGE	E VOLUME (L):	6 h	APPROX. PURG	E RATE (LPM):			
OBSERVAT	HONE DIRING	DEVEL OBJECTION			The state of the		Desire and the second
OBSERVA	IONS DUKING	DEVELOPMENT					
NOTES: (WELL	CONDITION, COLOUR	, CLARITY, ODOUR)	Good, S	ilty, no	odour.		
				7			
DECUARCE P	EHAMOUR:	FACT DECHA	DOING []		CLOWRECHARG	INC conception	SEASTED ALIDO: 🛛



WELL ID: MW108

PROJECT	INFORMATION						
PROJECT NAI	ME: Auburr	١		PROJECT NUMBE	R: 190103	31	
DATE OF INST	TALLATION: 03	106/19		INITIALS: MP	S		
DATE: 03/	106/19			INITIALS: MP	oudy 13	'C	
PURGE METH	100: Bailer				Ī		
PURGE VO	LUME CALCUL	ATION					
$\left(\frac{\mathcal{Y}_{\bullet}}{Total}\right)$	$\frac{O}{depth(m)} - \frac{1}{Wa}$	$\left(\frac{797}{\text{ter level }(m)}\right) \times \frac{1}{100}$	3 Vell volumes	$<2\frac{50 mm}{Well}$ or 7.8-	$\frac{100 mm}{Well} = \frac{1}{Calc}$	13.2 culated Purge V	olume Litres
FIELD PAR	AMETERS	B No.	PAR A				
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 ₁ 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
		15L.					
TOTAL PURG	E VOLUME (L):	15h.	APPROX. PURG	E RATE (LPM):			
Name of Street			of the state				
OBSERVA	rions during	DEVELOPMENT		T. USA AND THE			W 27 24 12
NOTES: (WELL	CONDITION, COLOUR	R. CLARITY, ODOUR)	Good, S	ilty, no	odour		
RECHARGE B	BEHAVIOUR:	FAST RECHA	RGING X		SLOW RECHARG	SING (<80% RECHARG	GE AFTER 2 HRS)



WELL ID: MW109

PROJECT INFO	RMATION						
PROJECT NAME:	Auburr)		PROJECT NUMBE	R: 19010	31	
DATE OF INSTALLA				INITIALS: MP	S		
DATE: 04/00		*		WEATHER: 7.	Cloudy 1	5°C.	
PURGE METHOD:				<u> </u>	Ť		
PURGE VOLUM	E CALCUL	ATION	SWEET				
$\left(\frac{\mathcal{Y}_{i} \mathcal{O}}{Total\ depth}\right)$	$\frac{1}{2}(m) - \frac{1}{Wat}$. 636 er level (m)) × 1	3 Well volumes	$2\frac{50 mm}{Well} or 7.8$	$\frac{100 mm}{Well} = \frac{100 mm}{Calc}$	14.Z rulated Purge V	olume Litres
FIELD PARAME	TERS						
TIME DT	W (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0,1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
03/06		5ん	Baile	d dry.			
011/06		<u></u>					
04/06		5 h	Baile	d dry.			
TOTAL PURGE VOLU	JME (L):	10	APPROX. PURG	E RATE (LPM):			
ORSERVATIONS	BURING	DEVEL OBSCNE			100 mg 100 mg		
OBSERVATIONS	S DUKING	DEVELOPINEN I					
NOTES: (WELL CONDI	TION, COLOUR,	CLARITY, ODOUR)	Good, 1	1. silty,	st odow	-> chem	ical ?
RECHARGE BEHAVI	OUR:	FAST RECHA	ARGING		SLOW RECHARG	ING (<80% RECHARG	GE AFTER 2 HRS)



WELL ID: MW110

PROJECT	INFORMATION						
PROJECT NA	ME: Auburr)		PROJECT NUMBE INITIALS: MP WEATHER:	R: 19010	31	
DATE OF INS	TALLATION: 03	106/19		INITIALS: MP	5		
DATE: 03	8/06/19 100: Bailer			WEATHER: CO	oudy 13	Č.	
PURGE MET	100: Bailer	•			J		
PURGE VO	DLUME CALCUI	ATION	3 5 6 6			SERB.	
$\left(\frac{\ell}{Total}\right)$	$\frac{1.5}{depth(m)} - \frac{5}{Wa}$	(1.562) ter level (m) $\times \sqrt{V}$	3 Vell volumes	$\times 2\frac{50 mm}{Well}$ or 7.8	$\frac{100 mm}{Well} = \frac{1}{Calc}$	11.6 Culated Purge V	Volume Litres
FIELD PAR	RAMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 ₁ 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
		132					
TOTAL PURG	E VOLUME (L):	136	APPROX. PURG	GE RATE (LPM):			
ORSERVA	TIONS DUDING	DEVELOPMENT					
OBSERVA	HONS DURING	DEVELOPMENT		.47			
NOTES: (WEL	L CONDITION, COLOUR	t, CLARITY, ODOUR)	(1000, S	silty no	odour.		
RECHARGE E	BEHAVIOUR:	FAST RECHA	RGING X		SLOW RECHARG	SING (<80% RECHAR	GE AFTER 2 HRS)



WELLID: MWIII

PROJECT	INFORMATION	111111	12			1	
PROJECT NAT	ME: Auburr)		PROJECT NUMBE	R: 19010	31	
	TALLATION: 04			INITIALS: MP	S		
DATE: 04				INITIALS: MP	Cloudy	15°C	
PURGE METH	on: Bailer				<i>J</i>		
PURGE VO	LUME CALCUI	ATION			1		
$\left(\frac{5}{Total}\right)$	$\frac{C}{depth(m)} - \frac{Wa}{Wa}$	1,734 ter level (m)) × 1	3 Well volumes	2 2 50 mm or 7.8	$\frac{100 \ mm}{Well} = \frac{100 \ mm}{Calc}$	19.6 culated Purge V	olume Litres
FIELD PAR	AMETERS		PATTE				
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 ₋ 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
		201.					
			_				
		_					
TOTAL PURGE	E VOLUME (L):	20%	APPROX. PURG	E RATE (LPM):			
OBSERVAT	TIONS DURING	DEVELOPMENT	100	و دري پاهي			
	CONDITION, COLOUR			a Miles on	o-forur	A 15	
			Cium, S	silty, no	COOM >		
RECHARGE BI	EHAVIOUR:	FAST RECHA	ARGING X		SLOW RECHARG	GING (<80% RECHARC	GE AFTER 2 HRS)



WELLID: MWIIS

PPO JECT	INFORMATION		1 (a) 5 (a) 10 (a)	MERCH TEST			
IF THE MICE SEA	INFORMATION	NAME OF TAXABLE PARTY.					
PROJECT NA	ME:	Aubum		PROJECT NUMBE	19010	48	
DATE OF INS	TALLATION:	2118/19		INITIALS:	NF		
DATE:		22/8/19		WEATHER:	clear		
PURGE METH	OD:	Bailer					
PURGE VO	LUME CALCUI	LATION					
$\left({Total}\right)$	7 4.028 depth (m) Wa	ter level (m) ×	3 Well volumes ×	2 50 mm or 7.8	$\frac{100 \ mm}{Well} = \frac{100 \ mm}{Calc}$	YXXIII. ulated Purge V	18.8 Litres
FIELD PAR	AMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
TOTAL PURGE	VOLUME (L):		APPROX. PURGE	E RATE (LPM):			
Education and over							
OBSERVAT	IONS DURING	DEVELOPMENT					
NOTES: (WELL	CONDITION, COLOUR	t, CLARITY, ODOUR)	Railed 4	10 C , SI	I'm brac	50 ac	odr w
			Senior	1 3	1 3.00) 1.0	Lagar Charles
RECHARGE BE	EHAVIOUR:	FAST RECHA	ARGING		SLOW RECHARG	NG (<80% RECHARG	BE AFTER 2 HRS)



WELL ID:

MW113

PROJECT	INFORMATIO	V						
PROJECT NAME:		Auburn		PROJECT NUMBER: 1901048			THE REAL PROPERTY.	
DATE OF INSTALLATION:		21/8		INITIALS:	NF			
DATE:		23/8/19		WEATHER:				
PURGE METH		Boiler						
BUBBB V	OLUME ON O		System is a			主要创作[2006]	MORANA CARSENTO	
NUMBER OF STREET	DLUME CALCU							
Total	depth (m) W	3-5 2.668 ater level (m)	3 Well volumes	< 2 50 mm or 7.8 Well	$\frac{100 mm}{ Well } = \frac{100 mm}{Calc}$	culated Purge	8 96 Litres	
Allaheri kurakun	RAMETERS							
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
		-						
					4			
TOTAL PURGE VOLUME (L): APPROX. PURGE RATE (LPM):								
OBSERVAT	TIONS DUDING	PEVEL ODMENT		POLICE PROPERTY.			AND THE PERSON NAMED IN	
UBSERVA	HONS DURING	DEVELOPMENT			332.9			
NOTES: (WELL	CONDITION, COLOU	R, CLARITY, ODOUR)	Bailed	40L SIL	y bour	1,000	dow	
]			
		1						
RECHARGE B	EHAVIOUR:	FAST RECHA	RGING		SLOW RECHARG	ING (<80% RECHAR	GE AFTER 2 HRS)	



WELL ID:

MWILL

PROJECT INFORMATION								
PROJECT NAME: Action				PROJECT NUMBER:		1901048		
DATE OF INSTALLATION: 2118				INITIALS: NF				
DATE:	23/8	19		WEATHER:	Cle	COY		
PURGE METH								
			THE PROPERTY AND ADDRESS.	DOM TO PERMITTED TO	South Control	2 Se (0.01 HAZ 0.)		
PURGE VO	LUME CALCUL	ATION						
$\left(\frac{5.850}{\textit{Total depth (m)}} - \frac{3.408}{\textit{Water level (m)}}\right) \times \frac{3}{\textit{Well volumes}} \times 2\frac{50 \text{ mm}}{\textit{Well}} \text{ or } 7.8 \frac{100 \text{ mm}}{\textit{Well}} = \frac{14.652}{\textit{Calculated Purge Volume}} \text{ Litres}$								
FIELD PAR	AMETERS							
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
TOTAL PURGE VOLUME (L): APPROX. PURGE RATE (LPM):								
OBSERVATIONS DURING DEVELOPMENT								
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR) Bailed 40c, silty brown no adour								
RECHARGE BEHAVIOUR: FAST RECHARGING SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)								



WELL ID:

MW115

PROJECT INFORMATION										
PROJECT NA	ME: A	burn		PROJECT NUMBER: 1901048						
DATE OF INSTALLATION: 21/8				INITIALS:						
DATE:	23	18		WEATHER:	No Clea).v				
PURGE METH	PURGE METHOD: Bailer									
-										
PURGE VO	LUME CALCUL	ATION								
$\left(\frac{3.384}{Total\ depth\ (m)} - \frac{0.561}{Water\ level\ (m)}\right) \times \frac{3}{Well\ volumes} \times 2\frac{50\ mm}{Well} \text{ or } 7.8\frac{100\ mm}{Well} = \frac{16.938}{Calculated\ Purge\ Volume} Litres$										
FIELD PAR	AMETERS				2000年。北京					
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
TOTAL PURGE VOLUME (L): APPROX. PURGE RATE (LPM):										
OBSERVATIONS DURING DEVELOPMENT										
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR) Bailed 40 L; brown silf water, no odow.										
,										
RECHARGE BEHAVIOUR: FAST RECHARGING (<80% RECHARGE AFTER 2 HRS)										



WELL ID: MWILL

BUTCH BUTCHES										
PROJECT INFORMATION										
PROJECT NAME: Auburn				PROJECT NUMBER: 1901048						
DATE OF INST		21/8		WEATHER: Clear						
DATE:		23/8/19		WEATHER:		Clear				
PURGE METHOD: Bailer										
PURGE VO	PURGE VOLUME CALCULATION									
$\left(\frac{3.572}{Total\ depth\ (m)} - \frac{19}{W\ ater\ level\ (m)}\right) \times \frac{3}{W\ ell\ volumes} \times 2\frac{50\ mm}{W\ ell} \ or\ 7.8\frac{100\ mm}{W\ ell} = \frac{19}{C\ alculated\ Purge\ Volume} Litres$										
FIELD PAR	AMETERS									
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
4.7										
TOTAL PURGE VOLUME (L): APPROX. PURGE RATE (LPM):										
OBSERVATIONS DURING DEVELOPMENT										
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR)										
Bailed dry purged approximately 10 L, sitty, no adour, brown T										
RECHARGE BEHAVIOUR: FAST RECHARGING SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)										



WELL ID: MW117

PROJECT INFORMATION PROJECT NUMBER: 1901048B DATE OF INSTALLATION: $2/10/19$ INITIALS: MPS DATE: $3/10/19$ WEATHER: SUNDY 17°C PURGE METHOD: Bailer PURGE VOLUME CALCULATION $ \frac{6.297}{Total \ depth \ (m)} - \frac{2.123}{Water \ level \ (m)} \times \frac{3}{Well \ volumes} \times 2\frac{50 \ mm}{Well} \text{ or } 7.8\frac{100 \ mm}{Well} = \frac{25.044}{Calculated \ Purge \ Volume} Litres$									
FIELD PAR	AMETERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0,1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)		
07:00	2.123	9							
15:50		8							
4/10/19									
4/10/19		8				1			
14:30		7							
	,								
TOTAL PURGE VOLUME (L): 32. APPROX. PURGE RATE (LPM):									
OBSERVATIONS DURING DEVELOPMENT									
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR) Good v. silty/turbid, no odour.									
RECHARGE BEHAVIOUR: FAST RECHARGING SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)									



WELLID: MW118

PROJECT NAME DATE OF INST	information ME: Auburr Pallation: 2, 10/19 OD: Bailer	10/19		PROJECT NUMBE INITIALS: MP WEATHER: ST	R: 19010 S Unny 1	948B 7°C.	
Name and Park	LUME CALCUL (229) (24)	ATION 3, 286 ter level (m)) × ī	3 Well volumes ×	2 50 mm or 7.8-	100 paní Well = Cald	5.658 Culated Purge Vo	olume Litres
FIELD PAR	AMETERS						
TIME 07:10 4/10/19 14:20	DTW (mbTOC)	TOTAL DISCHARGE (L) 5. Dry 5 Dry	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
TOTAL PURGE	VOLUME (L):	10.	APPROX. PURG	E RATE (LPM):			
NOTES: (WELL (IONS DURING CONDITION, COLOUR	DEVELOPMENT		sikty/ti	whid -	d. brown	;
RECHARGE BE	HAVIOUR:	FAST RECHA	RGING		SLOW RECHARG	ING (<80% RECHARGE	E AFTER 2 HRS)



WELL ID: MW119

PROJECT NAME: Auburn DATE OF INSTALLATION: 2/10/19 DATE: 3/10/19 PROJECT NUMBER: 19 INITIALS: MPS. WEATHER: Sunny 17°C PURGE METHOD: Bailer PURGE VOLUME CALCULATION								
PURGE METHOD: Bailer								
PURGE METHOD: Bailer								
Purge Method: Bailer								
PURGE VOLUME CALCULATION								
PURGE VOLUME CALCULATION $\left(\frac{\sqrt{389}}{Total\ depth\ (m)} - \frac{2.456}{Water\ level\ (m)}\right) \times \frac{3}{Well\ volumes} \times 2\frac{50\ mm}{Well} \text{ or } 7.8\frac{100\ mm}{Well} = \frac{10.998}{Calculated\ Purge\ Volume}^{Litres}$								
FIELD PARAMETERS								
TIME DTW (mbTOC) TOTAL PH CONDUCTIVITY REDOX DO (MG/L) +/- 10 (MS/CM) +/- 3% (MV) +/- 10MV (MG/L) +/- 10% TEMP (°C)								
07:16 2.456 25								
TOTAL PURGE VOLUME (L): 25 APPROX. PURGE RATE (LPM):								
OBSERVATIONS DURING DEVELOPMENT								
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR) Good, V. Lerbid/Silty - brown.								
no adour. Additional water purged to remove silt build up.								
RECHARGE BEHAVIOUR: FAST RECHARGING X SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)								



WELL ID: MW120

PROJECT	INFORMATION				77 3 3 1 TO 7			
PROJECT NA	ME: Auburr	1	STATE OF THE PARTY	PROJECT NUMBER: 19010488				
	TALLATION: 21			PROJECT NUMBER: 1901048B INITIALS: MPS WEATHER: Sunny 14°C.				
DATE: 3/		•		WEATHER: S	und 140	(1)		
	OD: Bailer				1	-		
	BOULD SON SON							
PURGE VO	LUME CALCUL	LATION			位的。			
$\left(\frac{5.7}{Total}\right)$	$\frac{161}{depth(m)} - \frac{1}{Wa}$	1.440 ter level (m) ×	3 Well volumes ×	$2\frac{50mm}{Well}$ or 7.8	$\frac{100 mm}{Well} = \frac{1}{Calc}$	24,126 culated Purge V	olume Litres	
FIELD PAR	AMETERS						NEW CO.	
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
07:29	1.440	28						
TOTAL PURGE	VOLUME (L):	28	APPROX. PURG	E RATE (LPM):				
OBSERVAT	IONS DURING	DEVELOPMENT					沙漠斯特	
NOTES: (WELL	CONDITION, COLOUR	, CLARITY, ODOUR)	Good V.	"silter / to	ushid	sV diese	1 dour	
sl. sh	een on u	vater	<u> </u>	"silty/b	vn .	and a second for		
RECHARGE BE	EHAVIOUR:	FAST RECHA	RGING X		SLOW RECHARG	ING (<80% RECHARG	E AFTER 2 HRS)	



WELL ID: MW121

PROJECT	NFORMATION							
PROJECT NAM	ME: Aubun	γ	OR LOWER PROPERTY AND ADDRESS OF THE PARTY.	PROJECT NUMBER: 1901048B				
DATE OF INST	ALLATION: 3/	10/19		INITIALS: MP	S		P	
DATE: 3/	10/19			WEATHER: So	innu 20°	C .		
PURGE METH	od: Bailer				J .			
	LUME CALCUL	SERVICE STREET	3 Wall valumas	2 50 mm or 7.8	100 mm	8,196.	Litres	
(Total a	epin (m) wu	ter tevet (III)	wen volumes	Well	well call		otume	
FIELD PAR	AMETERS							
TIME 16:05	DTW (mbTOC) 4.227	TOTAL DISCHARGE (L)	Base a 4,739.	CONDUCTIVITY FLEC PUTGIN	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
06:56		2.6	- P112					
06:50		20	5,043					
TOTAL PURGE	VOLUME (L):	30	APPROX. PURGE	ERATE (LPM):				
OBSERVAT	IONS DURING	DEVELOPMENT			eth washing			
NOTES: (WELL	CONDITION, COLOUR,	CLARITY, ODOUR)	Installed	to 6.5m	- addition	onal wate	er ourged	
to remo	ve silt e	baild up.				•	1 1	
Good.	v. silty/	turbil -	L. brown	. no o	bur.			
RECHARGE BE		FAST RECHA				ING (<80% RECHARG	E AFTER 2 HRS)	



WELL DEVELOPMENT LOG WELL ID: MW201

PROJECT	INFORMATION	Carl House	1000		1		11727-11	
PROJECT NA	ME: Aubur	n		PROJECT NUMBE	R: 19010	48A		
DATE OF INS	TALLATION: 24	109/19		PROJECT NUMBER: 1901048A				
	109/19	7 - 17 - 1		WEATHER:				
	100: Bailer	•	2					
	DLUME CALCUL		Walley II		32 Tilling			
$\left(\frac{1}{Total}\right)$	$\frac{17}{depth(m)} - \frac{1}{Wa}$	$\overline{ter\ level\ (m)}$ \ \times	Well volumes	$<2\frac{50 mm}{Well}$ or 7.8	$\frac{100 \text{min}}{\text{Well}} = \frac{1}{\text{Calc}}$	culated Purge I	Volume Litres	
FIELD PAR	RAMETERS				D. TA			
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0,1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
TOTAL PURG	E VOLUME (L):	201	APPROX. PURG	E RATE (LPM):				
OBSERVA*	TIONS DURING	DEVELOPMENT	1400					
NOTES: (WELL	. CONDITION, COLOUR	l, CLARITY, ODOUR)	Sl. sile	ty becom	nina ele	ac. No	o odour.	
			5, 5, 0	Ø	8			
RECHARGE B	EHAVIOUR:	FAST RECHA	ARGING X		SLOW RECHARG	ING (<80% RECHAR	GE AFTER 2 HRS)	



WELL ID: MW202

		101201000						
PROJECT	INFORMATION							
	ME: Aubus	. ,		PROJECT NUMBER: 1901048 A				
DATE OF INS	TALLATION: 25	109/19		INITIALS: TL				
	109/19			WEATHER:				
PURGE METH	100: Bailer							
PURGE VO	LUME CALCUL	ATION		W. 2234				
$\left(\frac{14}{Total}\right)$	$\left(\frac{\textit{14.0}}{\textit{Total depth (m)}} - \frac{3}{\textit{Water level (m)}}\right) \times \frac{3}{\textit{Well volumes}} \times 2 \frac{50 mm}{\textit{Well}} \text{ or } 7.8 \frac{100 mm}{\textit{Well}} = \frac{100 mm}{\textit{Calculated Purge Volume}} \text{ Litres}$							
FIELD PAR	AMETERS	145	WE STATE		0.00			
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
TOTAL PURGI	E VOLUME (L):	20h	APPROX. PURG	E RATE (LPM):				
OBSERVA	OBSERVATIONS DURING DEVELOPMENT							
NOTES: (WELL	. CONDITION, COLOUR	. CLARITY, ODOUR)	Sl. sil	ty become	ina cle	ar. No	odour.	
				Í	8			
RECHARGE B	RECHARGE BEHAVIOUR: FAST RECHARGING SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)							



WELL ID: MW203

PROJECT	INFORMATION								
	ME: Aubus			PROJECT NUMBER: 1901048 A					
	TALLATION: 25	5/09/19		INITIALS: Th					
DATE: 25	5/09/19			WEATHER:					
PURGE METH	100: Bailer								
PURGE VO	DLUME CALCUI	ATION			16.5	A STATE			
$\left(\frac{11}{Total}\right)$	$\frac{1.8}{\text{depth }(m)} - \frac{1}{Wa}$	$\frac{1}{V}$ ter level (m) × $\frac{1}{V}$	3 Well volumes	$\times 2\frac{50 mm}{Well} or 7.8$	$\frac{100 \text{mm}}{Well} = \frac{1}{Calc}$	culated Purge V	olume Litres		
FIELD PAR	RAMETERS	- THE STATE OF	-			BOUT			
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)		
				161					
TOTAL PURG	E VOLUME (L):	20 L	APPROX. PURG	GE RATE (LPM):					
OBSERVA	TIONS DURING	DEVELOPMENT		The second	100	3 7 7 1 L	13 C 15 16 3		
100000									
NOTES: (WELL	L CONDITION, COLOUP	C. CLARITY, ODQUR)	CLEAR	. No odo	sur.				
RECHARGE B	BEHAVIOUR:	FAST RECHA	RGING 🗶		SLOW RECHARG	SING (<80% RECHAR	GE AFTER 2 HRS)		



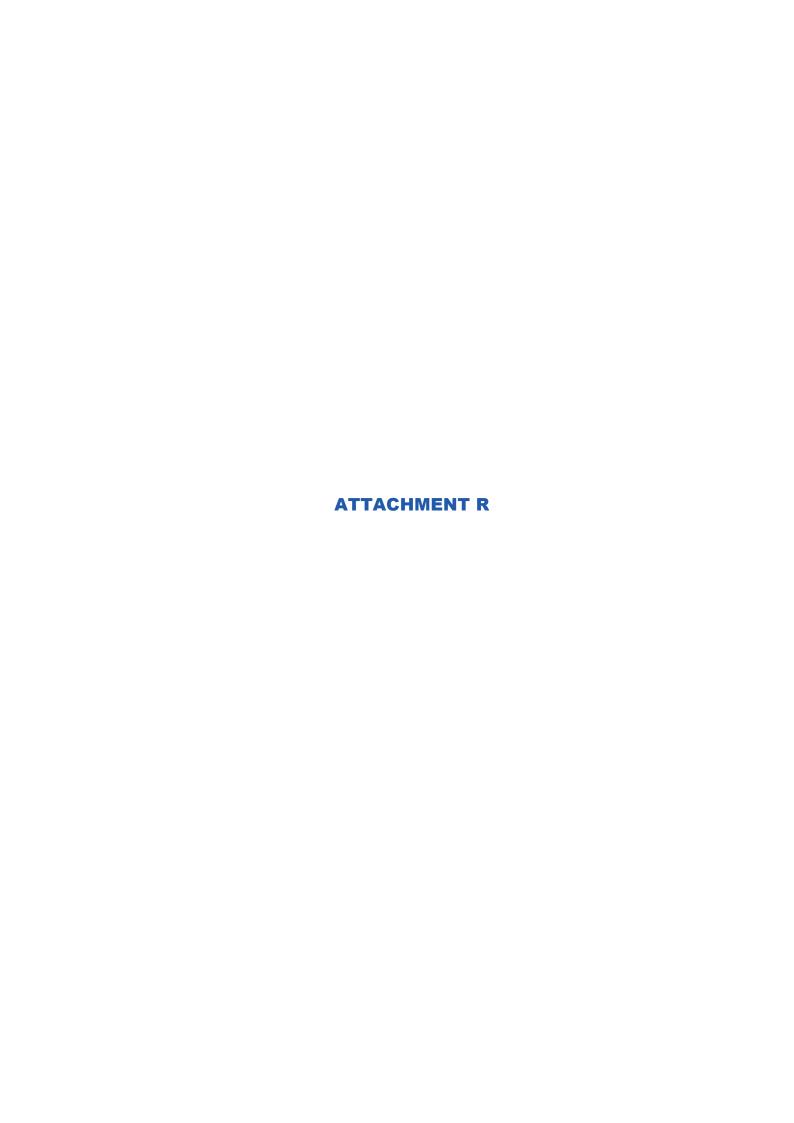
WELLID: MW204

PROJECT	INFORMATION								
PROJECT NA	ME: Auburr)		PROJECT NUMBER: 1901048B					
DATE OF INST	TALLATION: 4	110/19		INITIALS: MPS WEATHER: Sunny 30°					
DATE: 4/	10/19			WEATHER: S	innd 30	0			
PURGE METH	rallation: 4, 10/19 od: Bailer				1				
BESTON AND ADDRESS									
PURGE VO	LUME CALCUL	ATION							
$\left(\frac{12}{Total}\right)$	$\frac{.070}{\text{depth}(m)} - \frac{.}{Wa}$	(4.708) ter level (m)	3 Well volumes ×	2 2 50 mm or 7.8	$\frac{100 \text{mm}}{\text{Well}} = \frac{100 \text{mm}}{\text{Calc}}$	44,172 Culated Purge V	Litres		
FIELD PAR	AMETERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)		
14:08	4,708	40							
-									
TOTAL PURGE	VOLUME (L):	40	APPROX. PURGI	E RATE (LPM):					
OBSERVAT	IONS DURING	DEVELOPMENT							
NOTES: (WELL	CONDITION. COLOUR.	CLARITY, ODOUR)	Good to	urbid, no	atous		Service by a way and		
			acco, a	21014	COOK!				
RECHARGE BE	EHAVIOUR:	FAST RECHA	RGING X		SLOW RECHARG	ING (<80% RECHARG	E AFTER 2 HRS)		



WELLID: MW205

PROJECT	INFORMATION							
PROJECT NA	ME: Aubusi)		PROJECT NUMBER: 1901048B				
DATE OF INS	TALLATION: 4/	10/19		INITIALS: MPS WEATHER: SUNNY 30°C				
DATE: 4/	10/19			WEATHER: St	mou 30	00		
PURGE METH	100: Bailer				1			
	OLUME CALCUI	ATION $\frac{3.922}{\text{ter level } (m)} \times \frac{1}{3}$	3 Well volumes	2 2 50 mm or 7.8	100 mm Well = Cal	5g, 182 culated Purge V	olume Litres	
FIELD PAR	AMETERS					计划的程		
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0_1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
13:40	3,922	45	us n					
					-			
TOTAL PURGE	VOLUME (L):	45	APPROX. PURG	E RATE (LPM):				
OBSERVAT	IONS DURING	DEVELOPMENT						
NOTES: (WELL	NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR) Good, Eurbid, no odour.							
RECHARGE BE	HAVIOUR:	FAST RECHA	RGING X		SLOW BECHARO	ING (200) DECUADO	E ACTUR 2 LIDO	





WELL ID: GWI

PROJECT INFORMATION						
		1456				
PROJECT NUMBER: 1901031		INITIALS: MPS				
DATE: 06/06/19		THER: Sunny 8°	°C			
SAMPLING METHOD: LOW FLOW:	HYDRASLEEVI	Е ВАН	LER:			
	// SI // HIS SI		IV SHIPS FOR STATE OF STATE OF			
WELL GAUGING DETAILS						
STANDING WATER LEVEL (mBTOC): 2.04	2 TOTAL DEPTH	(мвтос): 4,324	TIME: 04:43			
DEPTH TO PSH (mBTOC): THICKNESS OF PSH (m):						
FIELD PARAMETERS		July College	Pleaning and the same of the			
The state of the s						
TIME DTW (mbTOC) TOTAL DISCHARGE		DUCTIVITY REDOX (MV) +/- 10M	DO TEMP (°C)			
07:53 2.184 1.2	7.40 99	538 107.5	5.3 0.44 24.0			
07:56 2.178 2.4		581 110.6	7.1 0.60 23.8			
07:59 2.180 3.6		190 111.0	8.4 0.69 23.8			
08:02 2.180 4.3		519 111.6	8.8 0.73 24.1			
08:05 2,180 4,9	7.00 95	148 112.1	9.1 0.74 24.1			
08:08 2.180 5.6	The state of the s	560 112.3	8.9 0.73 24.1			
227						
TOTAL PURGE VOLUME (L): 5.6	APPROX. SAMPLE PURGE R	RATE (LPM): 216 mh	/min			
ODSEDVATIONS DURING CANDING	0 70 100 200	III ARRIVATA				
OBSERVATIONS DURING SAMPLING						
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOU		lty, no atou	r. Water in road			
box w/ sheen, petrol odocur	· 12.6	rown				
RECHARGE BEHAVIOUR: FAST R	ECHARGING	SLOW RECHA	RGING (<80% RECHARGE AFTER 2 HRS)			
WELL SAMPLING						
DTW (mbTOC): (AT SAMPLING) 2,180						
ORIGINAL DUPLICATE TRIPLICATE						
SAMPLE ID: GWI	SAMPLE ID:	S	AMPLE ID:			
		SAMPLE TIME:				
SAMPLE TIME: 08:09	SAMPLE TIME:	s	AMPLE TIME:			
NO. CONTAINERS: 2 amb I met Yvials	SAMPLE TIME: NO. CONTAINERS		AMPLE TIME: O. CONTAINERS			



WELL ID: GW2

PROJECT	INFORMATION				Eliginal Commence	fire.	1.50	100	3 200
PROJECT N	UMBER: 1901	1031	E INV		INITIALS: 1/	De			
DATE: (6/06/19					PS.	000		
SAMPLING I		101115	E .	and the second		runny	96		
SAMPLING)	WIETHOD:	LOW FLOW:	L	HYDRAS	SLEEVE:		BAILER:		
WELL GA	UGING DETAIL	S	1 30		() tild ()			IA SHIP	U.S. Property
STANDING V	VATER LEVEL (mBT	oc): 0.476)	TOTALD	EDTH (mptoc)	0 10			
	SH (mBTOC):	U. Ti			SS OF PSH (m):	400	0	TIME:	18:34
				TENORMAL	55 OF P 56 (III):	Appendix .		L. Car	2
FIELD PAI	RAMETERS							Trei C	
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PF +/- 0		CONDUCTIVITY (MS/CM) +/- 3%	RED((MV) +/-		DO L) +/-10%	TEMP (°C)
08:40	0.735	1.9	8,4	1	152.2	20.	2 31.4	1 283	20.4
08:43	0.772	3.2	7,9		150.5	31.			20.2
08:46	0.743	4.3	7.6		162.3	10,0		1.37	19.8
08:49	0.740	6.3	7.2	17	168.4	-12.8			19.8
08:53	0,740	7.6	7.1		171.4	-20.	,	0.66	20.0
08:55	0.740	8.8	7.0		175.1	-285		0.53	20.0
08:58	0.740	10.0	7.0	2	177.4	-38.		0.40	
09:01	0.740	11.3	6.9		178.1	-43.		0.39	19.8
09:04	0.740	12.6	6.98		180.9	-46.		0.32	
09:07	0.740	13.8	6.94		184.2	-51.6		0.30	20.0
TOTAL PURGE V	OLUME (L)	13.8			RGE RATE (LPM)	113 mi		0.90	20.0
00000			-			11011)F	-/min		
OBSERVAT	TONS DURING	SAMPLING							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NOTES: (WELL	CONDITION, COLOUR.	CLARITY, ODOUR)	Water	in	road boo	1. 1	ant n	loge	slight
odour.	- petrol/	oil) ()	vem,	Syleghe
RECHARGE BE	HAVIOUR:	FAST RECHA	ARGING 🔀			SLOW REC	HARGING (<80%	% RECHARGE	AFTER 2 HRS)
WELL SAM	PLING	46.31	Mi H	17,14	1	10年8	C. 150	1,200	
DTW (mbTOC):	(AT SAMPLING)						1189	-	
	ORIGINAL			DUR	LICATE			TOIC	
SAMPLE ID:	SW2	SA	MPLE ID:				244601 = 10	TRIPLICA	(IC
SAMPLE TIME:	09:08		MPLE TIME:				SAMPLE ID:	-	
10. CONTAINE	RS: Zamb, Ime		. CONTAINE				SAMPLE TIME		
NALYSIS: 7	8		ALYSIS:			- 7	NO. CONTAIN	IERS	
U		7704					ANALYSIS:		



WELLID: GWY

PROJECT	INFORMATION						
PROJECT N	UMBER:	N 191	1031	INITIALS:	NF	A STATE OF THE PARTY OF	(A) (A) (A) (A) (A) (A) (A) (A) (A) (A)
DATE:		5/6	/	WEATHER:	Heavy	Shower	13°C
SAMPLING N	METHOD:	LOW FLOW. [HYDR	ASLEEVE;	BAILE		
WELL GA	UGING DETAIL	S					
STANDING W	ATER LEVEL (mBT	oc): 0.0183	TOTAL	DEPTH (mBTOC) :	3.925		
DEPTH TO P	SH (mBTOC):			NESS OF PSH (m):		TIME;	1310
FIELD PAR	RAMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
134	1.410	2	6.99	7-33	55.3	0.15 79	23.7
1331	260	6	1.74	6.79	63.6	0.41,5	77.5
1338	2.615	6.5	6.65	6.65	1.4.0	0.55 6.4	
1347	2.788	7.1	6.58	6.63	73.6	0.7386	21.5
1350	2.812		6.57	6.66	74.5	0.64,8	22.2
1575	2.891	7.5	6.55	6.97	74.8	0.657.7	
						/	
		,					
TOTAL PURGE V	OLUME (L)	D 0'	LODGE V ALLE				1
TO MET ONGE V	OCOME (C)	7.8	APPROX. SAMPLE	PURGE RATE (LPM)	OOML/m	lin	
OBSERVAT	IONS DURING	SAMPLING					
	CONDITION, COLOUR,	Allowed Max 1888 115	00.11	10/1			
		14.	milly hable to	yellow m stabilize.	Wel Color	yahic 1/4	
RECHARGE BE	EHAVIOUR:	FAST RECH	` =		SLOW RECHARG	GING (<80% RECHAR	GE AFTER 2 HRS)
VELL SAMI	PLING						
TW (mbTOC):	(AT SAMPLING) 2.	807					第一个人的
	ORIGINAL		DI	UPLICATE		TRIPLI	CATE
AMPLE ID:	GWY	S	AMPLE ID:		SAN	TPLE ID:	
AMPLE TIME:	1400	S	AMPLE TIME:			IPLE TIME:	
O. CONTAINE	RS: Yuld La	mb, IBMN	O. CONTAINERS		NO.	CONTAINERS	
NALYSIS:	38		NALYSIS:		ANA	l YSIS:	



WELL ID: MW101

PROJECT INFORMATION									
PROJECT NUMBER: 1901031		INITIALS:	5						
DATE: 05/06/19			in II°C.	111					
SAMPLING METHOD: LOW FI	LOW: H	YDRASLEEVE:	BAILER.						
WELL GAUGING DETAILS									
STANDING WATER LEVEL (mBTOC) :	STANDING WATER LEVEL (mBTOC): 3,179 TOTAL DEPTH (mBTOC): 7,296								
DEPTH TO PSH (mBTOC):		ICKNESS OF PSH (m):		THVIE:	:18				
					- X				
FIELD PARAMETERS									
DISC DIV (m610C) DISC	TOTAL PH CHARGE (L) +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)				
	0 6.84	16284	8:6	41 0.36	18.9				
11:30 3.499 1	4 6.81	16268	5.9	4.1 0.35	19.2				
11:33 3:499 2	.0 6.80	16302	3.9	4.9 0.43	19.2.				
11:36 3.499 2	.4 6.79	16310	4,2	5.4 0.47	19.4				
		5							
4	ND.	Ni Ni							
	- 40			200					
	21		6 8 5 4 1 1						
TOTAL PURGE VOLUME (L):	APPROX. SAI	MPLE PURGE RATE (LPM):	167mL/m	un					
OBSERVATIONS DURING SAME	LING	THE PARTY OF		103 7 7 8	3/10/10/15				
NOTES: (WELL CONDITION, COLOUR, CLARIT	V ODOLIE)	A 2 1144 2	0 0000						
Soft bottom	1,000k) G000,	silty, no	O QQQQI ,						
SOFT DOCTOR									
RECHARGE BEHAVIOUR:	FAST RECHARGING		SLOW RECHARGI	NG (<80% RECHARGE	E AFTER 2 HRS)				
WELL SAMPLING			1	L. W W.					
DTW (mbTOC): (AT SAMPLING) 3,49	9.			2-2-1					
ORIGINAL		DUPLICATE		TRIPLICA	ATE				
SAMPLE ID: MWIOL	SAMPLE ID:		SAME	PLE ID:	· N				
SAMPLE TIME: 11:37	SAMPLE TIME:		SAME	PLE TIME:					
NO. CONTAINERS: 2ambs, Inch	Huid NO. CONTAINE	RS	NO. 0	CONTAINERS					
ANALYSIS: B8	ANALYSIS:		ANAL	YSIS:	THE WILL STREET				



WELL ID:

MW102

PPO IE	CT INFORMATION	783 Ten 3	PHONE WAY		ST TST ST			NA COLUMN	- N
100									
PROJECT	NUMBER: 1901	031		INITIALS: MPS					
DATE:	05/06/19		1	WEATHER: P.	Cloudy	14°C			
SAMPLIN	G METHOD:	LOW FLOW	HYDR	RASLEEVE	BAILE	R.			
WELL (SAUGING DETAILS	3							2 701
STANDIN	G WATER LEV <mark>E</mark> L (mBT	oc): 2.734	TOTAL	DEPTH (mBTOC) :	4.596	-			
DEPTH TO	PSH (mBTOC):		THICK	NESS OF PSH (m):			TIME: 10	7:11	
10	MAC 155 1 5	C N/I / / / / /		7.502				5	
FIELD F	PARAMETERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0,1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV		DO _) +/-10%	TEMP (°0	C)
12:20		1.9	6.43	15773	-39.9	5.0	10.43	19.4	100
12:23		2.7	6.36	15903	-43.4	5.7	0,49	A.4	30
12:26	2,965	3.4	6.32	16161	-48.0	8.1	0.71	19.2	- 6
12:29	2,965	4.0	6.31	16346	-50.8	10.0	0.87	19.2	1-7
12:32	2,965	4.7	6.30	16480	-53.7	11.1	0.97	19.2	Page 1
12:35	2.965	5.4	6.29	16558	-55.3	11.6	0,99	19.2	Tex
			1	29			Ĭ.		
				No. of the last of				10	
			A SALES						
TOTAL PUR	GE VOLUME (L)	5.4	APPROX. SAMPLE	PURGE RATE (LPM)	233 ml/	min			
OBSER\	ATIONS DURING	SAMPLING					1	STOLEN	
	ELL CONDITION, COLOUR	للسلام عاملا	A 1	0 - 1/1/			W.S.	Lich Lette	474
0.3		ODAMIT, ODOOK)		l. silty, n					
	bottom	1000		Lel. brown			131		
RECHARG	E BEHAVIOUR:	FAST RECHA	ARGING K	year J	SLOW RECHARG	GING (<80	% RECHARGE	: AFTER 2 HRS)	
WELL SA	AMPLING						3 1 1 2		120
DTW (mbT	OC): (AT SAMPLING)	.965				all and the			
	ORIGINAL		0	DUPLICATE.			TRIPLICA	ATE.	
SAMPLE ID	SAMPLE ID: MWIO2 SAMPLE ID:				SAN	APLE ID:			
SAMPLE TI		SA	MPLE TIME:	SAMPLE TIME:					
NO. CONTA	INERS: Zambs, In	net, Hurale NO	. CONTAINERS			CONTAI	44.	1	-
ANALYSIS:	BB	,	ALYSIS:		ANA	ALYSIS:			



WELL ID: MW103

PROJECT	INFORMATION						
PROJECT NU	JMBER: 190	1031		INITIALS: M	PS		
DATE: ()	5/06/19				ain 11°C		The state of the s
SAMPLING N	IETHOD:	LOW FLOW:	HYDRA	ASLEEVE:	BAILE		
WELL GAL	JGING DETAILS						
STANDING W	ATER LEVEL (mBT	oc): 1.745	TOTAL	DEPTH (mBTOC) :	2 268		2000年
DEPTH TO PS	SH (mBTOC):	2.4.		IESS OF PSH (m):	<i>y</i> .	TIME: C	9:59
FIELD PAR	RAMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
10.09	2.051	19	6.62	6727	-75.4	4,0 0.35	21,2
10:12	2,080	2.8	6.62	6813	-79.4	4.2 0.36	20.9
10:15	2.081	3.0	6.62	7094	-88.9	5.0 0.44	20.5
10:18	2,081	3.4	6.62	4117	-92.4	5.5 0.48	20.2
10:21	2.081	3.9	6.62	7205	-95-1	6.1 0.54	20.5
10:24	2.081	4.4	6.62	7370	-9811	6.3 0.55	20.5
							50.5
						1	
					_		
TOTAL PURGE V	OLUME (L)	4.4	APPROX. SAMPLE F	PURGE RATE (LPM)	167mh/mi	n	
OBSERVAT	IONS DURING	SAMPLING					
NOTES: (WELL	CONDITION, COLOUR,	CLARITY, ODOUR)	Good	0 0140	otron	hemical o	
	ottom			a yellow			Clocur.
RECHARGE BE	HAVIOUR:	FAST RECHA		0 0		ING (<80% RECHARGI	E AFTER 2 HRS)
WELL SAME	LING						
DTW (mbTOC):	(AT SAMPLING)	081		(各种的) (1) (多种)			A SECTION AND A SECTION AND ASSESSMENT OF THE PARTY OF TH
	ORIGINAL		DH	PLICATE		TOIDLIC	ATC
SAMPLE ID:	1W103.	SAM	MPLE ID:	ONE SHOP HE WAY	SAM	TRIPLICA	41C
SAMPLE TIME:	10:25		IPLE TIME:				
NO. CONTAINER		neb Yvialsno.	CONTAINERS	SAMPLE TIME: NO. CONTAINERS			
EVERTARIAN DE CANADA PER PER PER PER PER PER PER PER PER PER	8		LYSIS:			LYSIS:	
535	, ,,	2 1			1,444		

Rinsate collected ORIGINAL FIELD RECORD



WELL ID: MWIOY

PROJECT	INFORMATION								
PROJECT NU	MBER: 19010	131		INITIALS: MPS					
DATE: 05	106/19			WEATHER: RO	un 9°C				
SAMPLING MI	ETHOD:	LOW FLOW:	HYDR/	ASLEEVE:	BAILER	R: []			
WELL 041	0110 0554	- CONTRACTO	A COLUMN	A SAN TENE	75 FASAULT	6.8 (0.8)	12/25/10/2019		
	IGING DETAILS	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND							
	ATER LEVEL (mBT	oc): 1,043		DEPTH (mBTOC):	3,640	TIME: ()	8:34		
DEPTH TO PS	H (mBTOC):		THICK	VESS OF PSH (m):					
FIELD PAR	AMETERS				3	fore-			
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)		
08:47	1.106	0.5	6.36	11060	-8.9	2.6 0.23	21.3		
08:45	1,110	1.0	6.23	11144	-5.8	2.6 0.22	21.4		
08:48	1,112	1.8	5.97	11353	6.0	6.6 0.56	21.3		
08:51	1.114	2.5	5.77	11551	15.2	7.2 0.62	21.4		
08:54	1,113	3.1	5.72	11557	17.7	7.7 0.65	21.4		
08:57	1,113	3.8	5.67	11609	21.7	8.2 0.69	21.4		
09:00	1.113	4.5	5.62	11698	25.7	8.5 0.72	21.6		
09:03	1,113	50	5.59	11731	27.5	8:7 0.74	21.6		
09.06	1,113	5.5	5.57	11732	28.8	8.7 0.74	21.6		
TOTAL BUDGE M	0111145		1						
TOTAL PURGE VO	OLUME (L):	5.5	APPROX. SAMPLE	PURGE RATE (LPM)	200mL/1	mih			
OBSERVAT	IONS DURING	SAMPLING							
NOTES: (WELL	CONDITION, COLOUR,	CLARITY, ODOUR)	Good el	silty no a	bur s	At bottom			
			400	l brown.	, Je	A COCCUPA			
RECHARGE BE	HAVIOUR:	FAST RECH			SLOW RECHARG	ING (<80% RECH <mark>A</mark> RG)	E AFTER 2 HRS)		
WELL SAME	PLING			S Contract		NA SHE			
DTW (mbTOC):	(AT SAMPLING)	113		SZZIMPROJECTI	/ / /				
1	ORIGINAL	-18 -5 -	0	UPLICATE		TRIPLIC	ATE		
SAMPLE ID:	MW104	s	AMPLE ID: Du	71	SAM	PLEID: TWI			
SAMPLE TIME:	09.07	s		9:11 SAMPLE TIME: (79:15.					
NO. CONTAINE	Rs: Zamb, Im	et, 4 wals N	O. CONTAINERS	ant, Inet 1	Hurals NO.	CONTAINERS IM	nt, Inet, Yvials		
ANALYSIS:	38		NALYSIS: B8			LYSIG: B	1		



GROUNDWATER SAMPLE LOG WELL ID: MW 106

PROJECT	INFORMATION							
PROJECT NU	мвек 19	010363	Í	INITIALS: MP	' S			
DATE: 05	106/19	•		WEATHER: 7	cloudy.	14°C -		
SAMPLING ME	ETHOD:	LOW FLOW:	HYDRA	ASLEEVE,	BAILER			
WELL GAU	IGING DETAILS		4 5.5 1 5 3.			Mary St.		
		The second second		fir being			从器在海流	
STANDING WATER LEVEL (mBTOC): 1,175 TOTAL DEPTH (mBTOC): 3,786 DEPTH TO PSH (mBTOC): THICKNESS OF PSH (m): 18:05								
DEFINIOFS	n (mb100).		HICKN	E55 OF P5H (m): ~				
FIELD PAR	AMETERS							
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L	PH +/- 0,1	CONDUCTIVITY (MS/CM) #/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
13:27	1.423	2.5	6.68/	6247	-67.1	7.7 0.68	14.8	
13:30	1.428	3.0	6,71	6014	-76.8	9.3 0.82	19.7	
13.33	1.428	3.4	6.65	6605	-78.8	6.9 0.62	19.6	
13:36	1.428	3.8	6.64	6698	-86.1	7.9 0.70	1936	
13:39	1.428	4.2	6.65	6607	-86.4	7.9 0.71	19.6	
13:42	1,428	4.6	6.62	6698	-86.6	7.2 0.65	19.6	
13:45	1.428	5.0	6.58	6856	-93.0	7.7 0.69	19.4	
			g)		Ale:	ar a		
			10.00					
TOTAL BURGE V	OLUME (I)	F-10 (1)						
TOTAL PURGE VI	OLUME (L):	5.0	APPROX. SAMPLE	PURGÉ RATE (LPM);	133mh/1	าก		
OBSERVAT	IONS DURING	SAMPLING	1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S			75 x 3 3 5	HULLING.	
NOTES: (WELL	CONDITION, COLOUR,	CLARITY, ODOUR)	Good of	claudes 10	16.		adoire	
Soft 6						organic i	Mour /	
				is grey / bi	own		(CZ)	
RECHARGE BE	EHAVIOUR:	FAST REC	HARGING L		SLOW RECHARG	ING (<80% RECHARGI	E AFTER 2 HRS)	
WELL SAMI	PLING	The Proof	THE RESERVE	SI STEP ST	AND ENGINEER	COT VENT		
DTW (mbTOC):		428						
ORIGINAL DUPLICATE TRIPLICATE								
SAMPLE ID:	MW106	3	SAMPLE ID:		SAN	IPLE ID:		
SAMPLE TIME:	13:46.		SAMPLE TIME:	SAMPLE TIME:				
NO. CONTAINE	RS: 2-combs, Im	et, Yvials	NO. CONTAINERS	NO. CONTAINERS				
ANALYSIS: 1	38		ANALYSIS:		ANA	LYSIS:		
· Term								



GROUNDWATER SAMPLE LOG WELL ID: MW107

PROJECT	INFORMATION				70 No.	1-190,000	A
PROJECT NU	MBER: 1901	031		INITIALS: M	PS		
DATE: 05	106/19				Cloudy	1400	
SAMPLING MI	ETHOD:	LOW FLOW:	HYDE	RASLEEVE:	J		
					BAILE		
WELL GAU	IGING DETAILS			(in the second			Par Tomologic
STANDING W/	ATER LEVEL (mBT)	oc): 2,594	TOTAL	DEPTH (mBTOC) :	3,807		
DEPTH TO PS	H (mBTOC):		THICK	NESS OF PSH (m): .		TIME:	4:56
FIELD PAR	AMETERS		T-15				5,3)51614
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0,1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV)+/-10MV	DO (MG/L) +/-10%	TEMP (°C)
15:01	3,114	1.8	8.72	575	-1.0	42.1 3.56	225
15:04	3,215	2.3	8.75	580	4.6	39,1 3,32	22.2
15:07	3,298	2.6	8,69	614	16.2	32.1 2.86	21.5
15:10	3.334	2.9	8.67	622	18.0	34.3 3.07	21.6
15:13	3.372	3.1	8.62	658	22.1	31.9 2.89	22.2
15:16	3,391	3.3	8.60	668	24.8	32.2291	21.5
TOTAL PURGE VO	DITME (I)	0.2	ADDDOV OALLS		1 - 1	,	
	LOWE (E)	3.3	APPROX. SAMPLE	PURGE RATE (LPM)	< 100mL	Imin	
OBSERVATI	IONS DURING	SAMPLING	15"5(")		1 1		
NOTES: (WELL O	CONDITION, COLOUR.	CLARITY, ODOUR)	lood el	silty, no	douc		
Pump	on lower	1 115	seed, se	le to stal	A. I		
0		0		he to stal	orkise, he	W.	
RECHARGE BE	HAVIOUR:	FAST RECHA	RGING L_		SLOW RECHARG	SING (<80% RECHARG	E AFTER 2 HRS)
WELL SAMP	LING		Me Bu				1087
DTW (mbTOC): ((AT SAMPLING)				A COLUMN		
	ORIGINAL		0	UPLICATE		TRIPLIC	ATE
SAMPLE ID: N	IW104	SAN	IPLE ID:		SAM	IPLE ID:	
SAMPLE TIME:	15:17	SAN	IPLE TIME:	SAMPLE TIME:			
NO. CONTAINER	Rs: 2ambs, Im	et 4010 sNO.	CONTAINERS		NO.	CONTAINERS	
ANALYSIS: P	8	ANA	LYSIS:		ANA	LYSIS:	



WELLID: MW108

PROJECT	INFORMATION		33 15	19.5		E SIS	Seller	15	
PROJECT NU	MBER: 1901	1031			INITIALS: MPS				
DATE: 05					12/1	louty	13°C		
SAMPLING MI		LOW FLOW:	X	HVDD		J			
Orani Ento Mi		LOW PLOV		HYDRA	ASLEEVE:	В.	AILER. L		
WELL GAU	IGING DETAILS								
STANDING W	ATER LEVEL (mBT)	oc): 1.78	30	TOTAL	DEPTH (mBTOC) :	3,92	6		
DEPTH TO PS	H (mB (OC):			THICKN	IESS OF PSH (m):			TIME; /	6:13
	4.765511		3 10 24	16					
FIELD PAR	AMETERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L) Pi		CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10		DO L) +/-10%	TEMP (°C)
16:16	1.912	1.5	7.1	19	1403	-0.6	7.7	OH	21.3
16:19	1,927	2,5	7.6	7	1400	-85.6		0.66	21.1
16:22	1,932	3.7	7.5	9	1384	-124		10.37	21.3
16.25	1,932	4.9	7.5	3	1371	-148.		10.14	21.3
16:28	1,932	5.6	7.5		1355	-152.		0.13	21.2
16:31	1,932	6.3	7.5		1341	-152.	7 1.4	0.13	21.1
		- ul							
TOTAL PURGE VO	DLUME (L)	6.3	ABBBOY	CAMBLE	PURGE RATE (LPM):	200 1			_
	1-77	000	ALL NOX.	SAMP EL I	FORGE RATE (LPIVI)	MATTON	/min	204	
OBSERVAT	IONS DURING	SAMPLING							
NOTES: (WELL O	CONDITION, COLOUR.	CLARITY, ODOUR)	Good	, 51	silty, no	odou	r		
				دا ا	becomin	a ch	East		
RECHARGE BE	HAVIOUR:	FAST REC	CHARGING	X.		4	ARGING (<80	% RECHARGI	E AFTER 2 HRS)
		2 Jr. Jr. (C		11.70			1	ligen.	
DTW (mbTOC):			300	34.1					
5144 (1115100).	ORIGINAL								
SAMPLE ID: V	JPLICATE			TRIPLIC	ATE				
SAMPLE TIME:	16:32	g.			SAMPLE ID:				
NO. CONTAINER	0 1 1	1 11 4	NO. CONTAIN		SAMPLE TIME:				
ANALYSIS:	2-8	, ,	ANALYSIS:	110			NO. CONTAI	NEKS	
	30						ANALYSIS:		



WELL ID: MW109

PROJECT IN	FORMATION		1 200	10.5	1.5	30 54	S. C.	1750	
PROJECT NUMB	BER: 1901		INITIALS: MPS						
	06/19				°C				
GO J		LOW FLOW:	и И			V			
SAMPLING METH	HOD:	LOW FLOW:	<u> </u>	HYDRA	SLEEVE L	BAILE	:R: 🗀		
WELL GAUG	ING DETAILS					建产品	S C	637	Shirt Shirt
STANDING WAT	ER LEVEL (mBTC	oc): 1,634	1	TOTAL	DEPTH (mBTOC) :	3.915			9 00
DEPTH TO PSH ((mBTOC):			THICKN	ESS OF PSH (m):			TIME: O	1: of ch
500									
FIELD PARA	METERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	P +/-		CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV		DO L) +/-10%	TEMP (°C)
09:26	2.040	1.2	7.2	1	3152	-68.5	0.5	0.03	22.1
09:29	2.230	2.0	7.4		3047	-80.1	3.4	0.30	22.0
09:32	2.372	2.6	7.6	5	2762	-103.1	7.2	0.63	21.6
07:35	2,416	3.0	7.8	3	2690	-102.6	9.4	0.82	21.7
09.38	2,491	3.3	8.4	7	2499	-714	231	2.01	21.6
09:45	2.690	3.9	8.5		2172	-14.0	28.4	2.50	21.4
09:48	2,720	4.2	8.4	3	2296	-0.3	26.5	2.31	21.3
09:51	2.783	4.5	8.6	28	2433	1.8	23.6	2.05	21.6
09:54	2.899	4.8	8:1	2	2518	-38.8	21.6	1.39	21.5
09:57	2,986	5.0	8.0		2580	-61.8	21.0	1.84	21.7
TOTAL PURGE VOL	UME (L)	5.0	APPROX	. SAMPLE	PURGE RATE (LPM)	100m/u	min		
OBSERVATIO	ONS DURING	SAMPLING	WR I	35	The France		FIE	1	HIS THE PARTY OF T
NOTES: (WELL CO			Pond	. 0			\ 10		
			uoos	Jo 4	oudy, stra o stabilise	ing chem	real	octou	î.
		O.			o occupied	, riecco			[63
RECHARGE BEH	IAVIOUR:	FAST REC	HARGING			SLOW RECHAR	GING (<8	0% RECHARG	E AFTER 2 HRS)
WELL SAMPLING									
DTW (mbTOC): (AT SAMPLING)									
	ORIGINAL DUPLICATE TRIPLICATE								
SAMPLE ID: M	W109		ii.	SA	MPLE ID				
SAMPLE TIME:	09:58	VIE:	SAMPLE TIME:						
NO. CONTAINER	s: Zound, Ime	d, Unals N	IO. CONTA	INERS	NO. CONTAINERS				
ANALYSIS:	51	A	MĀLYSIS:			AN	ALYSIS:		



WELLID: MWILD

PROJECTINFORMATION PROJECT NUMBER: 19010 DATE: 5/6 SAMPLING METHOD: LOW FL		INITIALS: WEATHER: S RASLEEVE:	NF were revin,	indoor 14°C
WELL GAUGING DETAILS STANDING WATER LEVEL (mBTOC):	- 1	L DEPTH (mBTOC) : (NESS OF PSH (m):	4.430	TIME: 157/
1528 2.66 \ 0.9 1533 2.741 0.9 1536 2.826 1. 1540 3.057 2	2 6.02 5 6.03 1.0 6.03 5 6.02	CONDUCTIVITY (MS/CM) +1-3% 8.83 8.95 8.96 8.96 8.70 8.69 8.70	173.6 9 151.1 2 144.8 2 129.2 2 121.0 2 1153 19	DO TEMP (°C) 35.213 20.0 33.29.7 20.2 38.27.2 20.3 21.25.9 20.7 35.29.9 19.0 9.23.0 20.5
TOTAL PURGE VOLUME (L) OBSERVATIONS DURING SAMPI	O APPROX SAMPL	8.79		706
	ODOUR) SILY MIL 10 MILE. NO AST RECHARGING X	edeur		80% RECHARGE AFTER 2 HRS)
ORIGINAL SAMPLE ID: MWID SAMPLE TIME: 16:00		DUPLICATE	SAMPLE I	
NO. CONTAINERS: HVials, Zamb	ANALYSIS:		NO. CONT.	



WELL ID: MWIII

				TOTAL		1570-6-11			
PROJECT II	NFORMATION								
PROJECT NUM	IBER: 1901	031			INITIALS: MPS				
DATE: 05	106/19		WEATHER:	loudy	14°C	v			
SAMPLING ME	THOD:	LOW FLOW:	x]	HYDRA	SLEEVE:	and the same	ILER.		
WELL GAUG	GING DETAILS								
STANDING WA	TER LEVEL (mBTC	oc): 1.710		TOTAL	EPTH (mBTOC) :	4,887			1.00
DEPTH TO PSH	(mBTOC):			THICKN	ESS OF PSH (m):	-		TIME: /L	1 dd
FIELD PARA	METERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0		CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10N		OO) +/-10%	TEMP (°C)
14:28	060 1. MSB	2.2	6.7	i	6715	-24.6	5.8	0.47	22.0
14:31	1.090	2.9	6.6		6197	-24.8	6.1	0.53	21.8
14:34	1.095	3.5	6.6		6688	-26.8		0.64	21.8
14:37	1,095	4.3	6.6		6697	-28.9	8.1	0.70	21.8
14:40	1.095	5.1	6.6		6688	-30.3	8.2	0.71	21.8
						00.0			W. 4 O
TOTAL PURGE VO	LUME (L)	51	APPROX.	SAMPLE F	PURGE RATE (LPM)	250mh	/min.		
OBSERVATI	ONS DURING	SAMPLING	July 6	45	100	2015		(8 J. 1949)	1859
	ONDITION, COLOUR.	- S 4 11 11 1	Good		L silby,		of addition		
	onomon, occoon.		DIGOC	, 5)	Larlby,	no odo	ar.		
RECHARGE BEH	HAVIOUR:	FAST REC	HARGING	X		SLOW RECHA	ARGING (<809	% RECHARGE	E AFTER 2 HRS)
WELL SAMP	LING		130.89					15.52	
DTW (mbTOC): (AT SAMPLING)								
	ORIGINAL			DU	JPLICATE			TRIPLICA	4TE
SAMPLE ID:	14111				SAMPLE ID:				
SAMPLE TIME:	14:41	E:			SAMPLE TIM	E:			
NO. CONTAINER	13: 2am65, 11	net, Hundst	IO. CONTAIN	IERS		1	VO. CONTAIN	VERS	
ANALYSIS: B	8	F	NALYSIS:		ANALYSIS:				



WELL ID: MW 102

PROJECTI	NFORMATION							
PROJECT NUM	MBER: 0	1031		INITIALS:	NF			
DATE: 1816 WEATHER: OVEVCOST								
SAMPLING ME	THOD:	LOW FLOW:	HYDRA	SLEEVE:	BAIL			
SAMPLING ME	THOD.	LOW FLOW.	птыка	ASLEEVE.	DAIL	EIX, L		
WELL GAU	GING DETAILS					i light		
STANDING WA	TER LEVEL (mBTC	DC): 2.66	5 TOTAL	DEPTH (mBTOC) :	450	59	17.4	
DEPTH TO PSI	H (mBTOC):	2.00		ESS OF PSH (m):	1. 1.	TIME:	1600	
FIELD PAR	AMETERS							
TIME	DTW (mbTOC)	TOTAL DISCHA R GE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10M\	DO (MG/L) +/-10%	TEMP (°C)	
609	2.788		5.87	15691	-29.5		18-8	
1414	2.220	2.5	5.91	15853	-35.	3 0.37 43	16. 0	
1619	3 272	4	5.93	16110	-390		18.8	
1622	3 225	4.5	5 94	16 166	-40.0	1.0	187	
1020	.).		2 11			' /		
							-	
TOTAL PURGE V	OLUME (L):	4.5	APPROX. SAMPLE	PURGE RATE (LPM)	250 m	L /min		
		71.7				7 1111		
OBSERVAT	TIONS DURING	SAMPLING						
NOTES: (WELL	CONDITION, COLOUR	, CLARITY, ODOUR)	No ode	our, Si	1+4			
					1	5.		
RECHARGE BI	EHAVIOUR:	FAST RECHA	ARGING 🗵		SLOW RECHA	RGING (<80% RECHA	RGE AFTER 2 HRS)	
WELL SAM	PLING							
	: (AT SAMPLING)	3.228						
	ORIGINAL DUPLICATE TRIPLICATE							
SAMPLE ID:	MIN 107	SA	MPLE ID:		S	AMPLE ID:		
SAMPLE TIME	16:22		MPLE TIME:			SAMPLE TIME:		
NO. CONTAINE	10 23		D. CONTAINERS			IO. CONTAINERS		
ANALYSIS: \	100d		NALYSIS:			NALYSIS:		
	1003							



WELL ID: AHT MW103

PROJECT INFORMATION					
PROJECT NUMBER: (90)(03)	INITIALS:				
DATE: \8/\sqrt{2}	WEATHER: OVER COUST				
SAMPLING METHOD: LOW FLOW: HYE	DRASLEEVE: BAILER:				
SAMI ENGINETIOS. LOWFLOW. E.J. RITE	DAILER.				
WELL GAUGING DETAILS					
STANDING WATER LEVEL (mBTOC): (. 70) TOT.	AL DEPTH (MBTOC): 3 254 TIME: 1220				
	KNESS OF PSH (m):				
FIELD PARAMETERS					
TIME DTW (mbTOC) TOTAL PH DISCHARGE (L) +/- 0.1	CONDUCTIVITY REDOX DO TEMP (°C)				
1343 2.470 1 6.68	7072 -919 024 220				
1348 2.471 2 6.54	7027 -96.3 0.24, 7.4 22.0				
1354 2 494 3.5 6.48	B626 -94.3 0.14,16 219				
1359 2 506 4.0 6.46	6659 -930 015,18 219				
TOTAL PURGE VOLUME (L): 4.0 APPROX. SAMI	PLE PURGE RATE (LPM): 277 ml /m/s				
TOTAL FORGE VOLUME (L). 7 . U APPROX. SAMI	PLE PURGE RATE (LPM): 222 m/min				
OBSERVATIONS DURING SAMPLING					
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR)	odar, silty.				
	- organic?				
RECHARGE BEHAVIOUR: FAST RECHARGING	SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)				
	OEOW REOFF ATOMO (NOW REOFF ATOE ATTER 2 HRO)				
WELL SAMPLING					
DTW (mbTOC): (AT SAMPLING) 2.506					
ORIGINAL DUPLICATE TRIPLICATE					
SAMPLE ID: SAMPLE ID:	SAMPLE ID:				
SAMPLE TIME: 1358 SAMPLE TIME:	SAMPLE TIME:				
NO. CONTAINERS: 4 VIALS NO. CONTAINERS	NO. CONTAINERS				
ANALYSIS: VOCS ANALYSIS:	ANALYSIS:				



Geo-Logix

WELL ID: 200

				- 1				
PROJECT INFORM								
PROJECT NUMBER:	901048	- THE PARTY OF THE	ALM LUC COM	INITIALS:	-	NAME OF STREET	10000000000000000000000000000000000000	
DATE:	1015 2		WEATHER:	ama	7			
SAMPLING METHOD:	LOW FLOW	ø	HYDRA	ASLEEVE:	/	BAILER:	05	P16
WELL GAUGING DE	TAILS							
STANDING WATER LEVE	L (mBTOC) :	THE SHAPE STATE OF THE STATE OF	TOTAL	DEPTH (mBTOC <u>)</u> :	41		(1)	
DEPTH TO PSH (mBTOC)	:		THICKN	ESS OF PSH (m):	1 10	(TIME;	
			de la communa					
FIELD PARAMETER	\$					建 和 \$1		
TIME DTW (mb	TOTAL DISCHARGE	Р	Н	CONDUCTIVITY	REDO		DO	TEMP (°C)
8 10 6	DISCHARGE	- (L) +/-	01	(MS/CM) +/- 3%	(MV)+/-		(MG/L) +/-10%	7 7 7
8 43 B	1	6.1	4	12.07	- 3 4	. 5	1,00,	4-4,)
2 61	200	6.0	0	12 77	7	5. U	0.17	Ct. 7
0 75		6.0	1	12.72	-33	40	1.10	224
								-
		-						
TOTAL PURGE VOLUME (L)		APPROX.	SAMPLE P	PURGE RATE (LPM)				
	INVESTIGATION OF THE PERSONS		O MARKET STATE					
OBSERVATIONS DU	RING SAMPLING					建		
NOTES: (WELL CONDITION, C	COLOUR, CLARITY, ODOUR	R) /on	1 3	ediment	- too	11,	Atan	mina
4	Cothing a	Action-	50	male		6	1	2 33/1 32
RECHARGE BEHAVIOUR:	EAST DE	CHARGING		10	OL OLA L D. E.O.			
ESTITION DELITION		CHARGING			SLOW REC	HARGING	G (<80% RECHARC	GE AFTER 2 HRS)
WELL SAMPLING		V.						
TW (mbTOC): (AT SAMPLIN	G)							
ORIGINA	AL II		DU	PLICATE			TRIPLIC	CATE
AMPLE ID: +1 F		SAMPLE ID:				SAMPLE	E ID:	
AMPLE TIME:		SAMPLE TIM	IE:			SAMPLE	E TIME:	**
O. CONTAINERS:	vials	NO. CONTAI	NERS			NO. COI	NTAINERS	0
NALYSIS: VICE	AMALVEIC.							



GROUND MATER SAWPLE LOG

Geo-Logix

WELL ID: HPV

PROJECT INFORMATION					
PROJECT NUMBER: 9010 4	8	INITIALS:		10年3月2日	
DATE: 22/8		WEATHER:	Sumb		
SAMPLING METHOD: LOW FLOW		HYDRASLEEVE:	BAILER		P16
WELL GAUGING DETAILS					
STANDING WATER LEVEL (mBTOC):	Т	OTAL DEPTH (mBTOC) :	4		A SALE WAS ASSESSED.
DEPTH TO PSH (mBTOC):	T	THICKNESS OF PSH (m):	₹	TIME:	
FIELD PARAMETERS					
TIME DTW (mbTOC) TOTAL DISCHAR		CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) ÷/-10%	TEMP (°C)
910 0.3	6.4	0 15.25	-104.5	0,24	29.5
, \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	6.4	8 15.22	-101.9	0.25	24,4
	10				
1 10 10 10 10 10 10 10 10 10 10 10 10 10					
(A) (A) (A)					
	A				
TOTAL PURGE VOLUME (L)	ADDDOV.CA	AND E DUDGE SATE WAY			
	APPROX. SA	AMPLE PURGE RATE (LPM)			
OBSERVATIONS DURING SAMPLIN	G			Sin 15-707	
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODG	OUB)				(()
	0 111	trown this	sedin	rent 1	sud
Soundwater	to TRING	Adyring	samp	le coli	eth-
RECHARGE BEHAVIOUR: FAST	RECHARGING .	Lewilly "	SLOW RECHARGIN	IG (<80% RECHARG	E AFTER 2 HRS)
WELL SAMPLING					
DTW (mbTOC): (AT SAMPLING)					
ORIGINAL		DUPLICATE		TRIPLIC	ATE
SAMPLE ID: HP2	SAMPLE ID:		SAMP	LE ID:	
SAMPLE TIME:	SAMPLE TIME:		SAMP	LE TIME:	
NO. CONTAINERS: YVIALS	NO. CONTAINER	RS	NO. Co	ONTAINERS	
ANALYSIS: VCC5	ANALYSIS:		ANAL	/SIS:	



GROUNDWATER SAMPLE LOG WELLID: HP3

PROJECT N DATE: SAMPLING N	22/3	O I O F	8	HYDR	INITIALS: 7 WEATHER:	Zun	BAILER	R: []	5 P 16	
Bergusta Big	VATER LEVEL (mBT		e en salado	TOTAL	DEDTU (mRTOC)	医性管 药	112			
DEPTH TO PSH (mBTOC): TOTAL DEPTH (mBTOC): THICKNESS OF PSH (m):										
Constitution of the last				HIOA						
FIELD PAR	RAMETERS	4.0			A STATE					
TIME :	DTW (mbTOC)	TOTAL DISCHARGE	E (L) P +/-	PH - 0 1	CONDUCTIVITY (MS/CM) +/- 3%	RED (MV) +/-		DO (MG/L) +/-10%	TEMP (°C)	路温
205	5	4	6.1	()	15.05	-	P. 3	1,0	19.6	-
207	6	3	6.6	25	14.95	-6	, 2	0,41	17.9	
713	0,	2.4	6.5	3	15.11	-17	7.3	0.26	19.9	
217	+	9	6.5	7	15.03		9,4	0.27	20.1	
073	6	4,5	1 1 1	8	15,09		1	0.29	20.0	
(-)	+		6.58	9	19.13	-13.		0.35	19.9	
TOTAL PURGE VO	OLUME (L)		APPROX.	SAMPLE P	PURGE RATE (LPM)					
DBSERVAT	IONS DURING S	SAMPLING							以 為使新	
	CONDITION, COLOUR, (8)	C D:					量的信息程度	
			" Pag #1	Sex 1	ant had	1 1	nel	yellow	wash	
ECHARGE BE	HAVIOUR:	FAST RE	ECHARGING [1	Ę	SLOW REC	CHARGIN	NG (<80% RECHARG	SE AFTER 2 HRS)	
VELL SAMP	LING									
TW (mbTOC): ((AT SAMPLING)							15. Page 15. 15. 15. 15. 15. 15. 15. 15. 15. 15.	Control of the Control	华亚洲
	ORIGINAL			DŲ	IPLICATE			TRIPLIC	ATE	
AMPLE ID:	HP3		SAMPLE ID:				SAMPI	LE ID:		
AMPLE TIME:	. / . /		SAMPLE TIME	E:			SAMPI	LE TIME:		
O. CONTAINER	rs: 4 vials	· ·	NO. CONTAIN	IERS			NO. CC	ONTAINERS		
NALYSIS:	VOCs		ANALYSIS:				ANALYSIS:			



Geo-Logix

WELL ID: HPY

PROJECT	INFORMATION								2000年至
PROJECT NUMBER: 19010 48 INITIALS:									
DATE:	77 /0		Ta	INITIALS:					
WEATHER: Sam 9									
SAMPLING METHOD: LOW FLOW. HYDRASLEEVE: BAILER: 5 9/6									
WELL GAL	JGING DETAIL	3							
STANDING W	ATER LEVEL (mBT	OC) :		TOTAL	DEPTH (mBTOC) :				
DEPTH TO PSH (mBTOC): THICKNESS OF PSH (m):									
				ent-mutture					
FIELD PAR	AMETERS								
TIME ,	DTW (mbTOC)	TOTAL DISCHARGE	(L) P		CONDUCTIVITY (MS/CM) +/- 3%	RED (MV) +/-		DO (MG/L) +/-10%	TEMP (°C)
2:48	1	1	6	9	3.64	-39	3	1 / 100	10.0
3)49	1.	1. 2	4. 9	3-	4,21	-77	a	0.20	19.0
3.52	7	1.4		76	612	-79	7	0.18	19.4
3:55	6.	1.6	1.6	4	723		<	2.26	17. 9
3:18		,	6. 0	54	735	-/1	9	0.24	10.7
					1,57	010		016	14.7
TOTAL PURGE VO	PLUME (L)		APPROX.	SAMPLE F	PURGE RATE (LPM)		-		
OBSERVATI	ONS DURING S	SAMPLING				. Str. 55 Str.			SITE SECRETARISM SECTION SECTI
NOTES: (WELL C	ONDITION, COLOUR,	CLARITY, ODOUR)	low	50,	Niment	borg	1	not yellow	v ernex
RECHARGE BEI	HAVIOUR:	FAST REC	CHARGING			SLOW REC	HARGIN	√G (<80% RECHAR	GE AFTER 2 HRS)
VELL SAMP	LING								
TW (mbTOC): (AT SAMPLING)								· 文学: 25 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2
	ORIGINAL			DU	JPLICATE			TRIPLIC	CATE
AMPLE ID:	1P4.		SAMPLE ID:				SAMP	LE ID:	
AMPLE TIME:			SAMPLE TIME	====== ≣:				LE TIME:	
O. CONTAINER	s: 4 Vials		NO. CONTAIN	IERS				ONTAINERS	
NALYSIS: V	OCs.		ANALYSIS:				ANAL		
									I



1 M3 21 2 1 1 2 3

GWI

PROJECT INFORMATION PROJECT NUMBER: (90)048 DATE: 28 8 SAMPLING METHOD: LOW FLOW.	INITIALS: WEATHER: HYDRASLEEVE;	NF clacul BAILER:	
WELL GAUGING DETAILS STANDING WATER LEVEL (mBTOC): 2. C DEPTH TO PSH (mBTOC):	TOTAL DEPTH (mBTO	4.30.7	TIME: 0830
TIME DTW (mbTOC) TOTAL DISCHARGE 0832 2.25\$ 1.5 0842 2.324 7 0846 2.324 9 0849 2.324 19 1 0852 7.324 5	6.95 8973 6.95 8973 6.93 8491 6.93 8491 6.95 8501 6.97 8495	8 (MV) +1-10MV P/MW -29.3 0.2 4/2.4 0.2 1.8 0.1 -1.5 0.1	3.2.721.5 4.89.21.4 111.7.21.4 13.1.6.21.4 14,16.21.5
TOTAL PURGE VOLUME (L) OBSERVATIONS DURING SAMPLING	APPROX. SAMPLE PURGE RATE (LP	M)	
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOU	« Milly, NO a	lov	
RECHARGE BEHAVIOUR: FAST R	ECHARGING	SLOW RECHARGING (<80	% RECHARGE AFTER 2 HRS)
WELL SAMPLING DTW (mbTOC): (AT SAMPLING)			
ORIGINAL SAMPLE ID: 6 V 1 SAMPLE TIME: 0000 NO. CONTAINERS: 8 V 1 V 1	SAMPLE ID: SAMPLE TIME: NO. CONTAINERS ANALYSIS:	SAMPLE ID: SAMPLE TIN NO. CONTAI ANALYSIS:	0100



WELL ID:

GWZ

PROJECTINFORMATION		
PROJECT NUMBER:	Y INITIALS:	70
DATE: 2818	WEATHER: C	Leew
SAMPLING METHOD: LOW FLOW.	HYDRASLEEVE:	BAILER:
WELL GAUGING DETAILS		
STANDING WATER LEVEL (MBTOC):	25 TOTAL DEPTH (mBTOC): 3.63	TIME: COST
DEPTH TO PSH (mBTOC):	THICKNESS OF PSH (m):	1146 0930
FIELD PARAMETERS		
TIME DTW (mbTOC) TOTAL DISCHARGE	PH CONDUCTIVITY REDO (MS/QM), +/- 3% (MV) +/- 1	1 1 1 1 1 1 1 1 1 1
0933 1.086 1.5	7-03 1785 -6.	4 1 42 44 180
0937 1 367 6	6.94 1945 -91	90.19,2 17.8
0945 1.413 19 1	7.15 2022 -13	3.7 0 16/1.7 17.V
0948 1413 3	7-20 205.6 -138	4021,22 17.8
0951 1.413 5	7.19 206.5 -140	90327 179
0954 1.413 +	7.3+ 206.5 -139	9 030.3.1 17.8
0957 1419 9	7.39 208.0 -(39	703434 17.8
1000 1.419 th	742 209.0 -13	160.35.35 17.8
1003 1.419 3	7.42 2010 -139	1.9032,87 17.8
TOTAL PURGE VOLUME (L)	APPROX. SAMPLE PURGE RATE (LPM)	
OBSERVATIONS DURING SAMPLING		
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR	Milly 10 odo	N a
SIt filmontep of		
Sit film onter of	- water in bullet. (a)	es away after empt
RECHARGE BEHAVIOUR: FAST RE	CHARGING SLOW REC	HARGING (<80% RECHARGE AFTER 2 HRS)
WELL SAMPLING		
DTW (mbTOC): (AT SAMPLING)		
ORIGINAL	DUPLICATE	TRIPLICATE
SAMPLE ID: GWZ	SAMPLE ID:	SAMPLE ID:
SAMPLE TIME: 1004 pas	SAMPLE TIME:	SAMPLE TIME:
NO. CONTAINERS: SVICE 2001	NO. CONTAINERS	NO. CONTAINERS
ANALYSIS:	ANALYSIS:	ANALYSIS:



WELLID: GWY

PROJECT INFORMATION								
PROJECT NUMBER: 19010U	18	INITIALS:	NF					
DATE:		WEATHER:	clean	/				
SAMPLING METHOD: LOW FLOW.	HYDRAS	SLEEVE;	BAIL	ER:				
WELL GAUGING DETAILS								
STANDING WATER LEVEL (MBTOC): 4-858 TOTAL DEPTH (MBTOC): 3.744								
DEPTH TO PSH (mBTOC): THICKNESS OF PSH (m):								
PROTECTION AND AUTOMOSIS AND A								
FIELD PARAMETERS								
TIME DTW (mbTOC) TOTAL DISCHARGE	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) ±/-10%	TEMP (°C)			
	6.82	NS/CM) +1-3%	1.1.	ppm, 1	- 6 '7			
1604 1.672 Z	6.76	7685	240.1	10/5	20.3			
1627 1.822 19	6.76	7680	4	0.17,1.9				
1124 1810 16/5	6.76	7685	175.9	0.20, 2.3	21.5			
1627 1.812 17	1.76	7708	134.8	0.19,2.2	21.6			
163/1 2.06/ 22		7640	102.5	6.23.27	21.4			
1637 2.068 25	6.25	7673	97.1	0.29.28				
0010 10	6.74	7760	88.2	0.24.28	21.6			
1640 17.000 78		4160	000	0.29,2.0	21.8			
TOTAL PURGE VOLUME (L)	APPROX. SAMPLE P	PURGE RATE (LPM)						
		Management of the						
OBSERVATIONS DURING SAMPLING								
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOU	R) BYDELIA	/ mithy	MA	100				
	2.0007	111111111111111111111111111111111111111	100 00	NOUV				
DECHARCE DELIAVIOUR. FACT D	ECHARGING T		0/ 0/4/ 0=0//45	20110				
RECHARGE BEHAVIOUR: FAST R	ECHARGING 🖸		SLOW RECHAF	RGING (<80% RECHARG	GE AFTER 2 HRS)			
WELLSAMPLING								
DTW (mbTOC): (AT SAMPLING)								
ORIGINAL	DC	JPLICATE		TRIPLIC	CATE			
SAMPLE ID: GWY	SAMPLE ID:		SA	AMPLE ID:				
SAMPLE TIME:	SAMPLE TIME:		SA	AMPLE TIME:				
NO. CONTAINERS: 8 Vials	NO. CONTAINERS		NO	D. CONTAINERS				
ANALYSIS:	ANALYSIS:	SIS: ANALYSIS						



Geo-Logix

WELL ID: MW/O(

PROJEC	LINFORMATION						发生的 自己的
PROJECT	IUMBER: O	101048	AUGUSTO CAUCILISTOS	INITIALS:	N		
DATE:	26 8			WEATHER:	Vain	n	
SAMPLING	METHOD:	LOW FLOW	HYDRA	ASLEEVE:	BAILE	R: 🗌	
WELLO	UGING DETAIL	NAME OF THE PARTY					
							基础要类型
	WATER LEVEL (m81	oc): 5.42		DEPTH (mBTOC) ;	7.142	TIME:	to an in the
DEPTH 101	PSH (mBTOC):		THICKN	ESS OF PSH (m):			1246
IFIELD PA	RAMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
1253	4.074	2	6.58	15592	024,28	0.24,28	18.6
1309	4.264	19. 3	6.60	15760	-8.9	032 36	19.1
1321	4.246	498 2	6.59	15754	-18.5	038,43	19.2
13 24	4.729	3	6.59	15750	-18.0	0.38, 44	19.1
1530	4.238	8	6.59	15725	-20.3	0.39 4.4	19.2
1907	4.238	+22 /	6.59	15-720	- 20 6	0.39,46	19.2
4000	1, 570	1 (4	6.59	15136	- 21.0	0.39,4.5	19.2
`TAL PURGE	VOLUME (L)		APPROX. SAMPLE	PURGE RATE (LPM)			
ODCEDVA	TIONS DUDING						NEW TORSE OF THE OWNER, AND THE OWNE
	TIONS DURING						
NOTES: (WEL	L CONDITION, COLOUR	, CLARITY, ODOUR	MILT	no alo	er		
	1 SIL	y wate	eV				
RECHARGE E	BEHAVIOUR:	FAST RE	CHARGING	× .	SLOW RECHARG	ING (<80% RECHARC	GE AFTER 2 HRS)
WELL SAN	MPLING						
DTW (mbTOC): (AT SAMPLING)						
	ORIGINAL		Dŧ	JPLICATE		TRIPLIC	CATE
SAMPLE ID:	MWIOI		SAMPLE ID:		SAM	PLE ID:	
SAMPLE TIME	1 / 10	1 -	SAMPLE TIME:		SAM	PLE TIME:	
NO. CONTAIN	ERS: Ovials	IPFAS	NO. CONTAINERS		NO.	CONTAINERS	
ANALYSIS: ANALYSIS: ANALYSIS:							



CROUNDIATER SAMPLE LOC

Geo-Logix

WELL ID: MA



PROJECT	INFORMATION	To the same					
PROJECT NU	JMBER: \	84010K		INITIALS:	Ni	A STATE OF THE PARTY.	10000000000000000000000000000000000000
DATE:	2	618		WEATHER:	Shall	JEN S	
SAMPLING N	IETHOD:	LOW FLOW.	HYDRA	ASLEEVE:	BAILE		
WELL GAI	JGING DETAILS						
STANDING W	ATER LEVEL (mBT	oc): 2.863	TOTAL	DEPTH (mBTOC) :	4.556		
DEPTH TO PS	SH (mBTOC):		THICKN	ESS OF PSH (m):		TIME:	1100
IELD PAR	RAMETERS						
TIME .	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH ÷/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
1111	5.098	7	6	13867	- 37.7	6.20.31	16.4
1129	3.396	9	6.10	15202	-69.0	0.55 61	16.7
1130	3.471	1/	6.11	15196	-67.0	06066	16.8
1133	3.474	13	6.11	15177	-67.7	010 63	16:7
1136	3.474	15	6.12	15139	-48.8	0.60.63	16.K
139	3.474	17	6.12	15/68	-193	0 62 X	14.7
192	3.602	22	615	15184	* 51. 3	1341 145	11 7
156	3607	23	6.15	15 1011	- 17.5	1.88 20.6	16.7
158 .	3502	1 4	6-15	15201	- 44.8	130 110	14.7
201	3.667	25	615	10193	-1-43	140.164	16.2
TAL PURGE V	DLUME (L)		APPROX. SAMPLE P	URGE RATE (LPM)		100	
1104	8.600	2 (0	6.15	15/94	- 5 4 5	1.57,17.1	16.7
BSERVAT	IONS DURING	SAMPLING					
OTES: (WELL	CONDITION COLOUR,	CLARITY, ODOUR)	6.15 Milk	15200	dour	1.25% 17 5	16 2
ECHARGE BE	HAVIOUR:	FAST RECHA	ARGING [SLOW RECHARGI	ING (<80% RECHARC	GE AFTER 2 HRS)
ELL SAMF	LING						
W (mbTOC):	(AT SAMPLING)		POTENCIA PROPERTY				上台 生 土土
	ORIGINAL		DU	PLICATE		TRIPLIC	CATE
MPLE ID:	MAN	MW/02 SA	MPLE ID:	Da Da	2 SAME	PLE ID:	# 70
MPLE TIME:	1104	911	MPLE TIME:	100		PLE TIME:	
. CONTAINER	6 1	10/10	. CONTAINERS	Suide	all and	CONTAINERS	42001 10
ALYSIS:	7.4(00)	11117	ALYSIS:	Aaimo			i viero , IP
		All			ANAL	_YSIS:	



WELL ID:

MW103



PROJECT	INFORMATION	r di ba							
PROJECT NU	IMBER: 140	1098		NE SOUR	INITIALS:		NF		TOWN STREET, S
DATE:	1	uolis			WEATHER:		Fine.	T	
SAMPLING N	ETHOD:	LOW FLOW		HYDR	ASLEEVE:	В	AILER:		
WELL GAL	JGING DETAILS	\$							
STANDING W	ATER LEVEL (mBT	oc): 1,80	3	TOTAL	DEPTH (mBTOC) :	2.243	·~		the fact of the fa
DEPTH TO PS	SH (mBTOC):			THICK	NESS OF PSH (m):)		TIME:	820
	TO THE SHARE THE PARTY OF THE P	ARTHUR MOTORNES		shipseema	en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de				
FIELDIPAR	RAMETERS								
TIME .	DTW (mbTOC)	TOTAL DISCHARGE	(L) P	°H 01	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10	MV (MG/	DO (L) +/-10%	TEMP (°C)
0830	2.581	156	6.6	7	4.801	-87.	7 0.20	1,29	18.5
0833	1.581	1.756	6	59	4837	- 90.5		/	18.5
118 36	2.531	12		3	5478	1	0 0.21		1. 18.5
0839	2.581	2.25	6.5	3	5 600	-94.	0 0.31		18.6
0542	2.581	7.56	6.5	2	5920	.98	003		18.8
0845	2.581	I.751	- 6.4	1	6316	- (Dy.	3 0.27	1.4	19.0
R845	2.652	31	6.48	5	6522		7 0.21	1,74	18.9
0851	2652	3-8	6.4	8	6755	-94.3	-	1 15 11	18.9
1859	2682	5	6.4	-	6899	-84.5	0.57	7	18.9
0906	2385	7	1	14	7197	-70.7	0.80	1,9.4	19.4
TOTAL PURGE V	OLUME (L)		APPROX	SAMPLE	PURGE RATE (LPM)	L	- 1- 1/	7 (-11	
2010/06/09 09:05/0				2002 T				Mark and an	
OBSERVAT	IONS DURING	SAMPLING							
NOTES: (WELL	CONDITION, COLOUR,	CLARITY, ODOUR)	Bro	wh.	milly wools	1 ND	ndar		
			1-210		J W WO	1 100	[/400]		.A.
RECHARGE BE	HAVIOUR:	FAST REC	CHARGING			SLOW RECH	ARGING (<80	% RECHARG	SE AFTER 2 HRS)
WELL SAME	PLING								
DTW (mbTOC):	(AT SAMPLING)						an cer samedia		
	ORIGINAL			DI	UPLICATE			TRIPLIC	ATE
SAMPLE ID:			SAMPLE ID:				SAMPLE ID:		
SAMPLE TIME:			SAMPLE TIN	1E:			SAMPLE TIN	ſE:	
NO. CONTAINE	RS:		NO. CONTAI	NERS			NO. CONTAI		
ANALYSIS: ANALYSIS:					ANALYSIS:				



Geo-Logix

MINIOS

		14,4410 2	(2)
PROJECT INFORMATION PROJECT NUMBER: 190048 DATE: 10/8 SAMPLING METHOD: LOW FLOW:	INITIALS: WEATHER: HYDRASLEEVE:	NF Cleaw BAILER:	
WELL GAUGING DETAILS STANDING WATER LEVEL (mBTOC): DEPTH TO PSH (mBTOC): FIELD PARAMETERS	TOTAL DEPTH (mBTOC) THICKNESS OF PSH (m):	TIME	
TIME DTW (mbTOC) TOTAL DISCHARGE 0910 2.541 8.5 0915 7.530 10 0915 2.322 14 0936 2.914 2014 0941 2.914 2014 0941 2.915 2016 0941 2.915 20 0953 2.915 20 0953 2.915 21 TOTAL PURGE VOLUME (L) 21.5	6.48 7188 6.60 7768 6.47 8918 6.52 8891	REDOX (MV) +1-10MV PM POO (MG/L) +1-10% PM POO (MG/	19.7 20.0 19.9 19.6
OBSERVATIONS DURING SAMPLING NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUGH RECHARGE BEHAVIOUR: FAST RE		Flun on top of i	WORDY
WELL SAMPLING DTW (mbTOC): (AT SAMPLING) ORIGINAL	Eug. S.		
SAMPLE ID: SAMPLE TIME: NO. CONTAINERS: ANALYSIS:	DUPLICATE SAMPLE ID: SAMPLE TIME: NO. CONTAINERS ANALYSIS:	SAMPLE ID: SAMPLE TIME: NO. CONTAINERS	CATE
	L	ANALYSIS:	



WELL ID:

MW104

PROJECT	INFORMATION					10 × 11 × 1	
PROJECT NUI	WBER: O	nious		INITIALS:	'NF		
DATE:	2018	MX	/	WEATHER:	Clean	/	
SAMPLING MI	ETHOD:	LOW FLOW	HYDRA	SLEEVE:	BAILEF	R;	
WELL GAU	IGING DETAILS		T-1-1-13-1-13	STE WENT	The Septiment	To the state of	
	ATER LEVEL (mBT	The Dyleting	TOTAL	DEPTH (mBTOC) :	3 166		ATT UTTO
DEPTH TO PS		oc): [. (0	+	ESS OF PSH (m):	7 1696	TIME:	1015
FIELD PAR	AMETERS	CONTRACTOR		W 15 18 1	allow to the	W TO HOUSE	
FIELU FAR	AWEIERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
1120	1.125	0.3	6.21	6343	-52.7	0.55,6	17.8
1127	1.154	7	5.38	In 1590	580	0 21 26	19.9
1133	1.156	10	6.20	10422	m 01 G	12 18 32	19.7
1136	1.155	12	5.13	inusa	427	0.27.3.	19941
1129	1.154	15	5.07	10660	96.5	0.25, 29	20.1
1142	1.156	17.5	5.09	10642	954	0.25,20	20.1
1145	1.156	20	5.06	10656	97.6	17727	20.1
					1,,	0.75	
TOTAL PURGE V	OLUME (L):		APPROX. SAMPLE	PURGE RATE (LPM);			
OBSERVAT	TIONS DURING	SAMPLING		The state of the s			
NOTES: (WELL	CONDITION, COLOUR	: CLARITY, ODOUR)	no ode	out, de	st /		F
			<u> </u>	100			
RECHARGE BI	EHAVIOUR:	FAST REC	HARGING		SLOW RECHARG	SING (<80% RECHAR	GE AFTER 2 HRS)
			5-10-10-10-10-10-10-10-10-10-10-10-10-10-	II INCHES			-1970 1974
WELL SAM			THE ROLL OF				17 - 10 - 10
DTW (mbTOC):							
	ORIGINAL			UPLICATE		TRIPLIC	CATE
SAMPLE ID:	MWIDY		SAMPLE ID:	VI.		IPLE ID:	
SAMPLE TIME	1///		SAMPLE TIME:	1750		IPLE TIME: 17	50
NO. CONTAINS	ers: 6 vi		NO. CONTAINERS	4 Vi	w)	CONTAINERS (y Vicks
ANALYSIS:			ANALYSIS:		ANA	LYSIS:	1



MW 106

•				
PROJECT INFORMATION				
PROJECT NUMBER: 1901	048	INITIALS:	NE	是一种的。 1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1000年,1
DATE: 2		WEATHER:	1000	
SAMPLING METHOD: LOW FLOW:	HYDR.	ASLEEVE .	BAILER:	
WELL GAUGING DETAILS				
STANDING WATER LEVEL (MBTOC):	78 TOTAL	DEPTH (mBTOC) :	3.75/	
DEPTH TO PSH (mBTOC):		IESS OF PSH (m):	9 / 5/	TIME: 1315
		Parameter and the second		
FIELD PARAMETERS				
TIME DTW (mbTOC) TOTAL		CONDUCTIVITY		DO TEMP (10)
DISCHARG	1	MS/OM) +/- 3%	l Buy	L) +/-10% TEMP (°C)
1320 1.996	6.58	2167	-117.000	19,70 17.6
150 2.032 1	6.67	4391	-126.6 0.14	1,15 17.7
	5 6.66	4562	-124.20.1	7,18 17.7
1333 2.033 3	6.67	4567	-125.6 0.20	21 17.7
12.00	5 6.68	4380	0-122 0.2	1.7.3 17.7
1339 2.031 4	6.67	4207	-119 0.19	720 17.7
1342 2.591 6	6.44	7465	-108 011	,1.3 19.4
1346 2.591 6.6	6.45	7064	-1075 01	7.18 9.7
1349 2.591 7	6.45	6908	-1072 D.19	7
1359 2-591 7.5	6.44	6901		0,24 18.8
TOTAL PURGE VOLUME (L)	APPROX. SAMPLE	PURGE RATE (LPM)	10 1.0 10.2	75-15.0
1355 2,591 8	6.45	6801	-108-2 0.7	10,22 189
OBSERVATIONS DURING SAMPLING				
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOL	JR) Milling	oun water	, With this	dina
surface, no odvol	14(1104)11111	Will wordy	WIIN THAN	steen on
RECHARGE BEHAVIOUR: FAST F	RECHARGING		SLOW RECHARGING (<80	% RECHARGE AFTER 2 HRS)
WELL SAMPLING				
DTW (mbTOC): (AT SAMPLING)				
ORIGINAL	DU	JPLICATE		TRIPLICATE
SAMPLE ID: MWI06	SAMPLE ID:	1	SAMPLE ID:	
SAMPLE TIME: (UOC)	SAMPLE TIME:		SAMPLE TIM	E:
NO. CONTAINERS: C VICES	NO. CONTAINERS	77	NO. CONTAIN	
ANALYSIS:	ANALYSIS:		ANALYSIS:	



Geo-Logix

WELL ID:

401WM

PROJECT	INFORMATION							No.
PROJECT NU	IMBER: 1901	148			INITIALS:	NF		
DATE:	2719	3			WEATHER:	OVENC	ast	
SAMPLING M	ETHOD:	LOW FLOW.	U	HYDR/	ASLEEVE:	BAILE		
WELL GAL	JGING DETAILS							
STANDING W.	ATER LEVEL (mBT)	00): 1.93	1	TOTAL	DEPTH (mBTOC) :	3.828		
DEPTH TO PS	H (mBTOC):			THICKN	IESS OF PSH (m):	- 000	TIME:	100
IFIELD PAR	AMETERS							
TIME ,	DTW (mbTOC)	TOTAL DISCHARGE	P (L) +/-	'H 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV)+/-10MV	DO (MG/L) +/-10%	TEMP (°C)
1210	2 382	1.5	8.19	E	447.8	-LE 1	ppm	199
1221	3.184	¹ U	0.10	9	453 3	-108.8	097.103	
iril	3.15	4.5	8.10	ว้	44) 4	-95.5	B1.19.13	19.8
1229	3 192	4.7	8 1	18	4615	-85.4	0.88.9	19.8
1236	3.429	5	8.1	1	480.7	-81.9	0.56 62	20.0
1239	3.495	65	0 8.0	11	458. D	-77.3	0.66, O.li	79.9
		-					1.78,15.2	
17 (14)	3.732		-					
10-30	2.136							
TAL PURGÉ VO	DLUME (L)		APPROX	SAMPLE	PURGE RATE (LPM)			
			70711072	OAWI EL I	ONGE RATE (CPM)			
DBSERVAT	IONS DURING S	SAMPLING						
NOTES: (WELL C	CONDITION, COLOUR,	CLARITY, ODOUR)	Vers s	low	recharge	at la va	+ 0, 2000	C-112- 1296
vell was	dedeting				te before :		diamond.	setting (inc Milly, no c
RECHARGE BE			CHARGING,					
all	Pfas	1 13 4	hall	- h	lled, apti	Sool	MAMA	GE AFTER 2 HRS)
WELL SAMP								
OTW (mbTOC): ((AT SAMPLING)			THE WAY	MATERIAL SERVICES			學生是複數學
	ORIGINAL			DL	JPLICATE		TRIPLI	CATE
AMPLE ID:	MW107		SAMPLE ID:			SAM	PLE ID:	
AMPLE TIME:	1249		SAMPLE TIM	E:		SAM	PLE TIME:	
O. CONTAINER	RS: Brich,	Infers	NO. CONTAIN	VERS		NO.	CONTAINERS	
NALYSIS:		17	ANALYSIS:			ANA	LYSIS:	



MW108

PROJECT INFORMATION PROJECT NUMBER: QCOOKS DATE: SAMPLING METHOD: LOW FLOW.	INITIALS: WEATHER: HYDRASLEEVE:	NF Clear BAILER:	
WELL GAUGING DETAILS STANDING WATER LEVEL (MBTOC): DEPTH TO PSH (MBTOC):	THICKNESS OF PSH (m):	TIME:	1145
TIME DTW (mbTOC) TOTAL DISCHARGE (150 1.882 1 1157 1.904 2 1205 1899 3-5 1108 1.901 L 1213 1.902 5 1216 1.902 5.3 1219 1.902 5.3 1219 1.903 6.5 TOTAL PURGE VOLUME (L)	7.54 1372 7.56 1374 7.57 1345 7.63 1287 7.66 1257 7.69 1237	REDOX (MV) +1-10MV (MG/L) +1-10%, PMM -117, 1-10%, PMM -10%, PMM -10%, PMM -10%, PMM -137 + 0.12, 1.3 -158.2 0.13, (.4 -174.20.12, 1.3 -174.1 0.12, 1.3 -174.1 0.12, 1.3 -174.1 0.12, 1.3	TEMP (°C) 19.5 19.4 19.3 19.4 19.3 19.3 19.3
OBSERVATIONS DURING SAMPLING NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR	B 10 oder,	3H milhy.	
	ECHARGING	SLOW RECHARGING (<80% RECHARG	E AFTER 2 HRS)
WELL SAMPLING			
DTW (mbTOC): (AT SAMPLING) ORIGINAL	DUPLICATE		
SAMPLE ID: MW108	SAMPLE ID:	SAMPLE ID:	AIE
SAMPLE TIME: (275)	SAMPLE TIME:	SAMPLE TIME:	
NO. CONTAINERS: CALLAGA . International	NO. CONTAINERS	NO. CONTAINERS	
ANALYSIS:	ANALYSIS:	ANALYSIS:	



DAMES AND REAL PROPERTY.	INFORMATION	100000000000000000000000000000000000000						
PROJECT NU	IMBER: (46	8 4010		INITIALS:	NF]
DATE:	28	18		WEATHER:	cle	es		
SAMPLING M	IETHOD:	LOW FLOW	HYDR	RASLEEVE:		BAILER:		1
STANDING W	AMETERS DTW (mbTOC)	和在外程和設計的基礎	TOTAL THICK	CONDUCTIVITY	8.9 REDC (MV) +/-	23 TIME: (1 60 (1	The state of the s
1043	2.972 3.024 3.127	0.5	7.62 5.2.57 7.52	1771	-167 -15 -14	701617	19.2	
TOTAL PURGE V	OLUME (L)		APPROX. SAMPLE	PURGE RATE (LPM)				
OBSERVAT	IONS DURING	SAMPLING		数据标案				ì
h-Franchis	CONDITION, COLOUR,						EXELECT.	
running	4			ally, no de lo stabi	live he	end (heeps go	indown to	J Sai
RECHARGE BE	HAVIOUR:	FAST RECH	IARGING L		SLOW REC	HARGING (<80% RECHAR	RGE AFTER 2 HRS)	-
WELL SAME								9 (4)
DTW (mbTOC):								
SAMPLE ID:	ORIGINAL AAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA			UPLICATE		TRIPLI	ICATE	
SAMPLE TIME:	1,1/1/ (n, /		AMPLE ID:			SAMPLE ID:		
NO. CONTAINE	RS: 050	. 1	AMPLE TIME:			SAMPLE TIME:		
ANALYSIS:	DAMIN	1 1003	O. CONTAINERS NALYSIS:			NO. CONTAINERS		
		I A	MALIOID.			ANALYSIS:	- 1	



Geo-Logix

WELL ID: MWIIO

			1.4110	
PROJECT INFORMATION PROJECT NUMBER: 1901045 DATE: 2345 SAMPLING METHOD: LOW FLOW.	HYDRA	INITIALS: WEATHER:	OVMO BAILER:	15t
WELL GAUGING DETAILS STANDING WATER LEVEL (MBTOC): 2 . V DEPTH TO PSH (MBTOC): DEFIELD PARAMETERS		DEPTH (mBTOC) : ¹ ESS OF PSH (m):	4.344	TIME: 1040
TIME DTW (mbTOC) TOTAL DISCHARGE 1045 2.965 2.5 1050 3.036 2.5 1055 3.097 2.8 1100 3.115 3.1 1106 3.47172 4 1110 3.191 4.5 1113 3.217 4.5 1126 3.281 1.5 1129 3.282 2 TTAL PURGE VOLUME (L) 2.5	6.15	CONDUCTIVITY (MS/CM) +1-3% (MS	14.8 0. 14.8 0. -12.3 0. 2.6 0. 7.2 0. 16.7 0. 33.5 0.	10,13.1 18.4
	SLT S Sest primes ECHARGING E	elling, we		LL. Hatagad. -80% RECHARGE AFTER 2 HRS)
WELL SAMPLING DTW (mbTOC): (AT SAMPLING)				
ORIGINAL	DU	PLICATE		TRIPLICATE
SAMPLE ID: MINITO	SAMPLE ID:		SAMPLE I	D:
AMPLE TIME: 1139	SAMPLE TIME:		SAMPLE 1	rime:
IO. CONTAINERS: TANK	NO. CONTAINERS			
Drimi i Mari			NO. CONT	AINERS
NALYSIS:	ANALYSIS:		ANALYSIS	3:



GROUNDWATER SAMPLE LOG WELL ID:

MWIII

PROJECT INFORMATION PROJECT NUMBER: 90045 DATE: LOW FLOW:	HYDRA	INITIALS: WEATHER:	NF Clew BAILER:	
WELL GAUGING DETAILS STANDING WATER LEVEL (mBTOC): DEPTH TO PSH (mBTOC):		DEPTH (mBTOC) : ESS OF PSH (m):	4.795	TIME: 1450
TIME DTW (mbTOC) TOTAL DISCHARGE 1500 2.118	6.11 6.46 6.47 6.49 6.49 6.49	CONDUCTIVITY (MS/9M) +/- 3% (MS/9M)	-21.9 0:3 -35.3 0.13 -34.4 0.1 -46.2 0.1 -41.9 0.1	5,1.7 20.3 4,1.5 20.4 5,1.7 20.4
OBSERVATIONS DURING SAMPLING NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR RECHARGE BEHAVIOUR: FAST RE	R) Millay by	nwh, no od		50% RECHARGE AFTER 2 HRS)
WELL SAMPLING DTW (mbTOC): (AT SAMPLING) ORIGINAL SAMPLE ID: MW III SAMPLE TIME: 1835	SAMPLE ID: SAMPLE TIME:	DUPLICATE	SAMPLE ID	
NO. CONTAINERS: & VIGAS -	NO. CONTAINERS ANALYSIS:		NO. CONTA	



WELL ID: MAIL

PROJECT INFORMATION PROJECT NUMBER: COMMON DATE: SAMPLING METHOD: LOW FLOW.	INITIALS: WEATHER: HYDRASLEEVE:	BAILER:
WELL GAUGING DETAILS STANDING WATER LEVEL (mBTOC):	TOTAL DEPTH (mBTOC): U C	728 TIME: 1645
TIME DTW (mbToc) TOTAL DISCHARGE 105 1 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	(L) +/-01 (MS/CM) +/-3% (MV) +	DOX DO (MG/L) +/-10% TEMP (°C)
NOTES: (WELL CONDITION: COLOUR, CLARITY, ODOUR RECHARGE BEHAVIOUR: FAST RE	odav	ECHARGING (<80% RECHARGE AFTER 2 HRS)
WELL SAMPLING DTW (mbTOC): (AT SAMPLING) ORIGINAL	DUPLICATE	TRIPLICATE
SAMPLE ID: SAMPLE TIME: NO. CONTAINERS: ANALYSIS:	SAMPLE ID: SAMPLE TIME: NO. CONTAINERS ANALYSIS:	SAMPLE ID: SAMPLE TIME: NO. CONTAINERS ANALYSIS:



Geo-Logix

PROJECT INFORMATION					
PROJECT NUMBER: 190104	8.	INITIALS:	NF	"我们是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们	
DATE: 2718		WEATHER:	over	cot.	
SAMPLING METHOD: LOW FLOW.	HYDRAS	BLEEVE:	BAILER:		
WELL GAUGING DETAILS					
STANDING WATER LEVEL (mBTOC): 2	668 TOTAL D	EPTH (mBTOC) :	5.829	A STATE OF THE STA	No. of the last of
DEPTH TO PSH (mBTOC):		SS OF PSH (m):	3 001	TIME: 0920	
FIELD PARAMETERS					
TIME DTW (mbTOC) TOTAL DISCHARGE	PH +/-01	CONDUCTIVITY	REDOX (MV) +/- 10MV	DO (MG/L) ÷/-10% TEMP	(°C)
0932 2 901 1.5	6.91	7411	446	86 375 19	
0939 2.124 55	6.86	8696	42.7	73,194 191	
0946 2 234 49 05		9356	44.5 1.	03,11.5 19.6	7
0949 3.234 2	6.78	10503	1 10	64.73 197	
X 51 3.724 4	6.78	10a615	33.70	11/20 10 1	-
0955 3.234 6	6.28	10621	26.6 0	131 - 1	7
3958 3.257 3	7677	10899	24.70	to 65 19	
091001 3.25B 8	178	10991	27.2 0	272 1 10 0	
1009 3.157 9	6.78	10007		.57,59 19.7	
		-0-(1)			
TAL PURGE VOLUME (L)	APPROX. SAMPLE PU	JRGE RATE (LPM)		*	
OBSERVATIONS DURING SAMPLING					
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOU					
The second second of the secon	R) Milly	-, NO 6	der		
				\	17
RECHARGE BEHAVIOUR: FAST R	ECHARGING		SLOW RECHARGING	(<80% RECHARGE AFTER 2 HR	s)
WELL SAMPLING					
DTW (mbTOC): (AT SAMPLING)	N				MANUS
ORIGINAL	DUF	PLICATE	<u></u>	TRIPLICATE	
SAMPLE ID: MINITS	SAMPLE ID:		SAMPLE	ID:	
SAMPLE TIME: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	SAMPLE TIME:	100	SAMPLE	TIME:	
NO. CONTAINERS: Wills Intai	NO. CONTAINERS		NO. CON	ITAINERS	
ANALYSIS:	ANALYSIS:		ANALYS	IS:	



WELL ID: MWIIY

PROJECT INFORMATION	建		413	
PROJECT NUMBER: 19010 48		INITIALS:	NIE	电影影响对射性 以特别
DATE: 2.718		WEATHER:	Oversan	
SAMPLING METHOD: LOW FLOW				
EOW PLOVY	HYDR.	ASLEEVE:	BAILER:	
WELL GAUGING DETAILS	Marie Care			
STANDING WATER LEVEL (MBTOC): 3	15 X TOTAL			
DEPTH TO PSH (mBTOC):	-	DEPTH (mBTOC) :	5.850	TIME: 1345
	THICKN	IESS OF PSH (m):		1345
FIELD PARAMETERS		SE INDE		
TIME DIWANTON TOTA		2010110		
TIME DTW (mbTOC) DISCHAR		CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO L) +/-10% TEMP (°C)
1357 3.67 1 2.4	7.41	6117	33 2 40	6,445 19.1
1407 3.832 5	7.38	4100	21.0 3	19 415 19.1
1415 3.828 6	7.31	6115	17.5 3.	10,350 19.2
1414 3.829 6.5	7.31	6117	16.2 3.1	9,35.1 19.2
42 3.828 2	7.33	6116	-	6,339 19.2
1424 3.830 2.	5 7.34	6118		36,31.7 19.2
				00/2 1 11.0
TOTAL PURGE VOLUME (L)	APPROX. SAMPLE F	PURGE RATE (LPM)		
OBSERVATIONS DURING SAMPLING	· 沙里 计图像 實際	A SERVICE		
WE - CHARLES TO AN CAMBUILD CONTAIN			, 自20世界里	
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODO	UR) MIL			
RECHARGE BEHAVIOUR: FAST	RECHARGING	S	LOW RECHARGING (500	% RECHARGE AFTER 2 HRS)
				NECHARGE AFTER 2 HRS)
WELL SAMPLING			在一种工程的	
DTW (mbTOC): (AT SAMPLING)	国产区总由 统约12年前的	以连担财务制务		并经济的研究。
ORIGINAL	DU	PLICATE		TRIPLICATE
SAMPLE ID: MULTIN	SAMPLE ID:	DE DE	SAMPLE ID:	TO LICATE
SAMPLE TIME: 1425	SAMPLE TIME:	1416	SAMPLE TIM	E: 147.2
10. CONTAINERS: & VICIS TAG	NO. CONTAINERS	Sirich In	NO. CONTAIN	
NALYSIS:	ANALYSIS:	1/1001	ANALYSIS:	SVAS, IFT
			AISAL 1010.	



Geo-Logix

WELL ID: MWIIS

				The State of the State of		中国的	
PROJECT NU	MBER: Q	1048		INITIALS:	N	Programme of the Control of the Cont	1
DATE:	731	8		WEATHER:	rain	så.	
SAMPLING ME	ETHOD:	LOW FLOW	1 нус	DRASLEEVE:	BAILER		
WELL GAU	GING DETAIL	S					
STANDING WA	ATER LEVEL (mBT	oc): 🔿 '	561 TOTA	AL DEPTH (mBTOC) :	3.380		
DEPTH TO PS	H (mBTOC):		301	KNESS OF PSH (m):	3.35	TIME: 0800)
FELD PAR	AMETERS						
0814 0827 0820 0836 0837	DTW (mbTOC) (1) 735 (2) 895 (3) 895 (4) 895 (5) 895 (6) 895	TOTAL DISCHARGE	(L) +1-01 6.69 6.64 6.66 6.65 6.68 6.68	CONDUCTIVITY 1350 13618 13629 13622 13649	-92 0 -92 1 -92 1	DO MM, +1.10% TEMP (** 0.70.7.7.16.9 9.31.3.4.17.3 0.35.3.8.17.3 0.39.4.3.17.3 0.41.4.5.17.4 0.47.4.7.17.4 0.47.4.7.17.4	3)
OBSERVATION	ONS DURING	SAMPLING				ANTERNA DE LA COMPANIA DEL COMPANIA DE LA COMPANIA DEL COMPANIA DE LA COMPANIA DEL COMPANI	
NOTES: (WELL C	ONDITION, COLOUR,	CLARITY, ODOUR	» UN No	odovy m	13/14 (brow	n)	
RECHARGE BEF	HAVIOUR:	FAST RE	CHARGING		SLOW RECHARGIN	G (<80% RECHARGE AFTER 2 HRS)	
WELL SAMP	LING						
DTW (mbTOC): (/	Service and the service of		第三人称形式		£50 000 000	REPORT OF BUILDING	
	ORIGINAL			DUPLICATE		TRIPLICATE	3
SAMPLE ID:	MW115		SAMPLE ID:		SAMPL		
SAMPLE TIME:	0850		SAMPLE TIME:		SAMPL	E TIME:	
NO. CONTAINER	s: 8 Villa 1	das	NO. CONTAINERS			DNTAINERS	
ANALYSIS:		11	ANALYSIS:		ANALY	'SIS:	
	-6						

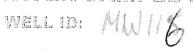


GROUNDWATER SAMPLE LOG WELLID: MW/16

PROJECT	INFORMATION						
		DUI		E E E E			
PROJECT NO	JMBEK: MO	040		INITIALS:	NY.		
DATE:	46/0		/	WEATHER:	laum		
SAMPLING N	IETHOD:	LOW FLOW:] HYDI	RASLEEVE	BAIL	ER 🗌	
WE WANT			SAND CURE				
WELL GA	JGING DETAILS			and article of			
STANDING W	ATER LEVEL (mBT	oc): //a/	TOTA	L DEPTH (mBTOC) :	3.571	TIME:	I to red
DEPTH TO PS	SH (mBTOC):		THICK	(NESS OF PSH (m):		711976	448
FIELD PAR	RAMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) ÷/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
1457	1.823	2	6.14		49.7	12 2 16	12.5
1507	1.904	4.5	6.30	13112	-800	133,36	19.2
15PO	1.919	5	6.31	13164	-849	03226	17.9
1513	1.928	55	6.37	12200	-88.2	1243 8	18.0
	1.928	6	6.37	1200	-86.6	5.48.48	1-2 8
1514	1.017	65	6.37	10173	-89 2	05/153	17.7
1527	2 412	49	6.28	13/80	-85.6	151,57	18.0
1530	2413	0.5	6.31	13777	-91.1	0.55/61	18.1
1534	2413	1	132	14050	-93.3	0.5662	18.2
1547	2.673		6.3	14360	-76.7	076.85	18.3
TOTAL PURGE V	OLUME (L)		APPROX. SAMPLI	E PURGE RATE (LPM)			
OBSERVAT	IONS DURING	SAMPLING					
NOTES: (WELL	CONDITION, COLOUR,	CLARITY, ODOUR)				是分表的是的唯	经过的需要的
		,,,,,,,,				1	
RECHARGE BE	EHAVIOUR:	FAST RECHA	ARGING		SLOW RECHAR	GING (<80% RECHARG	SE AFTER 2 HRS)
WELL SAM	PLING						
DTW (mbTOC):	(AT SAMPLING)				100	*	
	ORIGINAL		24	DUPLICATE	W	TRIPLIC	ATE
SAMPLE ID:		SA	MPLE ID:		SĄ	MPLE ID:	
SAMPLE TIME:		SA	MPLE TIME:		SA	MPLE TIME:	Mary Comment
NO. CONTAINE	RS:	NO	. CONTAINERS		ИО	. CONTAINERS	y. \$ /
ANALYSIS:		AN	ALYSIS:	-OL-	AN	ALYSIS:	i.e.



SROUNDWATER SAWFLE LOS





PROJECT	INFORMATION						
PROJECT NO	JMBER:	BINGS		INITIALS:	A JI		
DATE:		74.18		WEATHER:	Min	1.1	
SAMPLING N	IETHOD:	LOW FLOW	HYDR.	ASLEEVE:	BAILEI	R: \square	
		200 A 50 A	发展有效				
WELL GA	JGING DETAILS		September 1				
The second secon	ATER LEVEL (mBT	OC) :	TOTAL	DEPTH (mBTOC) :		TIME:	
DEPTH TO PS	SH (mBTOC):		THICK	VESS OF PSH (m):		111412.	
IFIELD PAR	RAMETERS				建筑型层建筑		
TIME .	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV)+/-10MV	DO (MG/L) +/-10%	TEMP (°C)
15.45	9-6/2	4	6.33	14457	-927	1 37 g	2 18.4
1548	2.6/9	4.5	10.34	illual	-86.7	N 35 6 8	18.4
1551	2-613	18	634	lycly	-88.5	12492	19. 4
1554	2.610	5.5	124	14570	-892	0.35,00	18.4
1558	2610	6	7.24	14512	-89.5	17280	184
LOI	2.610	6.5	6.33	14501	-88.9	07387	18.4
UNU	2.610	7-11	6.32	14491	- 88 5	122 8.1	18.4
1001			0 0)	87 1	00	0.721	1-01
	6 34						
TAL PURGE V	OLUME (L)		APPROX. SAMPLE	PURGE RATE (LPM)			
OBSERVAT	IONS DURING	SAMPLING		COLDENS!			
新年 第二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十	CONDITION, COLOUR,		A L				
Con 11	CONDITION, COLOUR,		^	1114 19114	7 10	odow	
51+	50044 HI	mon sy	ace of	ouchet '			
RECHARGE BE	EHAVIOUR:	FAST RECHA	RGING		SLOW RECHARGI	ING (<80% RECHARGE	EAFTER 2 HRS)
WELL SAM	PLING						
DTW (mbTOC):	(AT SAMPLING)						
	ORIGINAL		DI	UPLICATE		TRIPLICA	ATE
SAMPLE ID:	MW116	SAI	MPLE ID:		SAMI	PLE ID:	
SAMPLE TIME:	1610.	SAI	MPLE TIME:		SAMI	PLE TIME:	
NO. CONTAINE	RS: Sulah	loras No	CONTAINERS		NO. C	CONTAINERS	
ANALYSIS:	50, 1		ALYSIS:	7.00	ANAL	_YSIS:	



WELLID: GW4

PROJECT	NFORMATION									
PROJECT NU	VIBER: 1901	048A		INITIALS: MF	°5					
DATE: 27				WEATHER: SU	unu 17	1.0				
SAMPLING ME	ETHOD:	LOW FLOW:	₩ HYDRA	ASLEEVE:	1 BAIL	ER;				
MELLOAD	ONO DETAIL		100000		I turn Su					
	GING DETAILS				2 420					
	ATER LEVEL (mBT)	0.000		DEPTH (m8TOC):		TIVIS	08:38			
DEPTH TO PS	H (mBTOC);		THICKN	IESS OF PSH (m):			00.00			
FIELD PAR	AMETERS					1 5 5				
TIME	DTW (mbTOC)	TOTAL DISCHARGE (PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10M\	DO (MG/L) +/-10%	TEMP (°C)			
08:42	0.936	2.0	6,98	3446	458.1	1 1.29	21.3			
08:45	0.952	2.7	6.94	3493	454.1	0.66	21.3			
08:48	0,915	3.2	6.91	3565	468.6		21.4			
08:51	0,928	3.8	6.89	3627	443.9	0.39	21.4			
08:54	0.928	4.3	6.88	3689	421.5	0.27	21.5			
08:57	0.928	4.8	6.87	3729	394.2	0.22	21.6			
09:00	0.928	5.3	6.86	3472	383.0		21.7			
09:03	0.928	5.8	6.36	3818	381.8	0.24	21.7			
09:06	0.928	6.3	6.35	3835	378.4	0.21	21.9			
09:09	0.928	6.8	6.85	3839	371.9	0.20	21.9			
TOTAL PURGE V	OLUME (L)	6.9	APPROX. SAMPLE	PURGE RATE (LPM):	167ml/	inin				
OBSERVAT	IONS DURING	SAMPLING		Wall was		113 224	A CONTRACTOR OF STREET			
NOTES: (WELL	CONDITION, COLOUR	. CLARITY, ODOUR	Good, ale	200 00 -1	ma. C					
Soft	bottom.	White	2.2		Our					
RECHARGE BE	EHAVIOUR:		CHARGING X		SLOW RECHA	RGING (<80% RECHA	ARGE AFTER 2 HRS)			
WELL SAMI	PI INC					STATUTE OF THE REAL PROPERTY.				
A THE STREET		0.00								
DTW (mbTOC):	TW (mbTOC): (AT SAMPLING) $0,928$									
0.48404.5.10	ORIGINAL			UPLICATE			LICATE			
	904 09:10		SAMPLE ID:			AMPLE ID:				
SAMPLE TIME:	11 6	1 50 Paul	SAMPLE TIME:			AMPLE TIME:				
NO. CONTAINE	1 0100.20, -	1500mL plastic	NO. CONTAINERS			O. CONTAINERS				
ANALYSIS: W	US. HEC	•	ANALYSIS:		Ps.	NALYSIS:				



WELL ID: MW102

PROJECT INFORMATION		
PROJECT NUMBER: 1901048A	INITIALS: MPS	
DATE: 27/09/19	WEATHER: Sunn	ng 24°C
SAMPLING METHOD: LOW FLOW:	HYDRASLEEVE:	BAILER;
WELL GAUGING DETAILS		
STANDING WATER LEVEL (MBTOC): 2.58	2 TOTAL DEPTH (mBTOC): 3	3.879.
DEPTH TO PSH (mBTOC):	THICKNESS OF PSH (m):	TIME: 11:15
FIELD PARAMETERS		
TIME DTW (mbTOC) TOTAL DISCHARGE	PH CONDUCTIVITY (L) +/- 0,1 (A) (A) (A) (A) (A) (A) (A) (A) (A) (A)	REDOX DO TEMP (°C)
11:54 2.705 0.9		162.2 0.18 18.5
11:57 2.740 1.2		168-2 0.05 18.3
1.30		70.0
12:08 3,050 2.2	12.16 14042 -	246.0 0.07 14.9
12:11 3,102 2.6		243.4 0.05 18.0
12:14 3.194 2.9	11,97 15802 -	238.7 0.03 18.0
12:17 3:191 3:2	11.85 14788 -	-233.9 0.04 18.0
12:20 3.216 3.5		235.2 0.01 17.8
12:23 3,238 3.8		245.4 - 17.7
12:26 3,264 4.1		242.8 - 17.7
TOTAL PURGE VOLUME (L):	APPROX. SAMPLE PURGE RATE (LPM); //	oml/min.
OBSERVATIONS DURING SAMPLING	100 100	lake
	puisible drops	
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOU		y, slight brown/grey chemical odo
Unable to stabilise hea	d- pump on lowest setting	g. DO probe stopped working (?)
RECHARGE BEHAVIOUR: FAST R	ECHARGING SL	OW RECHARGING (<80% RECHARGE AFTER 2 HRS)
WELL SAMPLING		
DTW (mbTOC): (AT SAMPLING) 3.431		
ORIGINAL	DUPLICATE	TRIPLICATE
SAMPLE ID: MWIO2	SAMPLE ID:	SAMPLE ID:
SAMPLE TIME: 12:31	SAMPLE TIME:	SAMPLE TIME:
NO. CONTAINERS: 4 VIOLS 1 500 mh	NO. CONTAINERS	NO. CONTAINERS
ANALYSIS: WOCS ARC	ANALYSIS:	ANALYSIS:

ORIGINAL FIELD RECORD

Q3.2.1 QF_004 Groundwater Sample Log R7 collected after sampling

Version V2 Issued: October 2016 Review: March 2020



	NFORMATION MBER: 19010 109/19		- Z1	35	INITIALS: MP		5°C		
SAMPLING ME	ETHOD:	LOW FLOW:	X	HYDR	ASLEEVE: LJ	ВА	AILER, L	<u> </u>	
WELL GAU	GING DETAILS			N Turb		424			
STANDING WA	ATER LEVEL (mBT)	oc): 1.627		TOTAL	DEPTH (mBTOC) :	3,404		-0.00	
DEPTH TO PS	H (mBTOC):			THICK	NESS OF PSH (m):	-		1	17:12
FIELD PAR	AMETERS		119.6				1		
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L		'H 0.1	CONDUCTIVITY (#S/CM) +/- 3%	REDOX (MV) +/- 10N		DO 6/L) +/-10%	TEMP (°C)
07.19	1.780	2.5%	7.5	20	1336	-187.5	5 0	1.16	19.2
07:22	1.792	3.5	7.1	8	1333	-198.	57	.17	19.2
07:25	1, 799	4.2	7.0		1322	-201.8	2 0	.10	19.2
07:28	1,799	4.6	7.1	23	1306	-198.1		.06	19.1
07:31	1,802	5.2	7.		1276	-1920		.04	19.2
07:34	1.802	5.7	7.	29	1270	-191.1	0	.04	19.3
07:37	1.803	6.2	7.	30	1256	-189.5	0	.04	19.4
exister									
		1 19					, .		
TOTAL PURGE VO	OLUME (L)	6.3	APPRO)	. SAMPLE	PURGE RATE (LPM)	167 mly	min		
OBSERVAT	IONS DURING	SAMPLING							
NOTES: (WELL	CONDITION, COLOUR	CLARITY, ODOUR)	Good	cle	ear, no c	dour.			
))				
RECHARGE BE	HAVIOUR:	FAST REC	HARGING	X		SLOW RECH.	ARGING (<8	30% RECHAR(GE AFTER 2 HRS)
WELL SAMI	PLING			3572			460		PARTY.
DTW (mbTOC):	(AT SAMPLING)	302						2011	DO WATER
	ORIGINAL			C	DUPLICATE			TRIPLIC	CATE
SAMPLE ID:	1W108		SAMPLE ID	:			SAMPLE IC);	1
SAMPLE TIME:	07:38	500mL	SAMPLE TI	VIE:			SAMPLE T	IME:	
NO. CONTAINE	rs: 4 vials	Liable plastic	NO. CONTA	INERS			NO. CONTA	AINERS	
ANALYSIS: V	OCs, Adc.	,	ANALYSIS:				ANALYSIS:		



PROJECT	INFORMATION		A DE LOS	1 10 2			114
FIRST IS	MBER: 19010		de la dispuis	INITIALS: MP			and the second
DATE: 27		7017		1		·	
arra arr				WEATHER: Su	Thry 23 (
SAMPLING M	ETHOD:	LOW FLOW:	HYDR.	ASLEEVE:	BAILER	₹	
WELL GAL	IGING DETAILS						
STANDING WA	ATER LEVEL (mBT)	oc): 0,998	TOTAL	DEPTH (mBTOC) :	11.775		- 22
DEPTH TO PS	H (mBTOC):	11111		NESS OF PSH (m):		TIME:	0:22
FIELD PAR	AMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0_1	CONDUCTIVITY AS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
10:28	1.094	0.8	6.65	16582	90.1	1.08	19.7
10:31	1,102	1.5	6.62	16592	84.1	0.98	19,7
10:34	1,107	2.1	6.59	16627	78.1	0.46	19.7
10:37	1,109	2.8	6.58	16697	62.0	0.61	19.9
10:40	1,104	3.5	6.58	16645	55.0	0.52	19.9
10:43	1,107	4.0	6.57	16648	50.2	0.48	20.0
10:46	1.107	4.6	6.57	16611	46.8	0.40	20.0
10:49	1.107	5.2	6.57	16589	44.7	0.40	19,9
10:52	1,107	5.8	6.56	16586	41.4	0.38	19.9
				, 5 3 30			10
TOTAL PURGE V	OLUME (L)	5.8	APPROX. SAMPLE	PURGE RATE (LPM)	200ml/n	110	
356 - 5 H				T I The last			FIRE STILLS
OBSERVAT	TIONS DURING	SAMPLING	No. of Part of			NAME OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER,	00000000000000000000000000000000000000
NOTES: (WELL	CONDITION, COLOUR	. CLARITY, ODOUR)	Good, c	lear, no e	Lour.		
White	gattic e	over.					
RECHARGE B	J		HARGING X		SLOW RECHARG	SING (<80% RECHAR	GE AFTER 2 HRS)
).		
WELL SAM	PLING						
DTW (mbTOC)	: (AT SAMPLING)	.107					
	ORIGINAL			DUPLICATE		TRIPLI	CATE
SAMPLE ID:	MW201	S	SAMPLE ID: Dh	12	SAN	IPLE ID: TW	2
SAMPLE TIME	10			j:58	SAÑ	IPLE TIME: 1/.	02
NO. CONTAINS	ERS: Hvials, 1	1 Scomb N	NO. CONTAINERS &	Ivials 150	lastic NO.	CONTAINERS 4	vials 1 soom
	10Cs A20	- 17	ANALYSIS: VO			LYSIS: VOC	



	to the second se				ALCO MANAGEMENT					
1 (1)	INFORMATION									
	MBER: 1901	048A		INITIALS: MP						
DATE: 2	7/09/19			WEATHER: 86	unny 19°	C				
SAMPLING MI	ETHOD:	LOW FLOW:	HYDR	ASLEEVE:	BAILE	R \square				
WELL GAU	IGING DETAILS	3	1 (9, 14, 25)		7115					
STANDING W	ATER LEVEL (mBT	oc): 1).490) TOTAL	DEPTH (mBTOC) :	14.068					
	H (mBTOC):			NESS OF PSH (m):		TIME: (09:32			
FIELD PARAMETERS										
TILLDIAN	AMETERS	TOTAL								
TIME	DTW (mbTOC)	TOTAL DISCHARGE ((L) PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
09:38	0.535	1.0	6.24	18111	44.2	0.15	22.9			
09:41	0,535	1.8	6.25	18023	38.3	0.10	22.9			
09:44	0.535	2.7	6.25	18028	32.9	0.09	23.0			
09:47	0.535	3.6	6.25	18030	31.8	0.09	23.0			
09:50	0.535	4.5	6.25	18021	27.2	0.07	23:1			
TOTAL PURGE V	OLUME (L)	4.5	APPROX. SAMPLE	PURGE RATE (LPM):	300ml/r	nin.				
OBSERVAT	IONS DURING	SAMPLING		FILE PER		2×10-11				
NOTES: (WELL	CONDITION, COLOUR	R. CLARITY, ODOUR	Good, c	1-20-	1	Car of the la				
			GOOG, C.	rear, 110 c	dour.					
RECHARGE B	EHAVIOUR:	FAST RE	CHARGING X		SLOW RECHARG	GING (<80% RECHAR	GE AFTER 2 HRS)			
WELL SAM	PLING									
DTW (mbTOC):	(AT SAMPLING)).535								
	ORIGINAL			DUPLICATE		TRIPLI	CATE			
SAMPLE ID:	AMPLE ID: MW202 SAMPLE ID: SAMPLE ID:									
SAMPLE TIME:	09:51		SAMPLE TIME:		SAI	MPLE TIME:				
NO. CONTAINE	ers: Yvials, 1	500mh	NO. CONTAINERS		NO.	. CONTAINERS				
ANALYSIS: V	OCs. Aec	, ,	ANALYSIS:		AÑ.	ALYSIS:				



PROJECT	NFORMATION	10 To 10	100	0.00	() 1000000	701	VEC.			
PROJECT NUM	MBER: 1901	748 A			INITIALS: MP	S	-			
	109/19	1011			WEATHER: Su		6°C	- w - m - w		
		LOW FLOW		10/05/		J		1		
SAMPLING ME	THOU:	LOW FLOW		HYDRA	ASLEEVE:	B/	AILER: L			
WELL GAU	GING DETAILS									
STANDING WA	ATER LEVEL (mBT)	001: 2,291		TOTAL	DEPTH (mBTOC) :	11.435		TIME: 6	NM : 611	
DEPTH TO PS	H (mBTOC): -			THICKN	IESS OF PSH (m):	Deltas		T TIME C	7:54	
FIELD PAR	AMETÉRS							3 4 1		
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	P +/-	PH 0.1	CONDUCTIVITY (S/CM) +/- 3%	REDOX (MV) +/- 10		DO G/L) +/-10%	TEMP (°C)	
07:56	2.312	2.2	6.4	19	19066	12.4	0	1.27	21.5	
07:59	2.312	3.3	6.5	50	18997	11.5	_	.21	21.5	
08:02	2.312	4,4	6.5		18976	11.2		.17	21.5	
08:05	2.312	5,5	6.5		18973	10.1		14	21.5	
08:08	2.312	6.6	6.5	10	18971	9.8		13	21.5	
							$n \downarrow$			
TOTAL PURGE V	OLUME (L):	6.7	APPROX	. SAMPLE	PURGE RATE (LPM):	367 m	1/min			
OBSERVAT	IONS DURING	SAMPLING	2501	TO SERVICE		15. 3	15 / /			
	MATERIAL STATES		· 1	0	10 (
	CONDITION, COLOUR	. CLARITY, ODOUR)	DOOR	, sx.	cloudy, r	00 040	ar			
White	gattic									
RECHARGE BI	EHAVIOUR:	FAST RECHA	ARGING	X		SLOW RECH	HARGING (<	80% RECHAR	GE AFTER 2 HRS)	
The Francisco		1.521 - 156 7	el su	10000			UND 0			
WELL SAM		Bin to the		ary.						
DTW (mbTOC)	(AT SAMPLING)	.312								
	ORIGINAL			C	DUPLICATE			TRIPLI	CATE	
	AMPLE ID: MW203 SAMPLE ID: SAMPLE ID:									
SAMPLE TIME	08:09	SA	MPLE TI	ME:			SAMPLE 1	TME:		
NO. CONTAINE	Los: Yvials	1 500 plaste No). CONTA	JNERS			NO. CONT	AINERS		
ANALYSIS:	100s, AxC	AA	IALYSIS:				ANALYSIS	5:		



GROUNDWATER SAMPLE LOG WELL ID: MW117

PROJECT	INFORMATION				, i di jin		
PROJECT NU	MBER: 1901	048B		INITIALS: M.	PS .		A STATE OF THE REAL PROPERTY.
DATE: 8/					loudy, 2	3°C	
SAMPLING M		LOW FLOW:	HYDF	RASLEEVE	-		
		201112014	- III UF	ASLEEVE: LI	BAILEI	R; LJ	
WELL GAL	JGING DETAILS						
STANDING W.	ATER LEVEL (mBT	oc): 1.844	TOTAL	DEPTH (mBTOC) :	6.133		
Toward Salar and Assess	H (mBTOC); -			MESS OF PSH (m):	11	TIME:	4:18
FIELD PAR	AMETERS						
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 ₁ 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
14:32	2,136	1,0	6.38	13.52	29.0	0.23	20.2
14: 35	2.132	1.5	6.38	13.52	26.2	0.25	20.2
14:38	2.132	1.9	6.34	13.52	25.0	0.26	20.2
14:41	2.132	2.2	6.36	13.54	24.2	0.28	20.3
14:44	2.132	2.5	6.36	13.53	23.8	0.29	20.3
14:47	2.132	2.8	6.35	13,52	23.7	0.30	20.3
TOTAL PURGE VO	OLUME (L)	2.8	APPROX. SAMPLE	PURGE RATE (LPM):	100 mh/m	nin .	
	IONS DURING	THE REAL PROPERTY.	Gard all	非国民			
		000000	Good, ex	ear, no ac	lour.		78
RECHARGE BE	HAVIOUR:	FAST RECH	HARGING		SLOW RECHARG	ING (<80% RECHAR	GE AFTER 2 HRS)
WELL SAME	PLING			Barrett	THE BUILD		
DTW (mbTOC):	(AT SAMPLING) 2	.132					
	ORIGINAL		0	DUPLICATE		TRIPLK	CATE
SAMPLE ID:	1W117	s	AMPLE ID:		SAM	PLE ID:	
SAMPLE TIME:	14:47	S	AMPLE TIME:			PLE TIME:	
NO. CONTAINE	RS: 4 vials	N	O. CONTAINERS			CONTAINERS	
ANALYSIS: V			NALYSIS:			YSIS:	



		B 10 10 10 10								
PROJECT	INFORMATION									
PROJECT NUI	WIBER: 1901	048B		INITIALS: MP	5					
DATE: 8/	10/19			WEATHER: P.	Cloudy.	240€				
SAMPLING ME	ETHOD:	LOW FLOW:	HYDRA	ASLEEVE:	J BAILEF	()				
Dec - Profes										
WELL GAU	GING DETAILS									
STANDING WA	ATER LEVEL (mBT)	00): 3,116	TOTAL	DEPTH (m3TOC) :	4.218	TIME: /	2.19			
DEPTH TO PS	H (mBTOC):		THICKN	ESS OF PSH (m):		TIME	3:17			
FIELD PAR	AMETERS	5 San B San B S	2 17 17 17	The same of the same		- Albanda				
FIELD PAR	Ame i ers									
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
13:23	3,311	0.8	6.04	13.80	7.2	0.32	20.3			
13:26	3,369	1.1	5.97	13.20	5.7	0.35	20.2			
13:29	3,416	1.4	5.95	12.92	4.1	0.35	20.2			
13:32	3,447	1.8	5.94	12.44	2.6	0.37	20.2			
13: 35	3.488	2.1	5.93	12.78	2.5	0.36	20.3			
13:38	3.524	2,4	5.93	12.80	2.3	0.36	20.3			
137.41	3,565	2.7	5,93	12.46	1.2	0.39	20.3			
13:44	3,635	3.2	5,94	12.54	-2.9	0.34	20.2			
13:47	3,659	3.5	5,94	12.53	-6.8	0.36	20.3			
13:50	3.681	3.8	5,95	12.58	-9,1	0.35	20.3			
TOTAL PURGE V	DLUME (L)	3.8	APPROX SAMPLE	PURGE RATE (LPM)	100 mL/n	nin .				
OBSERVAT	IONS DURING	SAMPLING	98 20 E			23.44				
NOTES: (WELL	CONDITION COLOUR	CLARITY ODOLIR)	12 1		listan					
	on lowest		good, ex	ear, no oc	ICUT.					
0		security.								
RECHARGE BE	HAVIOUR:	FAST RECH	ARGING L		SLOW RECHARG	ING (<80% RECHARC	GE AFTER 2 HRS)			
WELL SAMI	PLING				100					
DTW (mbTOC):	(AT SAMPLING)	3,681								
	ORIGINAL	, .	D	UPLICATE		TRIPLIC	CATE			
SAMPLE ID:	AMPLE ID: MW118 SAMPLE ID: SAMPLE ID:									
SAMPLE TIME:										
NO. CONTAINE	1 1	NO). CONTAINERS		NO.	CONTAINERS				
ANALYSIS: V		Añ	ALYSIS:		ANA	LYSIS:				



									-
PROJECT	INFORMATION								
PROJECT NUI	MBER: 19010	048B			INITIALS: MI	52			
DATE: 8/	10/19				WEATHER: P.	Cloud	4 21	°C	
SAMPLING ME	ETHOD:	LOW FLOW	1	HYDRA	ASLEEVE		AILER:		
			5.5						
	IGING DETAILS								
STANDING WA	ATER LEVEL (mBT)	oc): 2.430		TOTAL	DEPTH (mBTOC) :	4,495		TIME:	1:45
DEPTH TO PS	H (mBTOC): -			THICKN	IESS OF PSH (m):	And the second			7.10
FIELD PAR	AMETERS	3 3 7 4		316				500700	
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)		H 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV)+/-10		DO /L) +/-10%	TEMP (°C)
11:53	2,505	2.8	6	52	11.26	-154.		.11	19.0
11:56	2.527	3,8	6.5		11.39	-162.0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	.12	19.1
11:59	2.540	4.7	6.6		11.50	-164.7		09	19.1
12:02	2.553	5.3	6.6		11.53	-160.6		08	19,2
12:05	2.548	5.18	6.6		11.59	-151.3		10	19.2
12:08	2.548	6.0	6.5		11.62	-149,5		09	19.3
12:11	2.548	6.3	6.6		11.69	-149.			19.3
12:14	2.548	6.6	6.6		11.71	-149.0		10	19,4
					13.1	1 1 1 1 1			1 1 7 (
TOTAL PURGE V	OLUME (L)	6.6	APPROX	. SAMPLE	PURGE RATE (LPM)	100 mL	Imin		
000000		0111211110			8-010-01-01-01-01-01			A	
OBSERVAI	IONS DURING	SAMPLING		To be					
NOTES: (WELL	CONDITION, COLOUR.	, CLARITY, ODOUR)	Good	Sil	by becomin	y clear	r arber	~1.5	h. Grey.
Sl. orga	unic odocu	Γ,			<i>V</i>	<i>0</i>			V .
RECHARGE BE	EHAVIOUR:	FAST RECH	IARGING			SLOW RECH	HARGING (<8	0% RECHAR	GE AFTER 2 HRS)
WELL SAMI	PLING			10-10					学生
DTW (mbTOC):	(AT SAMPLING) 2	548							
	ORIGINAL			D	UPLICATE			TRIPLI	CATE
SAMPLE ID: SAMPLE ID:								:	
SAMPLE TIME:		S.	AMPLE TI			SAMPLE TI	ME:		
NO. CONTAINE	RS: 4 vials	N	O, CONTA	INERS			NO. CONTA	INERS	
ANALYSIS: V		A	NALYSIS:				ANALYSIS:		



WELL ID: MW120

								-
PROJECT	INFORMATION		n'i garantan'i a			N. S. Commission		
PROJECT NU	MBER: 1901	048B		INITIALS: MP	5			
DATE: 8/	, , , , , , , , , , , , , , , , , , , ,			WEATHER: P.		20°C		
SAMPLING ME	ETHOD:	LOW FLOW:	HYDRA	ASLEEVE:	J BAILER	R		
		OF A PART OF THE P	F-E-ED + .	er ben et ele			VIETARE THE	
ESTERNE.	IGING DETAILS							
STANDING WA	ATER LEVEL (mBT	00): 1,436	TOTAL	DEPTH (mBTOC) :	5.946	TIME;	0:40	
DEPTH TO PS	H (mBTOC):		THICK	IESS OF PSH (m):				
FIELD PAR	AMETERS					かみずる		
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)	
10:53	2,125	3.0	4.54	1.34	-134.9	0.14	19.4	+
10:56	2.125	3.7	7.53	1,29	-155.9	0.14	19.3	
10:59	2.125	4.3	7.52	1.26	-165.4	0.15	19.3	
11:02	2.129	5.0	7.51	1.24	-172.8	0.15	19.3	
11:05	2.129	5. 8	7,51	1.24	-174.6	0.16	19.4	
11:08	2.129	6.0	7.51	1.23	-174.9	0.17	19.5	
11:11	2.129	6.8	7.51	1.24	-174.6	0.17	19.5	_
								1
								-
TOTAL PURGE V	OLUME (L):	6.5	APPROX. SAMPLE	PURGE RATE (LPM)	1614 m11			-
	\-/-	0.0		. STOC WITE (CLIM)	167mL/1	חומ .		_
OBSERVAT	TIONS DURING	SAMPLING						8
NOTES: (WELL	CONDITION, COLOUR	. CLARITY, ODOUR)	good, sl.	siltu beco	mina clea	rafber ~	1.0h. l	· 40/1
chemical	l odour in	ritially die	sel odour	in bucket	. 0			ba
RECHARGE BE		FAST RECHA		11. 600.00		GING (<80% RECHAR	CE AFTER 2 HPC	1
		TAGT REOTA	mono E		SLOW RECHARG	JING (SOU / RECHAR	GLAFIER Z RKO) LL	
WELL SAM	PLING							
DTW (mbTOC):	: (AT SAMPLING) 2	.129						
	ORIGINAL.			DUPLICATE		TRIPLI	CATE	
SAMPLE ID:	1W120.		WALE ID: DM	2.6	SAN	IPLE ID: TW	3	
SAMPLE TIME:			MPLE TIME: //.			APLE TIME: 11.	17	
	ers: 4 vials		. CONTAINERS			1.0	vials.	
ANALYSIS:	1005	AN	ALYSIS: VOC]5	ANA	ALYSIS: VOC	5	

ORIGINAL FIELD RECORD

Q3.2.1 QF_004 Groundwater Sample Log Rinsate (R8) collected.

Version: V2 Issued: October 2016 Review: March 2020



PROJECT	INFORMATION	1	The state of		Contract	产 华山村) 达	A Contact of the
PROJECT NU	JMBER: 1901	048B		INITIALS: MT	PS PS		
DATE: 8/					Claudy	19°6	
SAMPLING M	IETHOD:	LOW FLOW	НУП	RASLEEVE:	0		¥.
			11101		BAILE	:R; LJ	
WELL GAL	JGING DETAIL	S	100	100			U Start II
STANDING W	ATER LEVEL (mBT	oci: 2,960	TOTA	L DEPTH (mBTOC) ;	11 194	Member 18	
	SH (mBTOC):			(NESS OF PSH (m):		THME: C	19:52
100							
FIELD PAR	RAMETERS					The state of	TO THE REAL PROPERTY.
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
0:02	3,061	2.7	6.92	9.71	57.1	0.34	19.2
0: 05	3.068	3.8	6.87	9.72	-10.7	0.25	19.2
0:03	3,069	4.8	6.35	9.72	-25.8	0.25	19.2
0:11	3.069	5.8	6.84	9.74	-42.6	0.27	19.2
0:14	3.069	6.8	6.83	9.75	-45.9	0.25	19.2
0:17	3,069	7.8	6.83	9.76	-48.0	0.26	19.2
7:20	3,069	8.8	6.83	9.76	-48.7	0.25	19.3
		A					
TAL PURGE VO	OLUME (L):	00	APPROV CAMPUT	DUDOS DATE HAVE	002 1/		
		8.9	AFFROX SAMPLE	PURGE RATE (LPM)	333 my	nin	
BSERVAT	IONS DURING	SAMPLING	200		THE ALL ST	E 1.10 . 3.3.	678 B.N.
TES: (WELL O	CONDITION, COLOUR.	CLARITY, ODOUR) \	coff by	Hom. IPp		1	
Good w	ery silty be	e con in	and the	al 2 al	i	ed in silt	Isavel. Lyelli
		1	ear after	adion no	odour.		
CHARGE BE	HAVIOUR:	FASŤ RECHA	RGING X		SLOW RECHARG	ING (<80% RECHARG	E AFTER 2 HRS)
ELL SAMP	LING		Parl Saltan		Again Series		A STATE OF THE STA
	(AT SAMPLING) 3_s	269	F 9150				CONTROL OF
	ORIGINAL	00 1					
WPLE ID: V	1W121	24	WPLE ID:	UPLICATE		TRIPLICA	ATE
WPLE TIME:	10:20		MPLE ID:			PLE ID:	
CONTAINER			CONTAINERS	SAMPLE TIME:			
ALYSIS: VC	7.00		ALYSIS:	NO. CONTAINERS			
V (, - 0	Also			ANAL	YSIS:	



PROJECT INFORMATION									
PROJECT NUI	WBER: 1901C	48 B		INITIALS: MP	5				
DATE: 8/					loudy 2	1°C			
SAMPLING ME		LOW FLOW	HYDRA	SLEEVE:	BAILEF				
WELL GAUGING DETAILS									
STANDING WATER LEVEL (mBTOC): 0,850 TOTAL DEPTH (mBTOC): 12.051									
DEPTH TO PSH (mBTOC): THICKNESS OF PSH (m): TIME: 14:57									
FIELD PAR	AMETERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0, 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV)+/-10MV	DO (MG/L) +/-10%	TEMP (°C)		
15:13	1.107	1.6	6.58	17.86	53.5	0.72	20.7		
15:16	1.107	2.0	6.58	17.85	52.8	0.74	20.6		
15:19	1.107	2.4	6.58	17.84	52.5	0.73	20.6		
15:22	1.107	≈.8	6.58	17.83	52.8	0.68	20.6		
				1					
TOTAL BURGE W	OLLIME (L)	0.0	ABODOV OMBOS	2000	100 11				
TOTAL PURGE VO	JEUNE (E)	2.9	APPROX. SAMPLE	PURGE RATE (LPM)	133 mL/n	in.			
OBSERVAT	IONS DURING	SAMPLING			The state of				
NOTES: (WELL	CONDITION, COLOUR	. CLARITY, ODOUR)	Good de	ear, no od	our,				
-		-	Crary Out	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
RECHARGE BEHAVIOUR: FAST RECHARGING SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)									
WELL SAMPLING									
DTW (mbTOC): (AT SAMPLING)									
ORIGINAL DUPLICATE TRIPLICATE						CATE			
SAMPLE ID: MW204 SAMPLE ID: SAMPLE ID:									
SAMPLE TIME:		S	AMPLE TIME:		SAM	PLE TIME:			
NO. CONTAINE	RS: 4 vials.	N	O. CONTAINERS		NO. CONTAINERS				
ANALYSIS: V	OCs	A	NALYSIS:		ANA	LYSIS:			



	0.5 - A. S N.									
PROJECT INFORMATION										
PROJECT NUMBER: 1901048B				INITIALS: MPS						
DATE: 8/				WEATHER: P.	Cloudy.	23°C				
SAMPLING MI	ETHOD:	LOW FLOW:	HYDRA	ASLEEVE	J BAILE					
WELL GAUGING DETAILS										
STANDING WATER LEVEL (MBTOC): 2,183 TOTAL DEPTH (MBTOC): 13,573										
DEPTH TO PSH (mBTOC): _ THICKNESS OF PSH (m): _ TIME: 12:34										
FIELD PAR	AMETERS						History			
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
12:44	2.625	2.0	6.74	20.81	20.9	0.20	21.0			
12:47	2,635	2.8	6.75	20.82	28.8	0.20	21.1			
12:50	2,635	B/E 35		20.33	32.2	0.23	21.0			
12:53	2.635	4.1	6.73	20.33	30.1	0,24	21.0			
12:56	2.635	4.7	6.72	20.83	28.6	0.23	20.9			
12:59	2,635	5.3	6.71	20.84	28.7	0.24	21.0			
				0		0.57	21.0			
TOTAL PURGE V	OLUME (L)	5.3	APPROX. SAMPLE	PURGE RATE (LPM)	200 ml/	min				
E company of the co	Andrew Colonia				7					
OBSERVAT	IONS DURING	SAMPLING								
NOTES: (WELL	CONDITION, COLOUR.	CLARITY, ODOUR)	Good, cl	lear, no	odour.					
RECHARGE BEHAVIOUR: FAST RECHARGING (<80% RECHARGE AFTER 2 HRS)										
WELL SAMPLING										
DTW (mbTOC): (AT SAMPLING) 2.635										
ORIGINAL DUPLICATE TRIPLICATE							CATE			
SAMPLE ID: MW205 SAMPLE ID:					SAN	IPLE ID:				
SAMPLE TIME: 12:59 SAMPLE TIME:					SAN	IPLE TIME:				
NO. CONTAINE	RS: 4 Vials	NC). CONTAINERS		NO.	CONTAINERS				
	1005	AN	ALYSIS:		ANA	LYSIS:				

3.219 MW101 2.666 501WM 1.702 MW103 1:033 MW 104 UN609 1.125. MW 106 2.430 MW 107 1.770 MW 108 1-335 MW 109 2.384 1.794 MWILL GWI 2003 GW2 0.382 0.786 GWY



DAILY FIELD LOG

PROJE	ECT INFORMATION	
PROJE	ect NAME / NUMBER: 1901048 Auburn	acres a
TASK:	Gw levels 11:40-12:50	
DATE:	16/08/19	

Well	TOC. (mbey)
GWOY	0.824
MW103	1,789
MW102	2.738
MWIOI	3.294
MW104	1.054
MW106	1.147
MWIII	1.717
MW107	1.956
MWIIO	2.420
MWIOS	1.775
MW109	1.284
GW2	0.810
GWI	2.034.

EXPENSE	COST	COMMENTS	ENTERED
Vehicle	\$135/d Metro \$0.7/km Non-Metro		
Field Consumables	\$80/day		
Disposable Bailers	\$26/unit		
GW Sample Filters	\$25/unit		
GX Hand Auger	\$60/day		
GX Interface Probe	\$80/day		
Other			

Well GW levels



WELL DEVELOPMENT LOG

PROJECT	INFORMATION								
PROJECT NAME: AUDUKA				PROJECT NUMBER: 1901048					
DATE OF INSTALLATION:				INITIALS:		NF			
DATE:	2	814		WEATHER:	Cle	cen			
PURGE METH	OD:				P				
PURGE VO	LUME CALCUL	ATION							
$\left({Total\ c}\right)$	depth (m) Wa	$\frac{1}{ter \ level \ (m)} \times \frac{1}{1}$	3 Well volumes	$\times 2\frac{50 mm}{Well} or 7.8$	$\frac{100 \ mm}{Well} = \frac{100 \ mm}{Calc}$	culated Purge V	Volume Litres		
FIELD PAR	AMETERS								
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0,1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)		
GWI	2.098			6/414	0940	3.725			
BUN	0.828			MW106	1.168	3.7/7	Y		
MWIOG	1.248	3 1		MWIDY	1068	3.65	4		
MWIID	2.481			MW 103	787	3.291			
MW 113	2.640			MW102	2764	4.552			
MW 108	1.706			MW101	3.478	7.186			
MW114	3 . 398	1.1		MW116	1.174	3.574	2 1		
MMIS	1.854	4.032		MW 115	0.527	3.348			
MWILL	1.7981	4.814				. 62			
FOLWM	2.741	3.847							
TOTAL PURGE	VOLUME (L):		APPROX. PURG	SE RATE (LPM):			2		
OBSERVAT	IONS DURING	DEVELOPMENT							
NOTES: (WELL	CONDITION, COLOUR	. CLARITY, ODOUR)							
							8		
4									
RECHARGE BE	EHAVIOUR:	FAST RECHA	RGING		SLOW RECHARG	ING (<80% RECHAR	GE AFTER 2 HRS)		

ORIGINAL FIELD RECORD



DAILY FIELD LOG

PROJECT INFORMATION							
PROJECT NAME / NUMBER:	Auburn	19010483					
TASK: GW Sampling							
DATE: 8/10/19 0							

DATE: 8/10/19	
08:32 On site. Open all well eaps. Commence dips.	
Stort sampling MWH2H Ice, cement.	MW121: 2,960
19:08 Top up cement surrounding MW204, MW205	MW120: 1.439
9.45 Start sampling MW121	MW119 2.442
0:38 MW120 - DW3, TW3 Chemical odour.	MW205: 2.179
R8 collected.	MW118: 3,130
1:39 MW119, MW205	MW117: 1.849
3:15 MW118	MW204: 0.863
4:10 MW117, MW204	
4:15 Surveyor on site.	
5:42 Offsite. Drop samples at Eurofins.	
5:42 Offsize. Drop samples at Eurofins. 6:40 Arrive back at office: Unpack.	-8"
EXPENSE COST C	OMMENTS ENTERE

EXPENSE	COST	COMMENTS	ENTERED
Vehicle	\$135/d Metro \$0.7/km Non-Metro		
Field Consumables	\$80/day		
Disposable Bailers	\$26/unit		
GW Sample Filters	\$25/unit		
GX Hand Auger	\$60/day		
GX Interface Probe	\$80/day		
Other			



PROJECT INFORMATION						
PROJECT NUMBER: 19010	48		INITIALS: K)		
DATE: 12/11			WEATHER: 5			
SAMPLING METHOD: LC	DW FLOW:	HYDRA	SLEEVE;	BAILEF	k: 🔲	
WELL GAUGING DETAILS						
STANDING WATER LEVEL (mBTOC	1.851	TOTAL	DEPTH (mBTOC) :	A. 32 A		
DEPTH TO PSH (mBTOC):			ESS OF PSH (m):	70-1	TIME;	1.45
FIELD PARAMETERS						
TIME DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0, 1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)
TOTAL PURGE VOLUME (L):		APPROX SAMPLE	PURGE RATE (LPM):		l	
OBSERVATIONS DURING S	AMPLING					
NOTES: (WELL CONDITION, COLOUR. C	LARITY, ODOUR)	ROUNISH	, WOHT TU	RBID, No	SMELL, NO	SHE FILL
RECHARGE BEHAVIOUR:	FAST RECHA	PCINC		SLOW BECHAR	GING (<80% RECHARG	NE ACTED ALIDON
RECHARGE BEHAVIOOR.	TAGTINEGHA	1.011.0		SEOW NEGITATO	JINO (100 % RECHARD	EAFTER 2 HRS)
WELL SAMPLING					例数語言	
DTW (mbTOC): (AT SAMPLING)						
ORIGINAL		D	UPLICATE		TRIPLIC	CATE
SAMPLE ID: WAR GIVE I	SAI	MPLE ID:		SAM	MPLE ID:	
SAMPLE TIME: 11.50	SAI	MPLE TIME:		SAN	IPLE TIME:	
NO. CONTAINERS:	ОИ	. CONTAINERS		NO.	CONTAINERS	
ANALYSIS: PFAS	AN	ALYSIS:		ANA	ALYSIS:	



PROJECT I	NFORMATION					413				
PROJECT NUMBER: 1901048 INITIALS: KB										
DATE: 12/11/2019 WEATHER: SUNNY										
SAMPLING ME	SAMPLING METHOD: LOW FLOW: HYDRASLEEVE: BAILER:									
	SAMELING WETHOU.									
WELL GAU	GING DETAILS									
STANDING WATER LEVEL (mBTOC): 1 - CANDING TOTAL DEPTH (mBTOC): 3-786										
DEPTH TO PSH (mBTOC): THICKNESS OF PSH (m):										
FIELD PAR	AMETERS		(A.) W. W.		4-7/4 HT-51					
		TOTAL	PH	CONDUCTIVITY	REDOX	DO				
TIME	DTW (mbTOC)	DISCHARGE (L)	+/~ 0.1	(MS/CM) +/- 3%	(MV) +/- 10MV	(MG/L) +/-10%	TEMP (°C)			
	Tel.		198							
1 1887										
			100							
			1991							
			The second							
TOTAL PURGE V	OLLIME (L.)		APPROX SAMPLE	PURGE RATE (LPM):						
TOTALTONGLY	OCOME (E)		AFFROX. SAWFEL	FORGE RATE (EFIVI).						
OBSERVAT	IONS DURING	SAMPLING								
NOTES: (WELL	CONDITION, COLOUR	, CLARITY, ODOUR)	LIBOHT GRE	ENISH/BOOM	15HISINT	Y, ARGANIC	OPOUR,			
			7,72		1-11	7,000	,,,			
RECHARGE BEHAVIOUR: FAST RECHARGING L SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)										
WELL SAM	PLING			7 52 9 11						
DTW (mbTOC):	(AT SAMPLING)									
	ORIGINAL DUPLICATE TRIPLICATE									
SAMPLE ID:	m 6010	SA	MPLE ID:		SAN	MPLE ID:				
SAMPLE TIME:		SA	MPLE TIME:		SAN	IPLE TIME:				
NO. CONTAINE	1		. CONTAINERS		NO.	CONTAINERS				
ANALYSIS:	PFAS.	AN	IALYSIS:		ANA	ALYSIS:				

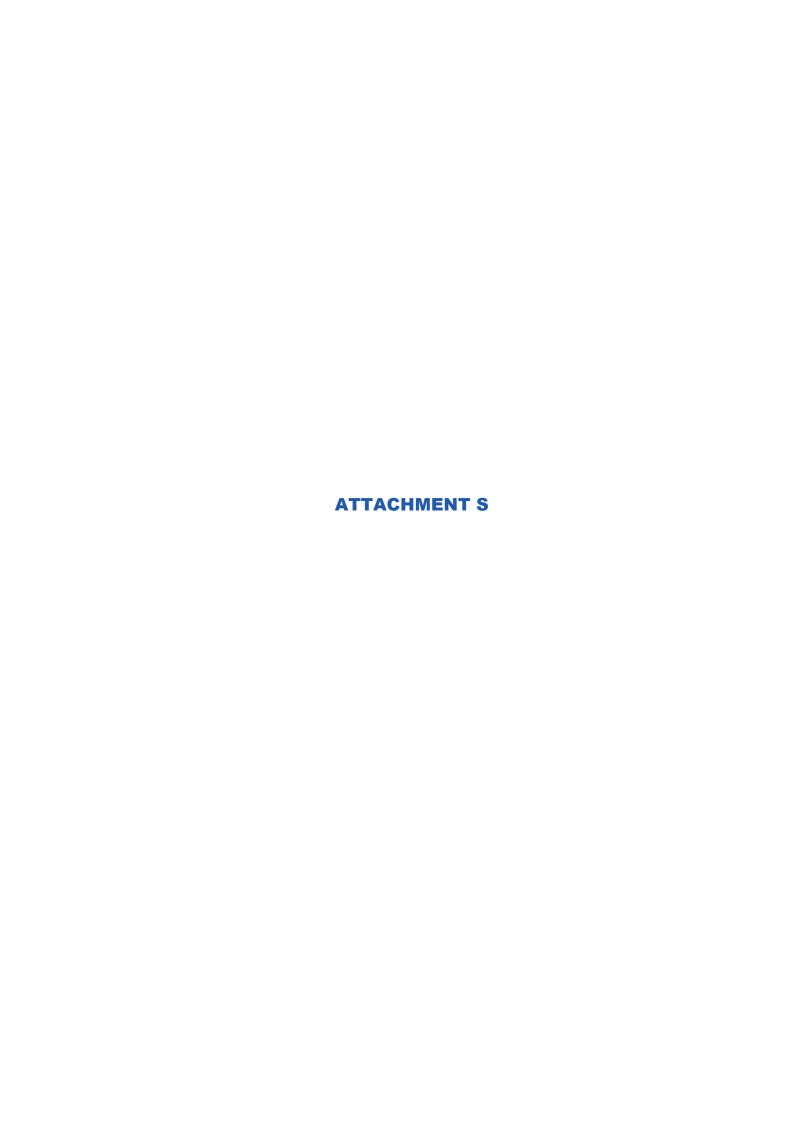


WELL ID: MWIIO

PROJECT	INFORMATION									
PROJECT NU	MBER: 1 90 1	048		INITIALS: KB						
	2/11			WEATHER: 5	Y NNU					
SAMPLING M	SAMPLING METHOD: LOW FLOW: HYDRASLEEVE: BAILER:									
WELL GAU	IGING DETAILS						76. X 5 TO			
STANDING W	ATER LEVEL (mBT	oc): 2·24=	3 TOTAL	DEPTH (mBTOC) :	4.430		20			
DEPTH TO PS				ESS OF PSH (m):		TIME: ()	:30			
FIELD PAR	RAMETERS		TANK							
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)			
TOTAL PURGE \	OLUME (L)		APPROY SAMPLE	PURGE RATE (LPM):						
TOTALTORGE	OLOME (E)		ALLICA, GAMILLE	TORGETON'E (ELIM).						
OBSERVA"	TIONS DURING	SAMPLING			1000 5 10					
NOTES: (WELL	CONDITION, COLOUR	R. CLARITY, ODOUR) (11-41/5	URBID, O	REANIC DO	oue Nh 6	SUETAL			
			71	0.001110) 0.	- G/G/C 02	001, 140) ne El V			
RECHARGE B	EHAVIOUR:	FAST RECHA	RGING L		SLOW RECHARG	ING (<80% RECHAR	GE AFTER 2 HRS)			
WELL SAMPLING										
DTW (mbTOC)): (AT SAMPLING)									
ORIGINAL DUPLICATE TRIPLICATE						CATE				
SAMPLE ID:	mwno	SAI	MPLE ID:		SAN	IPLE ID:				
SAMPLE TIME	11.35	SAI	MPLE TIME:		SAN	IPLE TIME:				
NO. CONTAIN		NO	. CONTAINERS		NO.	CONTAINERS				
ANALYSIS:	PFAS	AN	ALYSIS:		ANA	ALYSIS:				



PROJECT INFORMATION									
PROJECT NU	MBER: 19010	14-8		INITIALS: SUNNY					
DATE: 12/11 WEATHER: KB									
SAMPLING METHOD: LOW FLOW: HYDRASLEEVE: BAILER: BAILER:									
WELL GAUGING DETAILS									
STANDING WATER LEVEL (mBTOC): 5-850									
DEPTH TO PS	SH (mBTOC):			ESS OF PSH (m):					
FIELD PARAMETERS									
TIME	DTW (mbTOC)	TOTAL DISCHARGE (L)	PH +/- 0.1	CONDUCTIVITY (MS/CM) +/- 3%	REDOX (MV) +/- 10MV	DO (MG/L) +/-10%	TEMP (°C)		
TOTAL PURGE VOLUME (L); APPROX. SAMPLE PURGE RATE (LPM):									
OBSERVAT	TIONS DURING	SAMPLING					San Barrier		
NOTES: (WELL CONDITION, COLOUR, CLARITY, ODOUR) TURBID, WIGHT BROWN, NO ODOUR									
10,000,000,000,000,000,000,000,000,000,									
RECHARGE BEHAVIOUR: FAST RECHARGING SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)									
RECHARGE BEHAVIOUR: FAST RECHARGING SLOW RECHARGING (<80% RECHARGE AFTER 2 HRS)									
WELL SAMPLING									
DTW (mbTOC): (AT SAMPLING)									
ORIGINAL			DUPLICATE			TRIPLICATE			
SAMPLE ID: MWI14			SAMPLE ID: DW			SAMPLE ID: TWO			
SAMPLE TIME: 1). 1 O			SAMPLE TIME: 11.15			SAMPLE TIME: 11.20			
NO. CONTAINERS: 1344			NO. CONTAINERS			NO. CONTAINERS			
ANALYSIS: PFAS			ANALYSIS: PFAS			ANALYSIS: PFAS			





PASSIVE SOIL GAS SAMPLE LOG

PROJECT INFORMATION								
PROJECT NAME / NUMBER	1901031							
INITIALS:	NF	*						
DATE:	3/6							
CAMPI P INFORMATION								
SAMPLE INFORMATION								
SAMPLE ID:	801	Í	DVI					
	P Soil Vapour							
SAMPLE DEPTH:	34 36	CV						
BOREHOLE SEALANT:	21							
SAMPLE LOCATION OBSERVATIONS	(OUTSIDE CONTAMI	NANT SOURCES,	BOREHOLE ODOURS, ETC)					
no oderv inside								
	7							
SOIL DESCRIPTION								
\$0 % clay, 50/sand, 10% gravel yellow brown								
SOIL MOISTURE: Wet Anoist Dry								
WEATHER								
AVERAGE TEMPERATURE: /6		PRECIPITATION:	,					
TIMING								
MINIMUM CALCULATED DEPLOYMENT TIME:								
SAMPLE START TIME:	1615	SAMPLE START D	ATE: 3/6					
	909	SAMPLE RETRIEV						
TOTAL DEPLOYMENT TIME:	40:54		~ / ~					
DV1 0°		12	ID					
	3/6 b	17 091	20					
5/		090	/1					



PROJECT INFORMATION	
PROJECT NAME / NUMBER 1901031	
INITIALS:	
DATE: 2/6	
7	
SAMPLE INFORMATION	
SAMPLE ID: SV2	
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 37	
BOREHOLE SEALANT: 21 CA	(W)
SAMPLE LOCATION OPERLYATIONS (OUTSIDE COM	TARMANT COURCES PORTION PARAMETERS
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CON	
Indoor re	odost
,	
SOIL DESCRIPTION	
470 / day 30/sand 10%	- dayel door locally well
Slave layer 1stlaver ->	gravel deep brown, rellow
SOIL MOISTURE: Wet Moist	Dry grey byour
WEATHER	
AVERAGE TEMPERATURE:	PRECIPITATION:
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIME:	
SAMPLE START TIME: (4 %)	SAMPLE START DATE: 3/6
SAMPLE RETRIEVALTIME: 0856	SAMPLE RETRIEVAL DATE:
TOTAL DEPLOYMENT TIME: (19: 95	× //



PROJECT INFORMATION	
PROJECT NAME / NUMBER 1901031	
INITIALS:	
DATE: 3/6	
SAMPLE INFORMATION	
SAMPLEID: SVS	
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 38	
BOREHOLE SEALANT: 2	
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMI	NANT SOURCES, BOREHOLE ODOURS, ETC)
Indoor no oelou.	
SOIL DESCRIPTION	
40% day, 40%, so	
	nd 20 / availed
Yell o	nd 20 1. gravel
SOIL MOISTURE: Wet Moist D	2 promu
Yella	2 promu
SOIL MOISTURE: Wet Moist D	2 promu
SOIL MOISTURE: Wet Moist D	2 byown
SOIL MOISTURE: Wet Moist D WEATHER AVERAGE TEMPERATURE: \(\)	2 byown
SOIL MOISTURE: Wet Moist D WEATHER AVERAGE TEMPERATURE: (8)	2 byown
SOIL MOISTURE: Wet Moist D WEATHER AVERAGE TEMPERATURE: TIMING MINIMUM CALCULATED DEPLOYMENT TIME:	PRECIPITATION:



PROJECT INFORMATION	
PROJECT NAME / NUMBER 190103	
INITIALS: N.F.	
DATE: 3/6	
SAMPLE INFORMATION	
/	VY
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 25 CM	
BOREHOLE SEALANT:	
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAM	INANT SOURCES, BOREHOLE ODOURS, ETC)
Indoor extino odour	
MOUNT FOR TWO CADO.	
SOIL DESCRIPTION	
Clay 60% Sand	40 %
brown, yello.	
SOIL MOISTURE: Wet Moist	Dry
MEATURE	
WEATHER	
AVERAGE TEMPERATURE: 17-C	PRECIPITATION:
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIME:	
SAMPLE START TIME: 1100	SAMPLE START DATE: 3/6
SAMPLE RETRIEVAL TIME: 0808	SAMPLE RETRIEVAL DATE: 5/6
TOTAL DEPLOYMENT TIME: 45:08	



PROJECT INFORMATION	
PROJECT NAME / NUMBER 1901031	
INITIALS:	
DATE: 3/6	
SAMPLE INFORMATION	
SAMPLE ID:	
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 30 cm	
BOREHOLE SEALANT:	
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTANT	IINANT SOURCES, BOREHOLE ODOURS, ETC)
Indoor, no opours	
, 0001	
SOIL DESCRIPTION	
yellow, brown.	
SOIL MOISTURE: Wet Moist	Drv
WEATHER	
AVERAGE TEMPERATURE: 18 %	
100	PRECIPITATION:
TIMING	PRECIPITATION:
	PRECIPITATION:
TIMING	SAMPLE START DATE: 3/6
TIMING MINIMUM CALCULATED DEPLOYMENT TIME:	



PROJECT INFORMATION	
PROJECT NAME / NUMBER (90 03)	
INITIALS:	
DATE: 3/6	
SAMPLE INFORMATION	
SAMPLE ID: SV6	
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 42 cm	
BOREHOLE SEALANT: 26 cm	
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAM	NANT SOURCES, BOREHOLE ODOURS, ETC)
ludoov, no odouv	
Trace of the content	
SOIL DESCRIPTION	
Linut and I don't	
Slag layer	wn, red
SOIL MOISTURE: Wet Moist D	ry
WEATHER	
AVERAGE TEMPERATURE: 18	PRECIPITATION:
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIME:	
SAMPLE START TIME: 1215	SAMPLE START DATE: 3/1,
SAMPLE RETRIEVAL TIME: 0830	SAMPLE RETRIEVAL DATE: 5/6
TOTAL DEPLOYMENT TIME: 44:15	



PROJECT INFORMATION	MXA A STATE OF THE
PROJECT NAME / NUMBER (C	701031
INITIALS:	J.F.
DATE: 3	16
SAMPLE INFORMATION	
SAMPLEID: SV-7	
	Soil Vapour
SAMPLE DEPTH: 45	
BOREHOLE SEALANT: 24)
	OUTSIDE CONTAMINANT SOURCES, BOREHOLE ODOURS, ETC)
SOIL DESCRIPTION	
Clay 80 %	yellow brown
SOIL MOISTURE: Wet	Moist Dry
WEATHER	
AVERAGE TEMPERATURE: \S*C	PRECIPITATION:
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIL	ME:
SAMPLE START TIME: 1245	SAMPLE START DATE: 3/6
SAMPLE RETRIEVAL TIME:	SAMPLE RETRIEVAL DATE:
TOTAL DEPLOYMENT TIME:	48:00



PROJECT INFORMATION
PROJECT NAME / NUMBER 190103)
INITIALS: NF
DATE: 36
SAMPLE INFORMATION
SAMPLE ID: SUS
SAMPLE TYPE: Sub-slab Soil Vapour
SAMPLE DEPTH: 27
BOREHOLE SEALANT: 90
SONE TO BE SENEAR !!
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMINANT SOURCES, BOREHOLE ODOURS, ETC)
Indoor, no odoor
SOIL DESCRIPTION
growel GO-1, sand 30 clay 30
brown red
SOIL MOISTURE: Wet Moist Dry
WEATHER
AVERAGE TEMPERATURE: PRECIPITATION: —
TIMING
MINIMUM CALCULATED DEPLOYMENT TIME:
SAMPLE START TIME: 1020 SAMPLE START DATE: 3/6
SAMPLE START TIME: 1020 SAMPLE START DATE: 3/6 SAMPLE RETRIEVAL TIME: 0800 SAMPLE RETRIEVAL DATE: 5/6
TOTAL DEPLOYMENT TIME: 45-40



PROJECT INFORMATION		
PROJECT NAME / NUMBER	1901031	
INITIALS:	NF	
DATE:	3/8	
SAMPLE INFORMATION		W. F. Sarat St. T. St. F. Sarat St. T. Sarat St.
SAMPLE ID:	879	
SAMPLE TYPE: Sub-slab	Soil Vapour	
SAMPLE DEPTH: 31		
	15 cm	
SAMPLE LOCATION OBSERVATIONS	OUTSIDE CONTAM	IINANT SOURCES, BOREHOLE ODOURS, ETC)
WC	oov no oc	
SOU PROCESSION		
SOIL DESCRIPTION		
		Fravel 40%, clay 30%
	vey brown	
SOIL MOISTURE: Wet	Moist E	Dry
WEATHER		
AVERAGE TEMPERATURE:	f.C	PRECIPITATION:
TIMING	Inches in the	图 · · · · · · · · · · · · · · · · · · ·
MINIMUM CALCULATED DEPLOYMENT T	IME:	
SAMPLE START TIME:	000	SAMPLE START DATE: 2/L
	08%	SAMPLE RETRIEVAL DATE: 514
TOTAL DEPLOYMENT TIME:	46:15	



PROJECT INFORMATION	
PROJECT NAME / NUMBER (\$0 (03):	
INITIALS: NF	
DATE: 36	
SAMPLE INFORMATION	17.
SAMPLE ID: SVIO	
SAMPLE TYPE: Sub-slab Soil Vapour	_
SAMPLE DEPTH: 30 cm	
BOREHOLE SEALANT: 14 cm (Oncrete	
	VI en
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMINANT SOURCES, BOREHOLE ODOURS, ETC)	
No odous	
SOIL DESCRIPTION	
30.1. day, 40.1. sand, 30.1. gravel	
brown grey	
SOIL MOISTURE: Wet Moist Dry	
WEATHER TO THE RESIDENCE OF THE PROPERTY OF TH	
AVERAGE TEMPERATURE: INCIGON WELL PRECIPITATION:	Towns.
TIMING Administration Calculated Dept Over fact Times.	
MINIMISM CALCULATED DEPLOYMENT TIME:	
SAMPLE START TIME: 0800 SAMPLE START DATE: 3/6	
SAMPLE RETRIEVAL TIME: 0725 SAMPLE RETRIEVAL DATE: 5/6	
TOTAL DEPLOYMENT TIME: 23.25 W 47:25	



PROJECT INFORMATION
PROJECT NAME / NUMBER 1901031
INITIALS: NF
DATE: 3/6
SAMPLE INFORMATION
SAMPLE ID: SVII
SAMPLE TYPE: Sub-slab Soil Vapour
SAMPLE DEPTH: 53cm, 30cm concrete
BOREHOLE SEALANT: CONCrete
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMINANT SOURCES, BOREHOLE ODOURS, ETC)
Indoor, no odours
SOIL DESCRIPTION
80/clay, 20 sand
red brown
SOIL MOISTURE: Wet Moist Dry
WEATHER
AVERAGE TEMPERATURE: 13°C PRECIPITATION:
TIMING
MINIMUM CALCULATED DEPLOYMENT TIME:
SAMPLE START TIME: 0915 SAMPLE START DATE: 04 3/6
SAMPLE RETRIEVAL TIME: 0751 SAMPLE RETRIEVAL DATE: 5/6
TOTAL DEPLOYMENT TIME: 46 hr. 36 min



PROJECT INFORMATION	
PROJECT NAME / NUMBER 190103	
INITIALS: NF	
DATE: 3/6	
SAMPLE INFORMATION	
SAMPLEID: SUE 12	
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 30 50	
BOREHOLE SEALANT: 30	
CAMBI E LOCATION ODSEDVATIONS (OUTSIDE CONTAIN)	MANT COURCES PORTION P. ORGUPO TVO
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMI	NANT SOURCES, BOREHOLE ODOURS, ETC)
est inside no odar	
brown grey	1.
SOIL DESCRIPTION	学以外方面的 自由 化二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基
Clay 50 1. 40 1. grave	1, 10% sand
SOIL MOISTURE: Wet Moist D	ry
WEATHER	THE RESERVE OF THE PARTY OF THE
AVERAGE TEMPERATURE: Indav	PRECIPITATION:
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIME:	
SAMPLE START TIME: 0840	SAMPLE START DATE: 3/4
SAMPLE RETRIEVAL TIME: () 7 4()	SAMPLE RETRIEVAL DATE: 5/6
TOTAL DEPLOYMENT TIME: 231	1:00



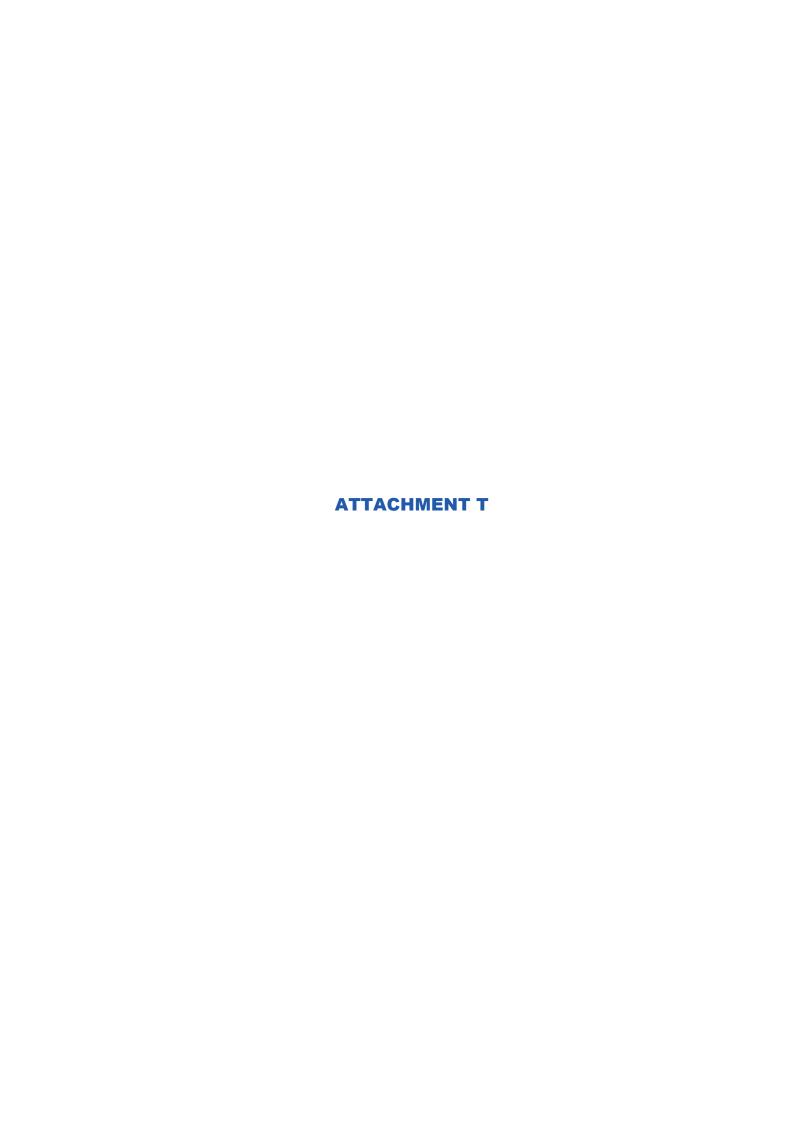
PROJECT INFORMATION	
PROJECT NAME / NUMBER 1001031	
INITIALS:	
DATE: \$\frac{3}{6}	
SAMPLE INFORMATION	
SAMPLE ID: SVB	
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 3	
BOREHOLE SEALANT:	
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMIN	ANT SOURCES, BOREHOLE ODOURS, ETC)
autside nv pet	vol tank
	CUVS
SOIL DESCRIPTION	1. 图 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Clay 60%, S	and 30, avanel 10
dark brain	and 30, gravel 10
SOIL MOISTURE: Wet Moist Dr	
WEATHER	THE RESERVE THE PROPERTY OF THE PARTY OF THE
AVERAGE TEMPERATURE: 16°C	PRECIPITATION: heavy rain
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIME:	
SAMPLE START TIME: 1500	SAMPLE START DATE: 3/6
SAMPLE RETRIEVAL TIME: 0970	SAMPLE RETRIEVAL DATE: 5/6
TOTAL DEPLOYMENT TIME: 41 - 20	
Note: sample outside, exposed	to Leavy rain



PROJECT INFORMATION	
PROJECT NAME / NUMBER 19003	
INITIALS:	
DATE: 3/6	
SAMPLE INFORMATION	
SAMPLE ID: SV 14	
SAMPLE TYPE: Sub-slab Soil Vapour	
SAMPLE DEPTH: 37	
BOREHOLE SEALANT: 20	
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMINATIONS)	NANT SOURCES, BOREHOLE ODOURS, ETC)
FU sand, 30 clay	iellow brunn
SOII. MOISTURE: Wet Moist D	ry
WEATHER AVERAGE TEMPERATURE: 16	PRECIPITATION:
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIME:	
SAMPLE START TIME: 1545	SAMPLE START DATE: 3/6
SAMPLE RETRIEVAL TIME: $OqZq$	SAMPLE RETRIEVAL DATE:
TOTAL DEPLOYMENT TIME: 41:53	



PROJECT INFORMATION	
PROJECT NAME / NUMBER (901031	
INITIALS: NF	
DATE: 3/6	
SAMPLE INFORMATION	
SAMPLE ID:)
SAMPLE TYPE: Sub-slab Soll Vapour	
SAMPLE DEPTH: 48	
BOREHOLE SEALANT:	
SAMPLE LOCATION OBSERVATIONS (OUTSIDE CONTAMIN	ANT SOURCES, BOREHOLE ODOURS, ETC)
indoor, no c	alouv
•	
oil on gre	ond in by
SOIL DESCRIPTION	
60 / sand P	10 day
. / 10	wn
SOIL MOISTURE: Wet Moist Dry	
WEATHER	
AVERAGE TEMPERATURE: 16	PRECIPITATION:
TIMING	
MINIMUM CALCULATED DEPLOYMENT TIME:	
157/	SAMPLE START DATE: 3/6
0.000	SAMPLE RETRIEVAL DATE: 5/6
TOTAL DEPLOYMENT TIME: 41:59	#





Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102 lac-mra



NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 659775-S

 Project name
 AUBURN

 Project ID
 1901031

 Received Date
 Jun 06, 2019

Client Sample ID			MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7	
Sample Matrix			Soil	Soil	Soil	Soil	
Eurofins mgt Sample No.			S19-Jn07723	S19-Jn07724	S19-Jn07725	S19-Jn07726	
Date Sampled			May 30, 2019	May 30, 2019	May 31, 2019	Jun 03, 2019	
Test/Reference	LOR	Unit					
Total Recoverable Hydrocarbons - 1999 NEPM Frac	tions	•					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20	
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20	
TRH C15-C28	50	mg/kg	100	< 50	180	79	
TRH C29-C36	50	mg/kg	250	< 50	380	55	
TRH C10-36 (Total)	50	mg/kg	350	< 50	560	134	
Volatile Organics	•						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	

Report Number: 659775-S



Client Sample ID			MW103/0.2-0.3	MW103/1.6-1.8	MW105/0.8-1.0	MW108/1.6-1.7
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S19-Jn07723	S19-Jn07724	S19-Jn07725	S19-Jn07726
Date Sampled			May 30, 2019	May 30, 2019	May 31, 2019	Jun 03, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	105	54	96	87
Toluene-d8 (surr.)	1	%	112	88	100	82
Total Recoverable Hydrocarbons - 2013 NEPM	Fractions					
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)N04	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	260	< 100	490	120
TRH >C34-C40	100	mg/kg	330	< 100	160	< 100
TRH >C10-C40 (total)*	100	mg/kg	590	< 100	650	120
Polycyclic Aromatic Hydrocarbons		1				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5



Client Sample ID Sample Matrix			MW103/0.2-0.3 Soil	MW103/1.6-1.8 Soil	MW105/0.8-1.0 Soil	MW108/1.6-1.7 Soil
Eurofins mgt Sample No.			S19-Jn07723	S19-Jn07724	S19-Jn07725	S19-Jn07726
Date Sampled			May 30, 2019	May 30, 2019	May 31, 2019	Jun 03, 2019
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons	·					
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	98	120	146	126
p-Terphenyl-d14 (surr.)	1	%	74	83	98	84
Heavy Metals						
Arsenic	2	mg/kg	< 2	8.5	2.5	17
Cadmium	0.4	mg/kg	< 0.4	< 0.4	1.3	3.0
Chromium	5	mg/kg	23	17	76	34
Copper	5	mg/kg	78	22	170	830
Lead	5	mg/kg	7.4	34	44	260
Mercury	0.1	mg/kg	< 0.1	< 0.1	0.4	0.1
Nickel	5	mg/kg	100	10	18	79
Zinc	5	mg/kg	80	80	95	980

9.7

27

25

18

Client Sample ID Sample Matrix			MW109/1.2-1.4 Soil	MW110/0.2-0.3 Soil
Eurofins mgt Sample No.			S19-Jn07727	S19-Jn07728
Date Sampled			Jun 03, 2019	Jun 03, 2019
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEF	PM Fractions			
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	220	< 50
TRH C29-C36	50	mg/kg	210	< 50
TRH C10-36 (Total)	50	mg/kg	430	< 50
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5

1

%

% Moisture



Client Sample ID Sample Matrix			MW109/1.2-1.4 Soil	MW110/0.2-0.3 Soil
Eurofins mgt Sample No.			S19-Jn07727	S19-Jn07728
Date Sampled			Jun 03, 2019	Jun 03, 2019
Test/Reference	LOR	Unit		00, 2010
Volatile Organics	LOK	Offic		
•	0.5		.0.5	.0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
lodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	102	89
Toluene-d8 (surr.)	1	%	102	82



Client Sample ID			MW109/1.2-1.4	MW110/0.2-0.3
Sample Matrix			Soil	Soil
Eurofins mgt Sample No.			S19-Jn07727	S19-Jn07728
Date Sampled			Jun 03, 2019	Jun 03, 2019
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 2013 NEPM	Fractions	•		
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)N04	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)N01	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	390	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	390	< 100
Polycyclic Aromatic Hydrocarbons		3 3		
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	2.7	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	2.9	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	3.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	0.6	< 0.5
Benz(a)anthracene	0.5	mg/kg	2.0	< 0.5
Benzo(a)pyrene	0.5	mg/kg	2.0	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	2.3	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	1.2	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	0.9	< 0.5
Chrysene	0.5	mg/kg	1.7	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	4.1	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	1.1	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	2.1	< 0.5
Pyrene	0.5	mg/kg	3.6	< 0.5
Total PAH*	0.5	mg/kg	21.6	< 0.5
2-Fluorobiphenyl (surr.)	1	%	150	119
p-Terphenyl-d14 (surr.)	1	%	96	79
Heavy Metals			1	
Arsenic	2	mg/kg	15	3.7
Cadmium	0.4	mg/kg	0.5	< 0.4
Chromium	5	mg/kg	24	90
Copper	5	mg/kg	890	27
Lead	5	mg/kg	170	11
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	28	78
Zinc	5	mg/kg	670	71
		g/.kg	5,0	1
% Moisture	1	%	17	17

Report Number: 659775-S



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins mgt Suite B8			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 11, 2019	14 Day
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Sydney	Jun 11, 2019	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 11, 2019	14 Day
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 11, 2019	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 11, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 11, 2019	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Jun 07, 2019	14 Day

⁻ Method: LTM-GEN-7080 Moisture

Report Number: 659775-S



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Unit F3, Building F

Sydney

Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone: +61 7 3902 4600 NATA # 1261 Site # 20794 Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID: AUBURN 1901031 Order No.: 3203 Report #: 659775

Phone: 02 9979 1722 **Fax:** 02 9979 1222

Received: Jun 6, 2019 4:03 PM

Due: Jun 18, 2019

Priority: 7 Day
Contact Name: Ben Pearce

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

	HOLD	Moisture Set	Eurofins mgt Suite B8					
Melb	Х	X	Х					
		 NATA Site # 1 y - NATA Site # 						
		NATA Site # 237						
Exte	rnal Laboratory	/						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	MW103/0.2- 0.3	May 30, 2019		Soil	S19-Jn07723		х	х
2	MW103/1.6- 1.8	May 30, 2019		Soil	S19-Jn07724		х	х
3	MW105/0.8- 1.0	May 31, 2019		Soil	S19-Jn07725		х	х
4	MW108/1.6- 1.7	Jun 03, 2019		Soil	S19-Jn07726		х	х
5	MW109/1.2- 1.4	Jun 03, 2019		Soil	S19-Jn07727		х	х
6	MW110/0.2-	Jun 03, 2019		Soil	S19-Jn07728		Х	Х

Eurofins | mgt Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400 Page 7 of 17 Report Number: 659775-S



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Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901031

Order No.: 3203 Report #:

659775 Phone: 02 9979 1722 Fax:

02 9979 1222

Received: Jun 6, 2019 4:03 PM Due: Jun 18, 2019

Priority: 7 Day **Contact Name:** Ben Pearce

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

						HOLD	Moisture Set	Eurofins mgt Suite B8		
	Sample Detail									
Melk	Melbourne Laboratory - NATA Site # 1254 & 14271									
Syd	ney Laboratory	- NATA Site # 18	8217			Х	Х	Х		
		y - NATA Site #								
Pert		NATA Site # 237	36							
7	0.3	May 20, 2010		Soil	040 1-07700					
7	MW101/0.15- 0.25	May 30, 2019		2011	S19-Jn07729	Х				
8	MW102/0.1- 0.2	May 30, 2019		Soil	S19-Jn07730	Х				
9	MW104/0.2- 0.3	May 31, 2019		Soil	S19-Jn07731	Х				
10	MW105/0.2- 0.3	May 31, 2019		Soil	S19-Jn07732	х				
11	MW106/0.9- 1.0	Jun 03, 2019		Soil	S19-Jn07733	х				
12	MW106/0.4- 0.6	Jun 03, 2019	·	Soil	S19-Jn07734	х				
13	MW107/0.5-	May 31, 2019		Soil	S19-Jn07735	Х				



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Site # 1254 & 14271

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Received:

Contact Name:

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Company Name: Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901031

Order No.: 3203 Report #: 659775

Phone: 02 9979 1722 Fax: 02 9979 1222

Jun 6, 2019 4:03 PM Due: Jun 18, 2019 Priority: 7 Day

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Ben Pearce

Sample Detail Melbourne Laboratory - NATA Site # 1254 & 14271								Eurofins mgt Suite B8
				71				
		- NATA Site # 1				Х	Х	Х
		y - NATA Site #						
Perti	0.7	NATA Site # 237	36	l				
14	MW108/0.3- 0.4	Jun 03, 2019		Soil	S19-Jn07736	Х		
15	DS1	May 31, 2019		Soil	S19-Jn07737	Х		
16								
17	MW111/0.2- 0.3	Jun 04, 2019		Soil	S19-Jn07739	Х		
Test	Counts					11	6	6



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis
- 8. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

ppm: Parts per million **ppb:** Parts per billion
%: Percentage

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.2 2018
CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Total Recoverable Hydrocarbons - 1999 NEPM Fr	actions				
TRH C6-C9	mg/kg	< 20	20	Pass	
TRH C10-C14	mg/kg	< 20	20	Pass	
TRH C15-C28	mg/kg	< 50	50	Pass	
TRH C29-C36	mg/kg	< 50	50	Pass	
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/kg	< 0.5	0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5	0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5	0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5	0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5	0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5	0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5	0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5	0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5	0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5	0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5	0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5	0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5	0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5	0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5	0.5	Pass	
1.4-Dichlorobenzene		< 0.5	0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5	0.5	Pass	
	mg/kg				
2-Propanone (Acetone)	mg/kg	< 0.5	0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5	0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5	0.5	Pass	
Allyl chloride	mg/kg	< 0.5	0.5	Pass	
Benzene	mg/kg	< 0.1	0.1	Pass	
Bromobenzene	mg/kg	< 0.5	0.5	Pass	
Bromochloromethane	mg/kg	< 0.5	0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5	0.5	Pass	
Bromoform	mg/kg	< 0.5	0.5	Pass	
Bromomethane	mg/kg	< 0.5	0.5	Pass	
Carbon disulfide	mg/kg	< 0.5	0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5	0.5	Pass	
Chlorobenzene	mg/kg	< 0.5	0.5	Pass	
Chloroethane	mg/kg	< 0.5	0.5	Pass	
Chloroform	mg/kg	< 0.5	0.5	Pass	
Chloromethane	mg/kg	< 0.5	0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5	0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5	0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5	0.5	Pass	
Dibromomethane	mg/kg	< 0.5	0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5	0.5	Pass	
Ethylbenzene	mg/kg	< 0.1	0.1	Pass	
lodomethane	mg/kg	< 0.5	0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5	0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2	0.2	Pass	
Methylene Chloride	mg/kg	< 0.5	0.5	Pass	
o-Xylene	mg/kg	< 0.1	0.1	Pass	



Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Styrene	mg/kg	< 0.5	0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5	0.5	Pass	
Toluene	mg/kg	< 0.1	0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5	0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5	0.5	Pass	
Trichloroethene	mg/kg	< 0.5	0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5	0.5	Pass	
Vinyl chloride	mg/kg	< 0.5	0.5	Pass	
Xylenes - Total	mg/kg	< 0.3	0.3	Pass	
Method Blank	1 0 0				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	i				
Naphthalene	mg/kg	< 0.5	0.5	Pass	
TRH C6-C10	mg/kg	< 20	20	Pass	
TRH >C10-C16	mg/kg	< 50	50	Pass	
TRH >C16-C34	mg/kg	< 100	100	Pass	
TRH >C34-C40	mg/kg	< 100	100	Pass	
Method Blank	1 1119/119	, , , , , , , , , , , , , , , , , , , ,	1 100		
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	mg/kg	< 0.5	0.5	Pass	
Acenaphthylene	mg/kg	< 0.5	0.5	Pass	
Anthracene	mg/kg	< 0.5	0.5	Pass	
Benz(a)anthracene		< 0.5	0.5	Pass	
	mg/kg			Pass	
Benzo(a)pyrene	mg/kg	< 0.5	0.5		
Benzo(b&j)fluoranthene	mg/kg	< 0.5	0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5	0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5	0.5	Pass	
Chrysene	mg/kg	< 0.5	0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5	0.5	Pass	
Fluoranthene	mg/kg	< 0.5	0.5	Pass	
Fluorene	mg/kg	< 0.5	0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5	0.5	Pass	
Naphthalene	mg/kg	< 0.5	0.5	Pass	
Phenanthrene	mg/kg	< 0.5	0.5	Pass	
Pyrene	mg/kg	< 0.5	0.5	Pass	
Method Blank		ı ı	<u> </u>	I	
Heavy Metals					
Arsenic	mg/kg	< 2	2	Pass	
Cadmium	mg/kg	< 0.4	0.4	Pass	
Chromium	mg/kg	< 5	5	Pass	
Copper	mg/kg	< 5	5	Pass	
Lead	mg/kg	< 5	5	Pass	
Mercury	mg/kg	< 0.1	0.1	Pass	
Nickel	mg/kg	< 5	5	Pass	
Zinc	mg/kg	< 5	5	Pass	
LCS - % Recovery					
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	3				
TRH C6-C9	%	116	70-130	Pass	
TRH C10-C14	%	80	70-130	Pass	
LCS - % Recovery					
Volatile Organics					
1.1-Dichloroethene	%	80	70-130	Pass	
1.1.1-Trichloroethane	%	94	70-130	Pass	
1.2-Dichlorobenzene	%	103	70-130	Pass	
1.2-Dichloroethane	%	83	70-130	Pass	



Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Benzene			%	102		70-130	Pass	
Ethylbenzene			%	119		70-130	Pass	
m&p-Xylenes			%	115		70-130	Pass	
o-Xylene			%	112		70-130	Pass	
Toluene			%	111		70-130	Pass	
Trichloroethene			%	100		70-130	Pass	
Xylenes - Total			%	114		70-130	Pass	
LCS - % Recovery								
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions						
Naphthalene			%	126		70-130	Pass	
TRH C6-C10			%	113		70-130	Pass	
TRH >C10-C16			%	84		70-130	Pass	
LCS - % Recovery								
Polycyclic Aromatic Hydrocarbons	3							
Acenaphthene			%	109		70-130	Pass	
Acenaphthylene			%	107		70-130	Pass	
Anthracene			%	100		70-130	Pass	
Benz(a)anthracene			%	102		70-130	Pass	
Benzo(a)pyrene			%	108		70-130	Pass	
Benzo(b&j)fluoranthene			%	105		70-130	Pass	
Benzo(g.h.i)perylene			%	108		70-130	Pass	
Benzo(k)fluoranthene			%	111		70-130	Pass	
Chrysene			%	108		70-130	Pass	
Dibenz(a.h)anthracene			%	130		70-130	Pass	
Fluoranthene			%	92		70-130	Pass	
Fluorene			%	109		70-130	Pass	
Indeno(1.2.3-cd)pyrene			%	125		70-130	Pass	
Naphthalene			%	110		70-130	Pass	
Phenanthrene			%	89		70-130	Pass	
Pyrene			%	92		70-130	Pass	
LCS - % Recovery				<u> </u>				
Heavy Metals								
Arsenic			%	100		70-130	Pass	
Cadmium			%	96		70-130	Pass	
Chromium			%	104		70-130	Pass	
Copper			%	104		70-130	Pass	
Lead			%	102		70-130	Pass	
Mercury			%	104		70-130	Pass	
Nickel			%	104		70-130	Pass	
Zinc			%	104		70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons -	1999 NEPM Fract	1		Result 1				
TRH C6-C9	S19-Jn14400	NCP	%	78		70-130	Pass	
TRH C10-C14	S19-Jn12819	NCP	%	74		70-130	Pass	
Spike - % Recovery					1			
Volatile Organics				Result 1				
1.1-Dichloroethene	S19-Jn07723	CP	%	77		70-130	Pass	
1.1.1-Trichloroethane	S19-Jn07723	CP	%	88		70-130	Pass	
1.2-Dichlorobenzene	S19-Jn07723	CP	%	92		70-130	Pass	
1.2-Dichloroethane	S19-Jn07723	CP	%	78		70-130	Pass	
Benzene	S19-Jn07723	CP	%	84		70-130	Pass	
Ethylbenzene	S19-Jn07723	CP	%	96		70-130	Pass	
m&p-Xylenes	S19-Jn07723	CP	%	92		70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
o-Xylene	S19-Jn07723	CP	%	89			70-130	Pass	
Toluene	S19-Jn07723	CP	%	90			70-130	Pass	
Trichloroethene	S19-Jn07723	CP	%	92			70-130	Pass	
Xylenes - Total	S19-Jn07723	CP	%	91			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbo	ns - 2013 NEPM Fract	ions		Result 1					
Naphthalene	S19-Jn07723	CP	%	94			70-130	Pass	
TRH C6-C10	S19-Jn14400	NCP	%	80			70-130	Pass	
TRH >C10-C16	S19-Jn12819	NCP	%	77			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarb	ons			Result 1					
Acenaphthene	S19-Jn07827	NCP	%	93			70-130	Pass	
Acenaphthylene	S19-Jn07827	NCP	%	93			70-130	Pass	
Anthracene	S19-Jn07827	NCP	%	72			70-130	Pass	
Benz(a)anthracene	S19-Jn07827	NCP	%	104			70-130	Pass	
Benzo(a)pyrene	S19-Jn07827	NCP	%	108			70-130	Pass	
Benzo(b&j)fluoranthene	S19-Jn07827	NCP	%	125			70-130	Pass	
Benzo(g.h.i)perylene	S19-Jn14400	NCP	%	98			70-130	Pass	
Benzo(k)fluoranthene	S19-Jn07827	NCP	%	124			70-130	Pass	
Chrysene	S19-Jn07827	NCP	%	105			70-130	Pass	
Dibenz(a.h)anthracene	S19-Jn08093	NCP	%	76			70-130	Pass	
Fluoranthene	S19-Jn07827	NCP	%	93			70-130	Pass	
Fluorene	S19-Jn07827	NCP	%	98			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S19-Jn07827	NCP	%	70			70-130	Pass	
Naphthalene	S19-Jn07827	NCP	%	95			70-130	Pass	
Phenanthrene	S19-Jn07827	NCP	%	76			70-130	Pass	
Pyrene	S19-Jn07827	NCP	%	95			70-130	Pass	
Spike - % Recovery			7.5					1 3.00	
Heavy Metals				Result 1					
Copper	S19-Jn07831	NCP	%	105			70-130	Pass	
Lead	S19-Jn07831	NCP	%	90			70-130	Pass	
Nickel	S19-Jn07831	NCP	%	125			70-130	Pass	
Zinc	S19-Jn07831	NCP	%	102			70-130	Pass	
Spike - % Recovery				-					
Heavy Metals				Result 1					
Arsenic	S19-Jn07726	СР	%	99			70-130	Pass	
Cadmium	S19-Jn07726	СР	%	88			70-130	Pass	
Chromium	S19-Jn07726	СР	%	98			70-130	Pass	
Mercury	S19-Jn07726	СР	%	113			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarboi	ns - 1999 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH C10-C14	S19-Jn08442	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S19-Jn08442	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S19-Jn08442	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbon	ns - 2013 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH >C10-C16	S19-Jn08442	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S19-Jn08442	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S19-Jn08442	NCP	mg/kg	< 100	< 100	<1	30%	Pass	

Report Number: 659775-S



Dunliagta									
Duplicate							I		
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		 _ 	
Acceptable	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S19-Jn07827	NCP	mg/kg	0.5	< 0.5	43	30%	Fail	Q15
Chrysene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S19-Jn07827	NCP	mg/kg	0.5	< 0.5	40	30%	Fail	Q15
Fluorene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S19-Jn07827	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals	1		1	Result 1	Result 2	RPD			
Arsenic	S19-Jn07725	CP	mg/kg	2.5	3.0	18	30%	Pass	
Cadmium	S19-Jn07725	CP	mg/kg	1.3	22	<1	30%	Pass	
Chromium	S19-Jn07725	CP	mg/kg	76	59	<1	30%	Pass	
Copper	S19-Jn07725	CP	mg/kg	170	170	5.0	30%	Pass	
Lead	S19-Jn07725	CP	mg/kg	44	52	18	30%	Pass	
Mercury	S19-Jn07725	CP	mg/kg	0.4	0.3	<1	30%	Pass	
Nickel	S19-Jn07725	CP	mg/kg	18	22	20	30%	Pass	
Zinc	S19-Jn07725	CP	mg/kg	95	150	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH C6-C9	S19-Jn07726	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<u><1</u>	30%	Pass	
4-Methyl-2-pentanone (MIBK)		CP						Pass	
` ' '	S19-Jn07726		mg/kg	< 0.5	< 0.5	<1	30%		
Allyl chloride	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene Bromobenzene	S19-Jn07726 S19-Jn07726	CP CP	mg/kg	< 0.1 < 0.5	< 0.1 < 0.5	<1	30%	Pass Pass	
	- STU-IND//26		mg/kg	115	(1)	<1	30%	. Pacc	



Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Bromochloromethane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	S19-Jn07726	СР	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	S19-Jn07726	СР	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	S19-Jn07726	СР	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	S19-Jn07726	СР	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	S19-Jn07726	СР	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total	S19-Jn07726	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbon	s - 2013 NEPM Fract	ions		Result 1	Result 2	RPD			
Naphthalene	S19-Jn07726	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-Jn07726	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S19-Jn07727	CP	%	17	17	1.0	30%	Pass	



Comments

Sample Integrity

Custody Seals Intact (if used) N/A Attempt to Chill was evident Yes Sample correctly preserved Yes Appropriate sample containers have been used Yes Sample containers for volatile analysis received with minimal headspace Yes Samples received within HoldingTime Yes Some samples have been subcontracted No

Qualifier Codes/Comments

Code	Description

F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis). N01

Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.

N02

F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes. N04

Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs N07

Q15 The RPD reported passes Eurofins | mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

Nibha Vaidva Analytical Services Manager Andrew Sullivan Senior Analyst-Organic (NSW) Gabriele Cordero Senior Analyst-Metal (NSW)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Melbourne

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ABN - 50 005 085 521

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Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901031 COC number: Not provided

Turn around time: 7 Day

Jun 6, 2019 4:03 PM Date/Time received:

Eurofins | mgt reference: 659775

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt: 9.8 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \square Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- Custody Seals intact (if used). N/A

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone: +61 (2) 9900 8415 or by e.mail: Nibha Vaidya@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.





Relinquished by Metalis**(circle) As, Cd, Cr, Cu, NI, Pb, Zn, Hg, Cr*, Cr*, Fe*, Fe*, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Ti, Bi, Sh F: (02) 9979 1722 F: (02) 9979 1222 Building Q2, Level 3 Geo-Logix Pty Ltd 2309/4 Daydream St Warriewood, NSW 2102 ABM: 85 116 802 936 Lab ID MW11/0,210.3 4.1-8.1/601MW TSI MM102/0.3-0.4 MM106/0.3-0.6 MM106/0.9-0.6 MW110/0.2-0.3 MINIOS/0.2-0.3 MW103/0.1-0.25 MN103/1.6-1.8 MW103/0.2-0.3 Sample ID Project Number: Project Name: Contact email: Project Manager: Ben Pearce XXXXXXX Project: Aubum Location. XXXXXXX Aubum Ge- Logix.com.out Matrix 1901031 Date Submitted: 04/06/19 31/05/19 03/06/19 31/05/19 03/06/19 31/05/19 30/05/19 30/05/19 ANALYSIS REQUIRED Chain of Custody TRH - C6 - C10 TRH - C10 - C40 MONITORING WELL NO. 3 PAH PCBs TAT required: Send invoice to: Quote Reference STD accounts@geo-logix.com.au Project Number X 888 88 ARREST ALLS IDENSO, CITAL BOD CODASCOL THOUST EDOUGHOUSE AND A STATE OF THE STATE O TRIVETEDOMPHINOCINOPPARE **BRUGOONYMINGELENGE** BRINGEDOWN BHISTYANDCZIBAGL **Eurofins MGT Suite EPENDICALISMO ENHACETRIFICAL** PAPARE ELECTED AND A STATE OF THE STATE OF T MANAMOCBABA Philipocalana



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Morgan Singleton-Fookes

 Report
 659759-A

 Project name
 AUBURN

 Project ID
 1901031

 Received Date
 Jun 05, 2019

Client Sample ID			SV1	SV2	SV3	SV4
Sample Matrix			WMS	WMS	WMS	WMS
Eurofins mgt Sample No.			S19-Jn07607	S19-Jn07608	S19-Jn07609	S19-Jn07610
Date Sampled			Jun 03, 2019	Jun 03, 2019	Jun 03, 2019	Jun 03, 2019
Test/Reference	LOR	Unit				
VOCs in Ambient Air (WMS Sampler)						
1.1-Dichloroethane	9.5	ug/m3	< 9.5	< 9.5	< 9.5	< 9.5
1.1-Dichloroethene	43	ug/m3	< 43	< 43	< 43	< 43
1.1.1-Trichloroethane	9.9	ug/m3	< 9.9	< 9.9	< 9.9	< 9.9
1.1.2-Trichloroethane	5.7	ug/m3	< 5.7	< 5.7	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
1.2-Dichlorobenzene	1.8	ug/m3	< 1.8	< 1.8	< 1.8	< 1.8
1.2-Dichloroethane	6.6	ug/m3	< 6.6	< 6.6	< 6.6	< 6.6
1.2.4-Trimethylbenzene	2.2	ug/m3	< 2.2	< 2.2	< 2.2	< 2.2
1.3-Dichlorobenzene	2.1	ug/m3	< 2.1	< 2.1	< 2.1	< 2.1
1.3.5-Trimethylbenzene	2.4	ug/m3	< 2.4	< 2.4	< 2.4	< 2.4
1.4-Dichlorobenzene	2	ug/m3	< 2	< 2	< 2	< 2
Benzene	27	ug/m3	< 27	< 27	< 27	< 27
Carbon Tetrachloride	8.4	ug/m3	< 8.4	< 8.4	< 8.4	< 8.4
Chlorobenzene	4.1	ug/m3	< 4.1	< 4.1	< 4.1	< 4.1
Chloroform	7.6	ug/m3	< 7.6	< 7.6	< 7.6	< 7.6
Chloromethane	50	ug/m3	< 50	< 50	< 50	< 50
cis-1.2-Dichloroethene	7.8	ug/m3	< 7.8	< 7.8	< 7.8	< 7.8
Ethylbenzene	3.5	ug/m3	< 3.5	< 3.5	< 3.5	< 3.5
Isopropyl benzene (Cumene)	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6
m.p-Xylene	3.5	ug/m3	< 3.5	< 3.5	< 3.5	94
Naphthalene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
o-Xylene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
Propylbenzene	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6
Styrene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
Tetrachloroethene	3.8	ug/m3	< 3.8	< 3.8	< 3.8	< 3.8
Toluene	5	ug/m3	210	370	1600	11000
trans-1.2-Dichloroethene	18	ug/m3	< 18	< 18	< 18	< 18
Trichloroethene	5.6	ug/m3	< 5.6	< 5.6	< 5.6	< 5.6
Vinyl Chloride	48	ug/m3	< 48	< 48	< 48	< 48
CRC CARE TR 23 PVI	·					
>C6-C10	10	ug/m3	210	370	1600	11000
>C6-C10 TRH minus BTEX (F1)	10	ug/m3	< 10	< 10	< 10	< 10
>C10-C12	10	ug/m3	< 10	< 10	< 10	< 10
>C10-C12 minus Naphthalene (mod F2)	10	ug/m3	< 10	< 10	< 10	< 10



Client Sample ID			SV5	SV6	SV7	SV8
Sample Matrix			WMS	WMS	WMS	WMS
Eurofins mgt Sample No.			S19-Jn07611	S19-Jn07612	S19-Jn07613	S19-Jn07614
Date Sampled			Jun 03, 2019	Jun 03, 2019	Jun 03, 2019	Jun 03, 2019
Test/Reference	LOR	Unit				
VOCs in Ambient Air (WMS Sampler)	•					
1.1-Dichloroethane	9.5	ug/m3	< 9.5	< 9.5	< 9.5	< 9.5
1.1-Dichloroethene	43	ug/m3	< 43	< 43	< 43	< 43
1.1.1-Trichloroethane	9.9	ug/m3	< 9.9	< 9.9	< 9.9	< 9.9
1.1.2-Trichloroethane	5.7	ug/m3	< 5.7	< 5.7	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
1.2-Dichlorobenzene	1.8	ug/m3	< 1.8	< 1.8	< 1.8	< 1.8
1.2-Dichloroethane	6.6	ug/m3	< 6.6	< 6.6	< 6.6	< 6.6
1.2.4-Trimethylbenzene	2.2	ug/m3	< 2.2	< 2.2	< 2.2	< 2.2
1.3-Dichlorobenzene	2.1	ug/m3	< 2.1	< 2.1	< 2.1	< 2.1
1.3.5-Trimethylbenzene	2.4	ug/m3	< 2.4	< 2.4	< 2.4	< 2.4
1.4-Dichlorobenzene	2	ug/m3	< 2	< 2	< 2	< 2
Benzene	27	ug/m3	< 27	< 27	< 27	< 27
Carbon Tetrachloride	8.4	ug/m3	< 8.4	< 8.4	< 8.4	< 8.4
Chlorobenzene	4.1	ug/m3	< 4.1	< 4.1	< 4.1	< 4.1
Chloroform	7.6	ug/m3	< 7.6	< 7.6	< 7.6	< 7.6
Chloromethane	50	ug/m3	< 50	< 50	< 50	< 50
cis-1.2-Dichloroethene	7.8	ug/m3	< 7.8	< 7.8	< 7.8	< 7.8
Ethylbenzene	3.5	ug/m3	< 3.5	< 3.5	< 3.5	< 3.5
Isopropyl benzene (Cumene)	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6
m.p-Xylene	3.5	ug/m3	56	< 3.5	< 3.5	< 3.5
Naphthalene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
o-Xylene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
Propylbenzene	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6
Styrene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
Tetrachloroethene	3.8	ug/m3	< 3.8	< 3.8	< 3.8	< 3.8
Toluene	5	ug/m3	2600	250	110	900
trans-1.2-Dichloroethene	18	ug/m3	< 18	< 18	< 18	< 18
Trichloroethene	5.6	ug/m3	< 5.6	< 5.6	< 5.6	< 5.6
Vinyl Chloride	48	ug/m3	< 48	< 48	< 48	< 48
CRC CARE TR 23 PVI						
>C6-C10	10	ug/m3	2700	250	110	900
>C6-C10 TRH minus BTEX (F1)	10	ug/m3	< 10	< 10	< 10	< 10
>C10-C12	10	ug/m3	< 10	< 10	< 10	< 10
>C10-C12 minus Naphthalene (mod F2)	10	ug/m3	< 10	< 10	< 10	< 10

Client Sample ID Sample Matrix Eurofins mgt Sample No.			SV9 WMS S19-Jn07615	SV10 WMS S19-Jn07616	SV11 WMS S19-Jn07617	SV12 WMS S19-Jn07618
Date Sampled			Jun 03, 2019	Jun 03, 2019	Jun 03, 2019	Jun 03, 2019
Test/Reference	LOR	Unit				
VOCs in Ambient Air (WMS Sampler)						
1.1-Dichloroethane	9.5	ug/m3	< 9.5	< 9.5	< 9.5	< 9.5
1.1-Dichloroethene	43	ug/m3	< 43	< 43	< 43	< 43
1.1.1-Trichloroethane	9.9	ug/m3	< 9.9	< 9.9	< 9.9	< 9.9
1.1.2-Trichloroethane	5.7	ug/m3	< 5.7	< 5.7	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
1.2-Dichlorobenzene	1.8	ug/m3	< 1.8	< 1.8	< 1.8	< 1.8
1.2-Dichloroethane	6.6	ug/m3	< 6.6	< 6.6	< 6.6	< 6.6



Client Sample ID			SV9	SV10	SV11	SV12		
Sample Matrix			WMS	WMS	WMS	WMS		
Eurofins mgt Sample No.			S19-Jn07615	S19-Jn07616	S19-Jn07617	S19-Jn07618		
Date Sampled			Jun 03, 2019	Jun 03, 2019	Jun 03, 2019	Jun 03, 2019		
Test/Reference	LOR	Unit						
VOCs in Ambient Air (WMS Sampler)	•	•						
1.2.4-Trimethylbenzene	2.2	ug/m3	< 2.2	< 2.2	< 2.2	< 2.2		
1.3-Dichlorobenzene	2.1	ug/m3	< 2.1	< 2.1	< 2.1	< 2.1		
1.3.5-Trimethylbenzene	2.4	ug/m3	< 2.4	< 2.4	< 2.4	< 2.4		
1.4-Dichlorobenzene	2	ug/m3	< 2	< 2	< 2	< 2		
Benzene	27	ug/m3	< 27	< 27	< 27	< 27		
Carbon Tetrachloride	8.4	ug/m3	< 8.4	< 8.4	< 8.4	< 8.4		
Chlorobenzene	4.1	ug/m3	< 4.1	< 4.1	< 4.1	< 4.1		
Chloroform	7.6	ug/m3	< 7.6	< 7.6	< 7.6	< 7.6		
Chloromethane	50	ug/m3	< 50	< 50	< 50	< 50		
cis-1.2-Dichloroethene	7.8	ug/m3	< 7.8	< 7.8	< 7.8	< 7.8		
Ethylbenzene	3.5	ug/m3	< 3.5	< 3.5	< 3.5	< 3.5		
Isopropyl benzene (Cumene)	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6		
m.p-Xylene	3.5	ug/m3	78	< 3.5	< 3.5	< 3.5		
Naphthalene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3		
o-Xylene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3		
Propylbenzene	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6		
Styrene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3		
Tetrachloroethene	3.8	ug/m3	< 3.8	< 3.8	< 3.8	< 3.8		
Toluene	5	ug/m3	180	340	3800	220		
trans-1.2-Dichloroethene	18	ug/m3	< 18	< 18	< 18	< 18		
Trichloroethene	5.6	ug/m3	< 5.6	< 5.6	< 5.6	< 5.6		
Vinyl Chloride	48	ug/m3	< 48	< 48	< 48	< 48		
CRC CARE TR 23 PVI								
>C6-C10	10	ug/m3	250	340	3800	220		
>C6-C10 TRH minus BTEX (F1)	10	ug/m3	< 10	< 10	< 10	< 10		
>C10-C12	10	ug/m3	< 10	< 10	< 10	< 10		
>C10-C12 minus Naphthalene (mod F2)	10	ug/m3	< 10	< 10	< 10	< 10		

Client Sample ID			SV13	SV14	SV15	DV1
Sample Matrix			WMS	WMS	WMS	WMS
Eurofins mgt Sample No.			S19-Jn07619	S19-Jn07620	S19-Jn07621	S19-Jn07622
Date Sampled			Jun 03, 2019	Jun 03, 2019	Jun 03, 2019	Jun 03, 2019
Test/Reference	LOR	Unit				
VOCs in Ambient Air (WMS Sampler)						
1.1-Dichloroethane	9.5	ug/m3	< 9.5	< 9.5	< 9.5	< 9.5
1.1-Dichloroethene	43	ug/m3	< 43	< 43	< 43	< 43
1.1.1-Trichloroethane	9.9	ug/m3	< 9.9	< 9.9	< 9.9	< 9.9
1.1.2-Trichloroethane	5.7	ug/m3	< 5.7	< 5.7	< 5.7	< 5.7
1.1.2.2-Tetrachloroethane	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
1.2-Dichlorobenzene	1.8	ug/m3	< 1.8	< 1.8	< 1.8	< 1.8
1.2-Dichloroethane	6.6	ug/m3	< 6.6	< 6.6	< 6.6	< 6.6
1.2.4-Trimethylbenzene	2.2	ug/m3	< 2.2	< 2.2	< 2.2	< 2.2
1.3-Dichlorobenzene	2.1	ug/m3	< 2.1	< 2.1	< 2.1	< 2.1
1.3.5-Trimethylbenzene	2.4	ug/m3	< 2.4	< 2.4	< 2.4	< 2.4
1.4-Dichlorobenzene	2	ug/m3	< 2	< 2	< 2	< 2
Benzene	27	ug/m3	< 27	< 27	< 27	< 27
Carbon Tetrachloride	8.4	ug/m3	< 8.4	< 8.4	< 8.4	< 8.4
Chlorobenzene	4.1	ug/m3	< 4.1	< 4.1	< 4.1	< 4.1



Client Sample ID			SV13	SV14	SV15	DV1
Sample Matrix			WMS	WMS	WMS	WMS
Eurofins mgt Sample No.			S19-Jn07619	S19-Jn07620	S19-Jn07621	S19-Jn07622
Date Sampled	ate Sampled					Jun 03, 2019
Test/Reference	LOR	Unit				
VOCs in Ambient Air (WMS Sampler)						
Chloroform	7.6	ug/m3	< 7.6	< 7.6	< 7.6	< 7.6
Chloromethane	50	ug/m3	< 50	< 50	< 50	< 50
cis-1.2-Dichloroethene	7.8	ug/m3	< 7.8	< 7.8	< 7.8	< 7.8
Ethylbenzene	3.5	ug/m3	< 3.5	< 3.5	< 3.5	< 3.5
Isopropyl benzene (Cumene)	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6
m.p-Xylene	3.5	ug/m3	52	< 3.5	< 3.5	< 3.5
Naphthalene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
o-Xylene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
Propylbenzene	2.6	ug/m3	< 2.6	< 2.6	< 2.6	< 2.6
Styrene	3.3	ug/m3	< 3.3	< 3.3	< 3.3	< 3.3
Tetrachloroethene	3.8	ug/m3	< 3.8	< 3.8	< 3.8	< 3.8
Toluene	5	ug/m3	190	500	97	220
trans-1.2-Dichloroethene	18	ug/m3	< 18	< 18	< 18	< 18
Trichloroethene	5.6	ug/m3	< 5.6	< 5.6	< 5.6	< 5.6
Vinyl Chloride	48	ug/m3	< 48	< 48	< 48	< 48
CRC CARE TR 23 PVI						
>C6-C10	10	ug/m3	250	500	97	220
>C6-C10 TRH minus BTEX (F1)	10	ug/m3	< 10	< 10	< 10	< 10
>C10-C12	10	ug/m3	< 10	< 10	< 10	< 10
>C10-C12 minus Naphthalene (mod F2)	10	ug/m3	< 10	< 10	< 10	< 10

Client Sample ID			BLANK
Sample Matrix			WMS
Eurofins mgt Sample No.			S19-Jn07623
Date Sampled			Jun 03, 2019
Test/Reference	LOR	Unit	
VOCs in Ambient Air (WMS Sampler)			
1.1-Dichloroethane	9.5	ug/m3	< 9.5
1.1-Dichloroethene	43	ug/m3	< 43
1.1.1-Trichloroethane	9.9	ug/m3	< 9.9
1.1.2-Trichloroethane	5.7	ug/m3	< 5.7
1.1.2.2-Tetrachloroethane	3.3	ug/m3	< 3.3
1.2-Dichlorobenzene	1.8	ug/m3	< 1.8
1.2-Dichloroethane	6.6	ug/m3	< 6.6
1.2.4-Trimethylbenzene	2.2	ug/m3	< 2.2
1.3-Dichlorobenzene	2.1	ug/m3	< 2.1
1.3.5-Trimethylbenzene	2.4	ug/m3	< 2.4
1.4-Dichlorobenzene	2	ug/m3	< 2
Benzene	27	ug/m3	< 27
Carbon Tetrachloride	8.4	ug/m3	< 8.4
Chlorobenzene	4.1	ug/m3	< 4.1
Chloroform	7.6	ug/m3	< 7.6
Chloromethane	50	ug/m3	< 50
cis-1.2-Dichloroethene	7.8	ug/m3	< 7.8
Ethylbenzene	3.5	ug/m3	< 3.5
Isopropyl benzene (Cumene)	2.6	ug/m3	< 2.6
m.p-Xylene	3.5	ug/m3	< 3.5
Naphthalene	3.3	ug/m3	< 3.3



Client Sample ID Sample Matrix			BLANK WMS
Eurofins mgt Sample No.			S19-Jn07623
Date Sampled			Jun 03, 2019
Test/Reference	LOR	Unit	
VOCs in Ambient Air (WMS Sampler)	·	•	
o-Xylene	3.3	ug/m3	< 3.3
Propylbenzene	2.6	ug/m3	< 2.6
Styrene	3.3	ug/m3	< 3.3
Tetrachloroethene	3.8	ug/m3	< 3.8
Toluene	5	ug/m3	< 5
trans-1.2-Dichloroethene	18	ug/m3	< 18
Trichloroethene	5.6	ug/m3	< 5.6
Vinyl Chloride	48	ug/m3	< 48
CRC CARE TR 23 PVI			
>C6-C10	10	ug/m3	< 10
>C6-C10 TRH minus BTEX (F1)	10	ug/m3	< 10
>C10-C12	10	ug/m3	< 10
>C10-C12 minus Naphthalene (mod F2)	10	ug/m3	< 10



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
VOCs in Ambient Air (WMS Sampler)	Melbourne	Jun 07, 2019	30 Days
- Method: SOP #100 Rev 10 June 22 2017 Eurofins Air Toxics Analysis of VOCs			
CRC CARE TR 23 PVI	Melbourne	Jun 18, 2019	14 Days

- Method: LTM-ORG-2030 VOCs Ambient Air by GC/MS

Report Number: 659759-A



ABN - 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Melbourne 6 Monterey Road Dandenong South VIC 3175 Phone: +61 3 8564 5000

NATA # 1261

Site # 1254 & 14271

Sydney Unit F3, Building F 16 Mars Road Lane Cove West NSW 2066 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217

Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone: +61 7 3902 4600 NATA # 1261 Site # 20794

Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name: Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901031

Order No.:

8 8

Report #:

659759

Phone: 02 9979 1722 Fax: 02 9979 1222

Received: Jun 5, 2019 5:45 PM

Due: Jun 14, 2019 Priority: 7 Day

Contact Name: Morgan Singleton-Fookes

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217												
Brisbane Laboratory - NATA Site # 20794												
Perti	n Laboratory - N	NATA Site # 237	36									
Exte	rnal Laboratory	,		1								
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID							
1	SV1	Jun 03, 2019		WMS	S19-Jn07607	Х	Х					
2	SV2	Jun 03, 2019		WMS	S19-Jn07608	Х	Х					
3	SV3	Jun 03, 2019		WMS	S19-Jn07609	Х	Х					
4	SV4	Jun 03, 2019		WMS	S19-Jn07610	Х	Х					
5	SV5	Jun 03, 2019		WMS	S19-Jn07611	Х	Х					
6	SV6	Jun 03, 2019		WMS	S19-Jn07612	Х	Х					
7	SV7	Jun 03, 2019		WMS	S19-Jn07613	Х	Х					
8	SV8	Jun 03, 2019		WMS	S19-Jn07614	Х	Х					
9	SV9	Jun 03, 2019		WMS	S19-Jn07615	Х	Х					

Eurofins | mgt Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400

Page 7 of 12

Date Reported:Jun 18, 2019



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NATA # 1261

Site # 1254 & 14271

16 Mars Road Lane Cove West NSW 2066 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217

Sydney Unit F3, Building F Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone: +61 7 3902 4600 NATA # 1261 Site # 20794 Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID: AUBURN 1901031 Order No.:

Report #:

659759

Phone: Fax: 02 9979 1722 02 9979 1222 **Priority**: 7 Day

Received:

Due:

Contact Name: Morgan Singleton-Fookes

Jun 5, 2019 5:45 PM

Jun 14, 2019

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail									
	ourne Laborato			71		Х	Х		
	ney Laboratory								
	bane Laboratory								
	<mark>h Laboratory - N</mark>		736	ı					
10	SV10	Jun 03, 2019		WMS	S19-Jn07616	Х	Х		
11	SV11	Jun 03, 2019		WMS	S19-Jn07617	Χ	Х		
12	SV12	Jun 03, 2019		WMS	S19-Jn07618	Х	X		
13	SV13	Jun 03, 2019		WMS	S19-Jn07619	Χ	Х		
14	SV14	Jun 03, 2019		WMS	S19-Jn07620	Χ	Х		
15	SV15	Jun 03, 2019		WMS	S19-Jn07621	Х	Х		
16	DV1	Jun 03, 2019		WMS	S19-Jn07622	Х	Х		
17	BLANK	Jun 03, 2019		WMS	S19-Jn07623	Х	Х		
Test	Counts					17	17		



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis
- 8. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

ppm: Parts per million **ppb:** Parts per billion
%: Percentage

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody

SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.2 2018
CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported
 in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Eurofins | mgt Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 Page 9 of 12

ABN: 50 005 085 521 Telephone: +61 2 9900 8400 Report Number: 659759-A



Quality Control Results

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Method Blank						
VOCs in Ambient Air (WMS Sampler)						
1.1-Dichloroethane	ug/m3	< 9.5		9.5	Pass	
1.1-Dichloroethene	ug/m3	< 43		43	Pass	
1.1.1-Trichloroethane	ug/m3	< 9.9		9.9	Pass	
1.1.2-Trichloroethane	ug/m3	< 5.7		5.7	Pass	
1.1.2.2-Tetrachloroethane	ug/m3	< 3.3		3.3	Pass	
1.2-Dichlorobenzene	ug/m3	< 1.8		1.8	Pass	
1.2-Dichloroethane	ug/m3	< 6.6		6.6	Pass	
1.2.4-Trimethylbenzene	ug/m3	< 2.2		2.2	Pass	
1.3-Dichlorobenzene	ug/m3	< 2.1		2.1	Pass	
1.3.5-Trimethylbenzene	ug/m3	< 2.4		2.4	Pass	
1.4-Dichlorobenzene	ug/m3	< 2		2	Pass	
Benzene	ug/m3	< 27		27	Pass	
Carbon Tetrachloride	ug/m3	< 8.4		8.4	Pass	
Chlorobenzene	ug/m3	< 4.1		4.1	Pass	
Chloroform	ug/m3	< 7.6		7.6	Pass	
Chloromethane	ug/m3	< 50		50	Pass	
cis-1.2-Dichloroethene	ug/m3	< 7.8		7.8	Pass	
Ethylbenzene	ug/m3	< 3.5		3.5	Pass	
Isopropyl benzene (Cumene)	ug/m3	< 2.6		2.6	Pass	
m.p-Xylene	ug/m3	< 3.5		3.5	Pass	
Naphthalene	ug/m3	< 3.3		3.3	Pass	
o-Xylene		< 3.3		3.3	Pass	
Propylbenzene	ug/m3	< 2.6		2.6	Pass	
Styrene	ug/m3 ug/m3	< 3.3		3.3	Pass	
Tetrachloroethene		< 3.8		3.8	Pass	
Toluene	ug/m3	1		5		
	ug/m3	< 5			Pass	
trans-1.2-Dichloroethene Trichloroethene	ug/m3	< 18		18	Pass	
	ug/m3	< 5.6		5.6	Pass	
Vinyl Chloride Method Blank	ug/m3	< 48		48	Pass	
CRC CARE TR 23 PVI			T			
>C6-C10		. 10		10	Door	
	ug/m3	< 10		10	Pass Pass	
>C6-C10 TRH minus BTEX (F1)	ug/m3	< 10		10		
>C10-C12	ug/m3	< 10		10	Pass	
>C10-C12 minus Naphthalene (mod F2)	ug/m3	< 10		10	Pass	
LCS - % Recovery						
VOCs in Ambient Air (WMS Sampler)	0/	00		70.400	D	
1.1-Dichloroethane	%	93		70-130	Pass	
1.1-Dichloroethene	%	108		70-130	Pass	
1.1.1-Trichloroethane	%	100		70-130	Pass	
1.1.2-Trichloroethane	%	100		70-130	Pass	
1.1.2.2-Tetrachloroethane	%	102		70-130	Pass	
1.2-Dichlorobenzene	%	99		70-130	Pass	
1.2-Dichloroethane	%	101		70-130	Pass	
1.2.4-Trimethylbenzene	%	99		70-130	Pass	
1.3-Dichlorobenzene	%	101		70-130	Pass	
1.3.5-Trimethylbenzene	%	99		70-130	Pass	
1.4-Dichlorobenzene	%	101		70-130	Pass	
Benzene	%	99		70-130	Pass	
Carbon Tetrachloride	%	102		70-130	Pass	



Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Chlorobenzene	%	100	70-130	Pass	
Chloroform	%	101	70-130	Pass	
Chloromethane	%	95	70-130	Pass	
cis-1.2-Dichloroethene	%	88	70-130	Pass	
Ethylbenzene	%	100	70-130	Pass	
Isopropyl benzene (Cumene)	%	101	70-130	Pass	
m.p-Xylene	%	102	70-130	Pass	
Naphthalene	%	92	70-130	Pass	
o-Xylene	%	102	70-130	Pass	
Propylbenzene	%	98	70-130	Pass	
Styrene	%	99	70-130	Pass	
Tetrachloroethene	%	103	70-130	Pass	
Toluene	%	100	70-130	Pass	
trans-1.2-Dichloroethene	%	97	70-130	Pass	
Trichloroethene	%	103	70-130	Pass	
Vinyl Chloride	%	100	70-130	Pass	



Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised By

Nibha Vaidya Analytical Services Manager
Joseph Edouard Senior Analyst-Air (VIC)
Joseph Edouard Senior Analyst-Organic (VIC)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins, Img shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report, In on case shall Eurofins I mg be liable for consequential claims, but not limited to, lost profits, damages for relative to meet decidines and lost production arising from this report. This document shall be reported.

Report Number: 659759-A



Melbourne

Sydney Unit F3, Building F

Brishane I/21 Smallwood Place
Murarrie QLD 4172
Phone: +61 7 3902 4600
NATA # 1261 Site # 20794 Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Morgan Singleton-Fookes

AUBURN Project name: Project ID: 1901031 COC number: Not provided

Turn around time: 7 Day

Jun 5, 2019 5:45 PM Date/Time received:

Eurofins | mgt reference: 659759

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} All samples have been received as described on the above COC.
- \mathbf{V} COC has been completed correctly.
- N/A Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone: +61 (2) 9900 8415 or by e.mail: NibhaVaidya@eurofins.com

Results will be delivered electronically via e.mail to Morgan Singleton-Fookes - morgan@geo-logix.com.au.





NICHOR Relinquished By: Name, Signature, Date/Time Relinquished By: Name, Signature, Date/Time Phone: Address Sampled by: (Print and Sign)_ Project Manager: Sydney Laboratory **CHAIN OF CUSTODY RECORD** Relinquished By: Name, Signature, Date/Time Company_ Unit F3 Bld.F, 16 Mars Rd, Lane Cove West, NSW 2066 ABN 50 005 085 521 No 10 00 9 6 w 2 ナートの Geo-1001x SV3 2115 Field Sample I.D. tox, at the SVU (Location) State 217 Morocom ot-ZY Post Code 1839-AN-LU9 Sampler I.D (WMS 839-AN-EE 053 Code) 038 085 2002 134 1700 195 Received by: Name, Signature, Date/Time Received by: Name, Signature, Date/Time Received by: Name, Signature, Date/Time Deployment Date of Project Name: Project Number: Suburb & State: Purchase Order Number: Project Info Email address: Mogan (a) geo-logix , com an Deployment 00.80 13:15 0:00 3:45 3:15 34:15 0:20 14:30 1:40 :00 Time of 5/6 Retrieval Date of 08:15 08:38 07:25 08:00 04:8C 10:00 85:86 90:09 15.4 Retrieval Time of Notes: Rapid: Normal: 5ta Air Temp and Weather Description: Specify: (surcharges apply **Turn Around Time** raun7 Analysis Required (days) 100 Page _ Indoor Air Outdoor Air of 2 Workplace Monitoring Other (

Waterloo Membrane Sampler (WMS™)

#659759

Relinquish	Relinquish	Relinquished By:	11 10	10 01	• 7	DIAME	\$MG	7	10	2	.12	INO.	20	ABN:	Phone:	City	Address	Company_	Sampled b	Project Manager:	01110000	Unit E3 RId F 16 M	Sudnov lal	ARN 50 005 085 521	CHAIN OF	Waterloo	
Relinquished By: Name, Signature, Date/Time	Relinquished By: Name, Signature, Date/Time	ed By: Name, Signature, Date/Time				blank	ING	SINS	PINS	SV13	21/5	(Location)	Field Sample I.D.			StateF	0	Jeo-Logix.	it and Sig	mager: Morgan	1 10 1100 1000 1000	Unit E3 Bld E 16 Mars Rd Tane Cove West, NSW 2066	poratory	5 085 521	CHAIN OF CUSTODY RECORD	Waterloo Membrane Sampler (WMS™	
		10410				082	093	066	099	019	1839-AN-LU-03	Code)	Sampler I.D (WMS			Post Code			A NOTE	,		West NSW 2066				ISTM)	
Received by: N	Received by: N				4	4				,	3/6	Deployment	Date of														
Received by: Name, Signature, Date/Time	Received by: Name, Signature, Date/Tin	Received by: Name, Signature, Date/Time				16:45	17:10	15:30	15:45	15:00	08:40	Deployment	Time of	Project Name:	Project Number:	Suburb & State:	Purchase Order Numbe	Project Info			Email address:					41	
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		5.45pm				08:42	40:40	09:24	09:38	08:50	04:40	Retrieval	Time of							d	(w opp -)				101	ロンイのン
	Notes:	Air Temp and Weat										and a second	Analysis Required	Specify: (days)	(surcharges apply)	Rapid:	Normal: Sta	Turn Around Time		C	looks. com our						
		Weather Description:										-		r Ai										Page			
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		, ou:										-	her	plac	e IV	ion	itol	ing)			+	of 2	1		



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Morgan Singleton-Fookes

 Report
 659452-W-V2

 Project name
 AUBURN

 Project ID
 1901031

 Received Date
 Jun 05, 2019

Client Sample ID			MW101	R16MW102	MW103	MW104	
Sample Matrix			Water	Water	Water	Water	
Eurofins mgt Sample No.			S19-Jn05328 S19-Jn05329 Jun 05, 2019 Jun 05, 2019		S19-Jn05330	S19-Jn05331	
Date Sampled					Jun 05, 2019	Jun 05, 2019	
Test/Reference	LOR	Unit	, , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	
Total Recoverable Hydrocarbons - 1999 NEPM Frac		Offic					
TRH C6-C9	0.02	mg/L	< 0.02	13	< 0.02	0.18	
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
Volatile Organics	0.1	i iig/L	V 0.1	7 0.1	7 0.1	V 0.1	
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	0.029	
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.2	< 0.001	0.029	
1.1.1-Dictriordetherie	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Allyl chloride	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Benzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Bromobenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Bromochloromethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Bromoform	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Bromomethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Carbon disulfide	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001	



Client Commis ID			10111111	R16MW102		
Client Sample ID			MW101		MW103	MW104
Sample Matrix			Water	Water		Water
Eurofins mgt Sample No.			S19-Jn05328	S19-Jn05329	S19-Jn05330	S19-Jn05331
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Chlorobenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 1	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	2.0	< 0.001	0.17
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
lodomethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.4	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 2	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.2	< 0.001	0.005
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	8.3	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.2	< 0.001	0.026
Xylenes - Total	0.003	mg/L	< 0.003	< 0.6	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.4	< 0.003	0.005
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	10.3	< 0.005	0.218
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	10.3	< 0.005	0.192
4-Bromofluorobenzene (surr.)	1	%	73	113	97	89
Toluene-d8 (surr.)	1	%	82	121	101	95
Total Recoverable Hydrocarbons - 2013 NEPM F		T		_		
Naphthalene ^{N02}	0.01	mg/L	< 0.01	< 2	< 0.01	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02	13	< 0.02	0.17
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	13	< 0.02	0.17
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Polycyclic Aromatic Hydrocarbons						2 2 2 4
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Action	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene Dibenz(a.h)anthracene	0.001	mg/L mg/L	< 0.001 < 0.001	< 0.001 < 0.001	< 0.001 < 0.001	< 0.001 < 0.001



Client Sample ID Sample Matrix			MW101 Water	R16MW102 Water	MW103 Water	MW104 Water	
Eurofins mgt Sample No.			S19-Jn05328	S19-Jn05329	S19-Jn05330	S19-Jn05331	
, , , ,							
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	
Test/Reference	LOR	Unit					
Polycyclic Aromatic Hydrocarbons							
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
2-Fluorobiphenyl (surr.)	1	%	108	107	67	137	
p-Terphenyl-d14 (surr.)	1	%	101	115	62	125	
Heavy Metals							
Arsenic (filtered)	0.001	mg/L	0.001	0.006	0.004	< 0.001	
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	0.002	< 0.001	
Copper (filtered)	0.001	mg/L	0.002	0.001	< 0.001	< 0.001	
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Nickel (filtered)	0.001	mg/L	0.002	0.016	0.001	0.015	
Zinc (filtered)	0.005	mg/L	0.009	0.011	0.006	0.047	

Client Sample ID			MW106	MW107	MW108	MW110	
Sample Matrix			Water	Water	Water	Water	
Eurofins mgt Sample No.			S19-Jn05332	S19-Jn05333	S19-Jn05334	S19-Jn05335	
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	
Test/Reference	LOR	Unit					
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
Volatile Organics							
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	



Client Sample ID			MW106	MW107	MW108	MW110	
Sample Matrix			Water	Water	Water	Water	
Eurofins mgt Sample No.	i		S19-Jn05332	S19-Jn05333	S19-Jn05334	S19-Jn05335	
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	
Test/Reference	LOR	Unit	00, 2010	Jul. 55, 2515	00.100, 2010	00, 2010	
Volatile Organics	LOIX	Offic					
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
lodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001 < 0.003	< 0.001	
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003		< 0.003	
Total MAH* Vic EPA IWRG 621 CHC (Total)*	0.003	mg/L	< 0.003 < 0.005	< 0.003 < 0.005	< 0.003 < 0.005	< 0.003 < 0.005	
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
4-Bromofluorobenzene (surr.)	1	mg/L %	97	97	93	87	
Toluene-d8 (surr.)	1	%	106	103	102	92	
Total Recoverable Hydrocarbons - 2013 NEPM		/0	100	103	102	32	
Naphthalene ^{N02}	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	
TRH C6-C10	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	
TRH >C10-C16	0.02	mg/L	< 0.02	< 0.05	< 0.02	< 0.02	
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	
TRH >C16-C34	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03	
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	



Client Sample ID			MW106	MW107	MW108	MW110	
Sample Matrix			Water	Water	Water	Water	
Eurofins mgt Sample No.			S19-Jn05332	S19-Jn05333	S19-Jn05334	S19-Jn05335	
Date Sampled			Jun 05, 2019 Jun 05, 2019		Jun 05, 2019	Jun 05, 2019	
Test/Reference	LOR	Unit					
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
2-Fluorobiphenyl (surr.)	1	%	113	93	143	118	
p-Terphenyl-d14 (surr.)	1	%	102	90	138	118	
Heavy Metals							
Arsenic (filtered)	0.001	mg/L	0.006	0.002	0.007	< 0.001	
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002	
Chromium (filtered)	0.001	mg/L	0.001	0.004	< 0.001	< 0.001	
Copper (filtered)	0.001	mg/L	< 0.001	0.004	0.004	0.002	
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	
Nickel (filtered)	0.001	mg/L	0.007	0.001	0.010	0.013	
Zinc (filtered)	0.005	mg/L	0.009	< 0.005	0.009	0.034	

Client Sample ID Sample Matrix Eurofins mgt Sample No. Date Sampled			MW111 Water S19-Jn05336 Jun 05, 2019	R16GW4 Water S19-Jn05337 Jun 05, 2019	DW1 Water S19-Jn05338 Jun 05, 2019	R1 Water S19-Jn05340 Jun 05, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fract	ions					
TRH C6-C9	0.02	mg/L	0.04	1.5	0.17	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	0.75	0.031	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	0.26	0.024	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001



Client Sample ID			MW111	R16 GW4	DW1	R1
Sample Matrix			Water	Water	Water	Water
Eurofins mgt Sample No.			S19-Jn05336	S19-Jn05337	S19-Jn05338	S19-Jn05340
, , ,						
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Bromobenzene Draws a blasses of the res	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Bromodichloromethane Promoform	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Bromoform Bromomethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001 < 0.001	< 0.02 < 0.02	< 0.001 < 0.001	< 0.001 < 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Chloroform	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Chloromethane	0.003	mg/L	< 0.003	< 0.02	< 0.003	< 0.003
cis-1.2-Dichloroethene	0.001	mg/L	0.024	1.3	0.16	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.04	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.2	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.02	0.005	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	0.002	0.025	0.003	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	0.013	0.31	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.02	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	0.009	0.41	0.026	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.06	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.04	0.005	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	0.048	2.305	0.213	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	0.039	1.895	0.187	< 0.005



Client Sample ID			MW111	R16 GW4	DW1	R1	
Sample Matrix			Water	Water	Water	Water	
Eurofins mgt Sample No.			S19-Jn05336	S19-Jn05337	S19-Jn05338	S19-Jn05340	
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	
·	1.00	1.1-20	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	
Test/Reference	LOR	Unit					
Volatile Organics		0/	404	00	04	404	
4-Bromofluorobenzene (surr.) Toluene-d8 (surr.)	1 1	%	104 114	90	91	101 106	
Total Recoverable Hydrocarbons - 2013 NEPM Fra		70	114	96	90	106	
Naphthalene ^{N02}	0.01	mg/L	< 0.01	< 0.2	< 0.01	< 0.01	
TRH C6-C10	0.01	mg/L	0.04	1.4	0.16	< 0.02	
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	0.04	1.4	0.16	< 0.02	
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Fluorene Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001 < 0.001	< 0.001 < 0.001	< 0.001 < 0.001	-	
Naphthalene	0.001	mg/L mg/L	< 0.001	< 0.001	< 0.001		
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	_	
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	_	
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001	_	
2-Fluorobiphenyl (surr.)	1	%	127	101	92	-	
p-Terphenyl-d14 (surr.)	1	%	117	101	89	-	
Heavy Metals		•					
Arsenic (filtered)	0.001	mg/L	0.002	0.001	< 0.001	-	
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	-	
Chromium (filtered)	0.001	mg/L	< 0.001	0.001	< 0.001	-	
Copper (filtered)	0.001	mg/L	0.001	0.003	0.001	-	
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-	
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	-	
Nickel (filtered)	0.001	mg/L	0.003	0.002	0.015	-	
Zinc (filtered)	0.005	mg/L	0.007	< 0.005	0.046	-	



Client Sample ID Sample Matrix			GW1 Water	GW2 Water	MW109 Water
•					
Eurofins mgt Sample No.			S19-Jn07576	S19-Jn07577	S19-Jn07578
Date Sampled			Jun 06, 2019	Jun 06, 2019	Jun 06, 2019
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fra	ctions				
TRH C6-C9	0.02	mg/L	< 0.02	0.06	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	0.07	0.06
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	0.2
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	0.26
Volatile Organics					
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	0.006	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	0.003	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.001	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001 < 0.001	< 0.001	< 0.001 < 0.001
Carbon disulfide	0.001	mg/L		< 0.001	
Carbon Tetrachloride Chlorobenzene	0.001	mg/L mg/L	< 0.001 < 0.001	< 0.001 < 0.001	< 0.001 < 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Chloroform	0.001		< 0.001	< 0.001	< 0.005
Chloromethane	0.005	mg/L mg/L	< 0.005	< 0.005	< 0.005
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.001	mg/L	0.003	< 0.001	< 0.001
Methylene Chloride	0.002	mg/L	< 0.003	< 0.002	< 0.002



Client Sample ID Sample Matrix			GW1 Water	GW2 Water	MW109 Water
Eurofins mgt Sample No.			S19-Jn07576	S19-Jn07577	S19-Jn07578
, • ,					
Date Sampled			Jun 06, 2019	Jun 06, 2019	Jun 06, 2019
Test/Reference	LOR	Unit			
Volatile Organics					
o-Xylene	0.001	mg/L	0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	0.005	< 0.003	< 0.003
Total MAH*	0.003	mg/L	0.004	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005
4-Bromofluorobenzene (surr.)	1	%	121	130	110
Toluene-d8 (surr.)	1	%	131	142	114
Total Recoverable Hydrocarbons - 2013 NEPM			0.04	0.04	0.04
Naphthalene ^{N02}	0.01	mg/L	< 0.01	< 0.01	< 0.01
TRH C6-C10	0.02	mg/L	0.03	0.08	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	0.03	0.08	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05	0.07	0.09
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	0.07	0.09
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	0.2
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)* Polycyclic Aromatic Hydrocarbons	0.1	mg/L	< 0.1	< 0.1	0.29
Acenaphthene	0.001		. 0.001	- 0.001	- 0.001
•	0.001	mg/L	< 0.001	< 0.001 < 0.001	< 0.001
Acenaphthylene Anthracene	0.001	mg/L	< 0.001 < 0.001	< 0.001	< 0.001 < 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001		< 0.001
		mg/L		< 0.001 < 0.001	< 0.001
Benzo(a)pyrene Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L mg/L	< 0.001 < 0.001	< 0.001	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	97	126	132
p-Terphenyl-d14 (surr.)	1	%	102	117	134
Heavy Metals		, ,,	102	1	1.5-1
Arsenic (filtered)	0.001	mg/L	< 0.001	0.002	0.004
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.002	< 0.0002
Chromium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	0.004
Copper (filtered)	0.001	mg/L	0.005	0.004	0.004



Client Sample ID Sample Matrix			GW1 Water	GW2 Water	MW109 Water
Eurofins mgt Sample No.			S19-Jn07576	S19-Jn07577	S19-Jn07578
Date Sampled			Jun 06, 2019	Jun 06, 2019	Jun 06, 2019
Test/Reference	LOR	Unit			
Heavy Metals					
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	0.005
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.001	< 0.001	0.005
Zinc (filtered)	0.005	mg/L	0.010	0.031	0.020



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins mgt Suite B8 (filtered metals)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 07, 2019	7 Day
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Sydney	Jun 07, 2019	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 07, 2019	7 Day
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 07, 2019	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 07, 2019	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8 filtered	Sydney	Jun 13, 2019	28 Day
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			

Report Number: 659452-W-V2



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Company Name: Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901031

Order No.: 3202 Report #: 659452

Phone: 02 9979 1722

Fax: 02 9979 1222 Received: Jun 5, 2019 5:45 PM

Due: Jun 14, 2019 Priority: 7 Day

Contact Name: Morgan Singleton-Fookes

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

	Sample Detail												
Melb	Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydr	Х	Х	Х										
Brisl	bane Laborator	y - NATA Site #	20794										
Pertl	h Laboratory - I	NATA Site # 237	36										
Exte	rnal Laboratory	<u>/</u>											
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID								
1	MW101	Jun 05, 2019		Water	S19-Jn05328			Х					
2	MW102	Jun 05, 2019		Water	S19-Jn05329			Х					
3	MW103	Jun 05, 2019		Water	S19-Jn05330			Х					
4	MW104												
5	MW106	Jun 05, 2019			Х								
6	MW107	Jun 05, 2019 Water S19-Jn05333											
7	MW108			Х									
8													
9	MW111	Jun 05, 2019		Water	S19-Jn05336			Х					

Report Number: 659452-W-V2



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Received:

Due:

Sydney Unit F3, Building F

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Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Jun 5, 2019 5:45 PM

Morgan Singleton-Fookes

Jun 14, 2019

7 Day

Company Name: Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901031

Order No.: 3202 Report #: 659452

Phone: 02 9979 1722 Fax:

Priority: 02 9979 1222 **Contact Name:**

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

	Sample Detail									
	ourne Laborato			271						
	ney Laboratory					Х	Х	Х		
	bane Laboratory									
	h Laboratory - N		36							
10	GW4	Jun 05, 2019		Water	S19-Jn05337			Х		
11	DW1	Jun 05, 2019		Water	S19-Jn05338			Х		
12	R1	Jun 05, 2019		Water	S19-Jn05340	Х	Х			
13	GW1	Jun 06, 2019		Water	S19-Jn07576			Х		
14	GW2	Jun 06, 2019		Water	S19-Jn07577			Х		
15			Х							
Test	Counts					1	1	14		



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis
- 8. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

ppm: Parts per million **ppb:** Parts per billion
%: Percentage

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.2 2018
CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Report Number: 659452-W-V2



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	1				
TRH C6-C9	mg/L	< 0.02	0.02	Pass	
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	



Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.001	0.001	Pass	
Vinyl chloride	mg/L	< 0.001	0.001	Pass	
Xylenes - Total	mg/L	< 0.003	0.003	Pass	
Method Blank	, ,				
Total Recoverable Hydrocarbons - 2013 NEPM Fraction	s				
Naphthalene	mg/L	< 0.01	0.01	Pass	
TRH C6-C10	mg/L	< 0.02	0.02	Pass	
Method Blank	1 3				
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	mg/L	< 0.001	0.001	Pass	
Acenaphthylene	mg/L	< 0.001	0.001	Pass	
Anthracene	mg/L	< 0.001	0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001	0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001	0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001	0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001	0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001	0.001	Pass	
Chrysene	mg/L	< 0.001	0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001	0.001	Pass	
Fluoranthene	mg/L	< 0.001	0.001	Pass	
Fluorene	mg/L	< 0.001	0.001	Pass	
Indeno(1.2.3-cd)pyrene		< 0.001	0.001	Pass	
` '''	mg/L				
Naphthalene	mg/L	< 0.001	0.001	Pass	
Phenanthrene	mg/L	< 0.001	0.001	Pass	
Pyrene Mathed Blank	mg/L	< 0.001	0.001	Pass	
Method Blank					
Heavy Metals		0.004	0.004	D	
Arsenic (filtered)	mg/L	< 0.001	0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0002	0.0002	Pass	
Chromium (filtered)	mg/L	< 0.001	0.001	Pass	
Copper (filtered)	mg/L	< 0.001	0.001	Pass	
Lead (filtered)	mg/L	< 0.001	0.001	Pass	
Mercury (filtered)	mg/L	< 0.0001	0.0001	Pass	
Nickel (filtered)	mg/L	< 0.001	0.001	Pass	
Zinc (filtered)	mg/L	< 0.005	0.005	Pass	
LCS - % Recovery				Γ	
Volatile Organics					
1.1-Dichloroethene	%	112	70-130	Pass	
1.1.1-Trichloroethane	%	101	70-130	Pass	
1.2-Dichlorobenzene	%	101	70-130	Pass	
1.2-Dichloroethane	%	96	70-130	Pass	
Benzene	%	97	70-130	Pass	
Ethylbenzene	%	106	70-130	Pass	
m&p-Xylenes	%	102	70-130	Pass	
o-Xylene	%	97	70-130	Pass	
Toluene	%	98	70-130	Pass	
Trichloroethene	%	97	70-130	Pass	
Xylenes - Total	%	100	70-130	Pass	
LCS - % Recovery					
Total Recoverable Hydrocarbons - 2013 NEPM Fraction	s				
Naphthalene	%	88	70-130	Pass	



Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery								
Polycyclic Aromatic Hydrocarbons	S							
Acenaphthene			%	83		70-130	Pass	
Acenaphthylene			%	86		70-130	Pass	
Anthracene			%	91		70-130	Pass	
Benz(a)anthracene			%	98		70-130	Pass	
Benzo(a)pyrene			%	99		70-130	Pass	
Benzo(b&j)fluoranthene			%	101		70-130	Pass	
Benzo(g.h.i)perylene			%	101		70-130	Pass	
Benzo(k)fluoranthene			%	99		70-130	Pass	
Chrysene			%	100		70-130	Pass	
Dibenz(a.h)anthracene			%	101		70-130	Pass	
Fluoranthene			%	96		70-130	Pass	
				89				
Fluorene			%			70-130	Pass	
Indeno(1.2.3-cd)pyrene			%	101		70-130	Pass	
Naphthalene			%	78		70-130	Pass	
Phenanthrene			%	92		70-130	Pass	
Pyrene			%	95		70-130	Pass	
LCS - % Recovery								
Heavy Metals								
Arsenic (filtered)			%	106		70-130	Pass	
Cadmium (filtered)			%	103		70-130	Pass	
Chromium (filtered)			%	107		70-130	Pass	
Copper (filtered)			%	104		70-130	Pass	
Lead (filtered)			%	107		70-130	Pass	
Mercury (filtered)			%	103		70-130	Pass	
Nickel (filtered)			%	106		70-130	Pass	
Zinc (filtered)			%	104		70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Total Recoverable Hydrocarbons -	1999 NEPM Fract	tions		Result 1				
TRH C6-C9	S19-Jn05329	CP	%	70		70-130	Pass	
Spike - % Recovery								
Volatile Organics				Result 1				
Benzene	S19-Jn05329	СР	%	109		70-130	Pass	
Ethylbenzene	S19-Jn05329	СР	%	109		70-130	Pass	
m&p-Xylenes	S19-Jn05329	CP	%	107		70-130	Pass	
o-Xylene	S19-Jn05329	CP	%	107		70-130	Pass	
Toluene	S19-Jn05329	CP	%	105		70-130	Pass	
Xylenes - Total	S19-Jn05329	CP	%	107		70-130	Pass	
Spike - % Recovery	1 010 01100020	<u> </u>	70	107		70-130	1 433	
Total Recoverable Hydrocarbons -	2012 NEDM Front	liono		Result 1				
•		CP	0/			70 120	Doos	
Naphthalene	S19-Jn05329		%	111		70-130	Pass	
TRH C6-C10	S19-Jn05329	CP	%	71		70-130	Pass	
Spike - % Recovery	4000 NEDE	·!		Descript				
Total Recoverable Hydrocarbons -			21	Result 1		70.400		
TRH C6-C9	S19-Jn05340	CP	%	96		70-130	Pass	
Spike - % Recovery								
Volatile Organics	I _			Result 1			_	
Benzene	S19-Jn05340	CP	%	112		70-130	Pass	
Bonzono			%	115	1	70-130	Pass	
Ethylbenzene	S19-Jn05340	CP			 			
	S19-Jn05340 S19-Jn05340	CP	%	115		70-130	Pass	
Ethylbenzene		1					Pass Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Xylenes - Total	S19-Jn05340	CP	%	115			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1					
Naphthalene	S19-Jn05340	CP	%	114			70-130	Pass	
TRH C6-C10	S19-Jn05340	CP	%	93			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons -	1999 NEPM Fract	ions		Result 1					
TRH C6-C9	S19-Jn07577	CP	%	99			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
Benzene	S19-Jn07577	CP	%	116			70-130	Pass	
Ethylbenzene	S19-Jn07577	CP	%	119			70-130	Pass	
m&p-Xylenes	S19-Jn07577	CP	%	118			70-130	Pass	
o-Xylene	S19-Jn07577	СР	%	118			70-130	Pass	
Toluene	S19-Jn07577	СР	%	113			70-130	Pass	
Xylenes - Total	S19-Jn07577	СР	%	118			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions		Result 1					
Naphthalene	S19-Jn07577	СР	%	128			70-130	Pass	
TRH C6-C10	S19-Jn07577	CP	%	93			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic (filtered)	S19-Jn07578	СР	%	122			70-130	Pass	
Cadmium (filtered)	S19-Jn07578	СР	%	115			70-130	Pass	
Chromium (filtered)	S19-Jn07578	СР	%	112			70-130	Pass	
Copper (filtered)	S19-Jn07578	CP	%	107			70-130	Pass	
Lead (filtered)	S19-Jn07578	CP	%	102			70-130	Pass	
Nickel (filtered)	S19-Jn07578	СР	%	108			70-130	Pass	
Zinc (filtered)	S19-Jn07578	CP	%	108			70-130	Pass	
_	Lab Sample ID	QA	Units	Result 1			Acceptance Limits	Pass	Qualifying Code
Test	Lab Sample ID	Source	••		I I			Limits	
Test Duplicate	Lab Sample ID	Source		11000111			Ziiiiito	Limits	
	Lab Sample ID	Source		Result 1	Result 2	RPD		Limits	
Duplicate	\$19-Jn05337	CP	mg/L		Result 2 0.001	RPD 14	30%		
Duplicate Heavy Metals Arsenic (filtered)	S19-Jn05337		mg/L	Result 1				Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered)	S19-Jn05337 S19-Jn05337	CP CP	mg/L mg/L	Result 1 0.001 < 0.0002	0.001 < 0.0002	14 <1	30%	Pass Pass	
Duplicate Heavy Metals Arsenic (filtered)	S19-Jn05337	СР	mg/L	Result 1 0.001	0.001	14	30%	Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP	mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003	0.001 < 0.0002 < 0.001 0.002	14 <1 <1 3.0	30% 30% 30% 30%	Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered)	S19-Jn05337 S19-Jn05337 S19-Jn05337 S19-Jn05337 S19-Jn05337	CP CP CP CP	mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.001	0.001 < 0.0002 < 0.001 0.002 < 0.001	14 <1 <1 3.0 <1	30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.001 < 0.0001	0.001 < 0.0002 < 0.001 0.002 < 0.001 < 0.0001	14 <1 <1 3.0 <1 <1	30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.0001 < 0.0001 0.002	0.001 < 0.0002 < 0.001 0.002 < 0.001	14 <1 <1 3.0 <1 <1 <1 4.0	30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.001 < 0.0001	0.001 < 0.0002 < 0.001 0.002 < 0.001 < 0.0001 0.002	14 <1 <1 3.0 <1 <1	30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered) Duplicate	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.001 < 0.0001 0.002 < 0.005	0.001 < 0.0002 < 0.001 0.002 < 0.001 < 0.0001 0.002	14 <1 <1 3.0 <1 <1 4.0 <1	30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.0001 < 0.0001 0.002	0.001 < 0.0002 < 0.001 0.002 < 0.001 < 0.0001 0.002 < 0.005	14 <1 <1 3.0 <1 <1 4.0 <1 RPD	30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered) Duplicate Heavy Metals	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.001 < 0.0001 0.002 < 0.005	0.001 < 0.0002 < 0.001 0.002 < 0.001 < 0.0001 0.002 < 0.005	14 <1 <1 3.0 <1 <1 4.0 <1 RPD <1	30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered) Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337	CP CP CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.0001 < 0.0001 0.002 < 0.005 Result 1 < 0.001 < 0.0001	0.001 < 0.0002 < 0.001 0.002 < 0.0001 0.002 < 0.005 Result 2 < 0.001 < 0.0002	14 <1 <1 3.0 <1 <1 4.0 <1 RPD <1 <1 <1	30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Zinc (filtered) Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn07576 \$19-Jn07576	CP CP CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.0001 < 0.0001 0.002 < 0.005 Result 1 < 0.0001 < 0.0002 < 0.0001	0.001 < 0.0002 < 0.001 0.002 < 0.0001 < 0.0001 0.002 < 0.005 Result 2 < 0.0001 < 0.0002 < 0.0001	14 <1 <1 3.0 <1 <1 4.0 <1 RPD <1 <1 <1 <1	30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered) Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn07576 \$19-Jn07576 \$19-Jn07576	CP CP CP CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.0001 < 0.0002 < 0.005 Result 1 < 0.0001 < 0.0002 < 0.0001 0.0002	0.001 < 0.0002 < 0.001 0.002 < 0.001 0.002 < 0.005 Result 2 < 0.001 < 0.0002 < 0.001 0.002	14 <1 <1 3.0 <1 <1 4.0 <1 RPD <1 <1 <1 12	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered) Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn07576 \$19-Jn07576 \$19-Jn07576 \$19-Jn07576	CP CP CP CP CP CP CP CP CP CP CP CP CP C	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.0001 < 0.0005 Result 1 < 0.001 < 0.0002 < 0.0001 < 0.0002 < 0.0005	0.001 < 0.0002 < 0.001 0.002 < 0.001 0.002 < 0.005 Result 2 < 0.001 < 0.0002 < 0.001 < 0.0004 < 0.001	14 <1 3.0 <1 4.0 <1 RPD <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered) Lead (filtered) Mercury (filtered) Nickel (filtered) Zinc (filtered) Duplicate Heavy Metals Arsenic (filtered) Cadmium (filtered) Chromium (filtered) Copper (filtered)	\$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn05337 \$19-Jn07576 \$19-Jn07576 \$19-Jn07576	CP CP CP CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	Result 1 0.001 < 0.0002 0.001 0.003 < 0.0001 < 0.0002 < 0.005 Result 1 < 0.0001 < 0.0002 < 0.0001 0.0002	0.001 < 0.0002 < 0.001 0.002 < 0.001 0.002 < 0.005 Result 2 < 0.001 < 0.0002 < 0.001 0.002	14 <1 <1 3.0 <1 <1 4.0 <1 RPD <1 <1 <1 12	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	



Comments

This report has been revised (V2) to include test results for samples S19-Jn07576, S19-Jn07577 and S19-Jn07578 from report number 659749.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier C	odes/Comments
Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.
R16	The LORs have been raised due to the high concentration of one or more analytes

Authorised By

Nibha Vaidya Analytical Services Manager
Andrew Sullivan Senior Analyst-Organic (NSW)
Gabriele Cordero Senior Analyst-Metal (NSW)



Glenn Jackson General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Report Number: 659452-W-V2



Melbourne

Sydney Unit F3, Building F

Brishane Histoane
1/21 Smallwood Place
Murarrie QLD 4172
Phone: +61 7 3902 4600
NATA # 1261 Site # 20794 Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Morgan Singleton-Fookes

AUBURN Project name: Project ID: 1901031 COC number: Not provided

Turn around time: 7 Day

Jun 5, 2019 5:45 PM Date/Time received:

Eurofins | mgt reference: 659452

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt: 3.2 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \square Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone: +61 (2) 9900 8415 or by e.mail: Nibha Vaidya@eurofins.com

Results will be delivered electronically via e.mail to Morgan Singleton-Fookes - morgan@geo-logix.com.au.





Geo-Logix Pty Ltd Building Q2, Level 3 2309/4 Daydream St Warriewood, NSW 2102 ABN: 86 116 892 936 P: (02) 9979 1722 F: (02) 9979 1222		Project Mana Contact ema Project Name	ne: Alburn								RED	Page of Purchase Order No: Quote Reference: Send Invoice to: accounts@geo-logix.com.au TAT required:													-	659452				
Lab ID	Sample ID	Date	soil	Water	nt. filters	other	Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCS	BTEXN	PAHS	PCBs	OCPs	OPPs	Phenois	Metals - M8	Metals - Lead Metals - Specify **	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Hongarian (Co.)	100 70		Hold	SUITE	Eurofins MGT Suite Codes	
Lab ID	MWIOZ MWIOZ MWIOZ MWIOS MWIOS MWIOS MWIIO MWIII GWY DWI TWI	\$ 6 17		* * * * * * * * * * * * * * * * * * *	8	0	Comments								0	0					4							738	B1 TRH/BTEXN B1A TRH/MAH B2 TRH/BTEXN/Pb B2A TRH/MAH/Pb B3 PAH/Phenois B4 TRH/BTEXN/PAH B4A TRH/BTEXN/PAH/Phenois B5 TRH/BTEXN/PAH/Phenois B7 TRH/BTEXN/M8 B7 TRH/BTEXN/PAH/Phenois/M8 B7A TRH/BTEXN/PAH/Phenois/M8 B8 TRH/BTEXN/PAH/Phenois/M8 B9 TRH/BTEXN/PAH/OCP/M8 B10 TRH/BTEXN/PAH/OCP/M8 B11 Na/K/Ca/Mg/C/SO ₂ /CO ₂ /HCO ₂ /NH ₂ /I B11A B11/Alkalinity B11B B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanoi B12A TRH/BTEXN/Oxygenates B13 OCP/PCB B14 CCP/OPP B15 OCP/OPP/PCB	
) As, Cd, Cr, Cu, Ni, 1						V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, I Chai ure:	in of	Cu	sto	1000							FI. 1	19										B16 TDS/SO ₄ /CH ₂ /Aik/BOD/COD/HPC/C B17 SO ₄ /NO ₂ /Fe++/HPC/CUB B18 CH/SO ₄ /pH B19 N/P/K B20 CEC/%ESP/Ca/Ma/Na/K	

CHAIN OF CUSTODY

Geo-Logix Pty Ltd

CHAIN OF CUSTODY RECORD

Eurofees | mgr ABN 50 005 085 521

Sydney Laborntory
Link F3 Bd.F 16 Mars Road Lane Cove West NSW 2086
02 9900 8400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory

Uni 1.21 Smallwood Place Mutanie GLD 4172 07 3502 4600 EnviroSampie QLD @eurofins.com

Unit 2 91 Leach Highway Kewdale WA 6105 Perth Laboratory

Melbourne Laboratory
6 Monteney Road Dandenong South VIC 3175
03 8584 5000 EnviroSampie/vio@eurofins.com

morgan@geo-logir. Same day
 Same day Required Turnaround Time (TAT) 14:11 1 day• 2 days• □

K 5 days (Slandard)

Other(11.41 AM 61/90/90 Other (Asbestos AS4964, WA Guidelines) MPS Jar (Glass or HDPE) 500mL PFAS Bottle I 5 -6 08 2 Email for Invoice Email for Results Date Time Time 500mL Plastic Signature EDD Format Morgan SYD I BINE I MEL I PER I ADL I NIT I DRW SYD | BNE | MEL | PER | ADL | NTL | DRW 1901031 Name Auburn □ Postal BB Suite Project Name E Project Ne X Hand Delivered M 90/90 3 1 Morgan 0414217179 Geo-Logix Received By Received By Client Sample ID Courier (# MM109 GWZ GWI Eurofins | mgt Purchase Order Quote ID Na Address Phone Ne

Eurofins Environment Testing Australia Pty Ltd trading as Eurofins | mgt

Ursula Long

From: Morgan Singleton-Fookes <morgan@geo-logix.com.au>

Sent: Tuesday, 18 June 2019 8:41 AM

To: Ursula Long

Subject: FW: Eurofins | mgt Test Results, Invoice - Report 659452 : Site AUBURN (1901031)

Follow Up Flag: Follow up Flag Status: Flagged

EXTERNAL EMAIL*

Actually, if it's not too much trouble. Could you please combine into one report?

Thank you, Morgan

From: Morgan Singleton-Fookes
Sent: Tuesday, 18 June 2019 8:17 AM

To: 'UrsulaLong@eurofins.com' < UrsulaLong@eurofins.com>

Subject: RE: Eurofins | mgt Test Results, Invoice - Report 659452 : Site AUBURN (1901031)

Morning Ursula,

Hope you had a nice weekend.

Could you have a check on the Auburn reports that are due today please?

Mostly antsy to receive the final version of 659749 (and no need to combine with 659452) and 659759 (soil vapour testing).

Thanks very much,

Morgan

From: <u>UrsulaLong@eurofins.com</u> [mailto:UrsulaLong@eurofins.com]

Sent: Friday, 14 June 2019 5:24 PM

To: Morgan Singleton-Fookes < morgan@geo-logix.com.au >

Cc: Nibha Vaidya < Nibha Vaidya @eurofins.com >

Subject: RE: Eurofins | mgt Test Results, Invoice - Report 659452 : Site AUBURN (1901031)

Hi Morgan,

I have just issued the revised report for 659751 to include the repeat results for MW103 and MW109.

I have also just sent the draft report for 659749 – here we have run MW109 for the B8 suite (same as those on report 659452).

We should have the final report for you by Tuesday, and I can combine these samples on to one report if you prefer.

I think that has covered everything, but let me know if you need anything else at all.

Hope you have a great weekend ©

Kind regards,

Ursula Long

Eurofins | mgt

Unit F3, Parkview Building 16 Mars Road LANE COVE WEST NSW 2066 AUSTRALIA

Phone : +61 2 9900 8420 Mobile: 0428 845 495

Email: <u>UrsulaLong@eurofins.com</u>

Website: www.eurofins.com.au/environmental-testing

From: Morgan Singleton-Fookes [mailto:morgan@geo-logix.com.au]

Sent: Friday, 14 June 2019 2:11 PM

To: Ursula Long

Subject: RE: Eurofins | mgt Test Results, Invoice - Report 659452 : Site AUBURN (1901031)

EXTERNAL EMAIL*

Hi Ursula,

Could you please reissue this report with the results from MW109 included?

And also as discussed, the rereun results for MW103 and MW109.

Thanks very much!

Morgan

From: UrsulaLong@eurofins.com [mailto:UrsulaLong@eurofins.com]

Sent: Friday, 14 June 2019 1:58 PM

To: Morgan Singleton-Fookes < morgan@geo-logix.com.au >

Subject: Eurofins | mgt Test Results, Invoice - Report 659452 : Site AUBURN (1901031)

Dear Morgan,

Please find attached results and invoice for your project in the subject header.

Regards

Ursula Long

Eurofins | mgt Unit F3, Parkview Building 16 Mars Road



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Morgan Singleton-Fookes

Report661654-WProject nameAUBURNProject ID1901031Received DateJun 19, 2019

Client Sample ID			MW101	MW102	MW103	MW104
Sample Matrix			Water	Water	Water	Water
Eurofins mgt Sample No.			S19-Jn22275	S19-Jn22325	S19-Jn22326	S19-Jn22327
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
Test/Reference	LOR	Unit	,	,	, , ,	,
Semivolatile Organics	LOIC	Orne				
2-Methyl-4.6-dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
1-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.3-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.3.4-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.3.5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.4-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.4.5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.3-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.3.5-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.4-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Chlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methylnaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Nitroaniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Nitrophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2-Picoline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2.3.4.6-Tetrachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.4-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.4-Dimethylphenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.4-Dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
2.4-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2.4.5-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.4.6-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.6-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.6-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006	< 0.006	< 0.006	< 0.006
3-Methylcholanthrene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
3.3'-Dichlorobenzidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Aminobiphenyl	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Bromophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01



Client Sample ID			MW101	MW102	M/M/4 00	MW104
Sample Matrix			Water	Water	MW103 Water	Water
•						
Eurofins mgt Sample No.			S19-Jn22275	S19-Jn22325	S19-Jn22326	S19-Jn22327
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics						
4-Chlorophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Nitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
4.4'-DDD	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4.4'-DDE	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4.4'-DDT	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
7.12-Dimethylbenz(a)anthracene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
a-BHC	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acetophenone	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aldrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
b-BHC	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzyl chloride	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-chloroethoxy)methane	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-chloroisopropyl)ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-ethylhexyl)phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Butyl benzyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
d-BHC	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Di-n-butyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Di-n-octyl phthalate	0.005	mg/L	< 0.005 < 0.001	< 0.005	< 0.005	< 0.005
Dibenz(a.h)anthracene	0.001 0.005	mg/L	+	< 0.001 < 0.005	< 0.001 < 0.005	< 0.001 < 0.005
Dibenz(a.j)acridine Dibenzofuran		mg/L	< 0.005 < 0.005	< 0.005		< 0.005
Dieldrin	0.005 0.005	mg/L mg/L	< 0.005	< 0.005	< 0.005 < 0.005	< 0.005
Diethyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dimethylaminoazobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Diphenylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan I	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan II	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan sulphate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin aldehyde	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin ketone	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Fluoranthene	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
g-BHC (Lindane)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor epoxide	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorobutadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005



Client Sample ID			MW101	MW102	MW103	MW104
Sample Matrix			Water	Water	Water	Water
Eurofins mgt Sample No.			S19-Jn22275	S19-Jn22325	S19-Jn22326	S19-Jn22327
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics						
Hexachlorocyclopentadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachloroethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Methoxychlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosodibutylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosodipropylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosopiperidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Nitrobenzene	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Pentachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pentachloronitrobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Pronamide	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trifluralin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Phenol-d6 (surr.)	1	%	49	35	39	41
Nitrobenzene-d5 (surr.)	1	%	88	65	72	77
2-Fluorobiphenyl (surr.)	1	%	99	79	76	85
2.4.6-Tribromophenol (surr.)	1	%	81	54	64	77

Client Sample ID			MW106	MW107	MW108	MW110	
Sample Matrix			Water	Water	Water	Water	
Eurofins mgt Sample No.			S19-Jn22328	S19-Jn22329	S19-Jn22330	S19-Jn22331	
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	
Test/Reference	LOR	Unit					
Semivolatile Organics							
2-Methyl-4.6-dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03	
1-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.2-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.2.3-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.2.3.4-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.2.3.5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.2.4-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.2.4.5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.3-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.3.5-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
1.4-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
2-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
2-Chlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	
2-Methylnaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	
2-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
2-Nitroaniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	
2-Nitrophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	
2-Picoline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	



Client Sample ID			MW106	MW107	MW108	MW110
Sample Matrix			Water	Water	Water	Water
Eurofins mgt Sample No.			S19-Jn22328	S19-Jn22329	S19-Jn22330	S19-Jn22331
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
•	1.00		Juli 05, 2019	Juli 05, 2019	Juli 05, 2019	Juli 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics						
2.3.4.6-Tetrachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.4-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.4-Dimethylphenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.4-Dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
2.4-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2.4.5-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.4.6-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.6-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.6-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006	< 0.006	< 0.006	< 0.006
3-Methylcholanthrene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
3.3'-Dichlorobenzidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Aminobiphenyl	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Bromophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Chlorophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Nitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
4.4'-DDD	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4.4'-DDE	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4.4'-DDT	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
7.12-Dimethylbenz(a)anthracene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
a-BHC	0.005	mg/L	< 0.005 < 0.001	< 0.005	< 0.005	< 0.005 < 0.001
Acenaphthulana	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acetaphanana	0.001	mg/L		< 0.001	< 0.001	< 0.001
Acetophenone Aldrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	
Aniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Anthracene	0.005 0.001	mg/L	< 0.005 < 0.001	< 0.005 < 0.001	< 0.005 < 0.001	< 0.005 < 0.001
b-BHC	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
		mg/L mg/L			< 0.003	
Benz(a)anthracene	0.001 0.001		< 0.001 < 0.001	< 0.001		< 0.001 < 0.001
Benzo(a)pyrene Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L mg/L	< 0.001	< 0.001 < 0.001	< 0.001 < 0.001	< 0.001
Benzo(a.h.i)pervlene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bis(2-chloroethoxy)methane	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-chloroisopropyl)ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-ethylhexyl)phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Butyl benzyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chrysene	0.003	mg/L	< 0.003	< 0.005	< 0.005	< 0.005
d-BHC	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Di-n-butyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Di-n-octyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dibenz(a.h)anthracene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dibenz(a.j)acridine	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenzofuran	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dieldrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005



Client Sample ID			MW106	MW107	MW108	MW110
Sample Matrix			Water	Water	Water	Water
Eurofins mgt Sample No.			S19-Jn22328	S19-Jn22329	S19-Jn22330	S19-Jn22331
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics	•					
Dimethylaminoazobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Diphenylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan I	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan II	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan sulphate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin aldehyde	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin ketone	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
g-BHC (Lindane)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor epoxide	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorobutadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorocyclopentadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachloroethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Methoxychlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosodibutylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosodipropylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosopiperidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Nitrobenzene	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Pentachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pentachloronitrobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Pronamide	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trifluralin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Phenol-d6 (surr.)	1	%	43	35	32	48
Nitrobenzene-d5 (surr.)	1	%	80	65	59	82
2-Fluorobiphenyl (surr.)	1	%	90	74	78	89
2.4.6-Tribromophenol (surr.)	1	%	76	52	83	93

Client Sample ID Sample Matrix Eurofins mgt Sample No. Date Sampled			MW111 Water S19-Jn22332 Jun 05, 2019	GW4 Water S19-Jn22333 Jun 05, 2019	GW1 Water S19-Jn22334 Jun 05, 2019	GW2 Water S19-Jn22335 Jun 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics						
2-Methyl-4.6-dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
1-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.3-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005



Client Sample ID			MW111	GW4	GW1	GW2
•			Water	Water	Water	Water
Sample Matrix						
Eurofins mgt Sample No.			S19-Jn22332	S19-Jn22333	S19-Jn22334	S19-Jn22335
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics						
1.2.3.4-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.3.5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.4-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.2.4.5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.3-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.3.5-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
1.4-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Chlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Methylnaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Nitroaniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2-Nitrophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2-Picoline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2.3.4.6-Tetrachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.4-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.4-Dimethylphenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.4-Dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
2.4-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
2.4.5-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.4.6-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
2.6-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
2.6-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006	< 0.006	< 0.006	< 0.006
3-Methylcholanthrene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
3.3'-Dichlorobenzidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Aminobiphenyl	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Bromophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
4-Chlorophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Nitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	< 0.03
4.4'-DDD	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4.4'-DDE	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4.4'-DDT	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
7.12-Dimethylbenz(a)anthracene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
а-ВНС	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acetophenone	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aldrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
b-BHC	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			MW111	GW4	GW1	GW2
Sample Matrix			Water	Water	Water	Water
Eurofins mgt Sample No.			S19-Jn22332	S19-Jn22333	S19-Jn22334	S19-Jn22335
Date Sampled			Jun 05, 2019	Jun 05, 2019	Jun 05, 2019	Jun 05, 2019
•	100	1.1-20	Juli 05, 2019	Juli 05, 2019	Juli 05, 2019	Juli 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics	2.005		0.005	2.225	2.225	2.225
Benzyl chloride	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-chloroethoxy)methane	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-chloroisopropyl)ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Bis(2-ethylhexyl)phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Butyl benzyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
d-BHC	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Di-n-butyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Di-n-octyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a.j)acridine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dibenzofuran Diologia	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Diethyl phtholoto	0.005	mg/L	< 0.005	< 0.005 < 0.005	< 0.005	< 0.005
Diethyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dimethyl phthalate	0.005	mg/L	< 0.005		< 0.005	< 0.005
Dimethylaminoazobenzene Dinhanylamina	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Diphenylamine Endosulfan I	0.005 0.005	mg/L	< 0.005 < 0.005	< 0.005 < 0.005	< 0.005 < 0.005	< 0.005 < 0.005
Endosulfan II	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan sulphate	0.005	mg/L mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin aldehyde	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Endrin ketone	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Fluoranthene	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
g-BHC (Lindane)	0.001	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor epoxide	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorobutadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachlorocyclopentadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Hexachloroethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Methoxychlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosodibutylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosodipropylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
N-Nitrosopiperidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Nitrobenzene	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Pentachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pentachloronitrobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Pronamide	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trifluralin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Phenol-d6 (surr.)	1	%	26	44	22	41
Nitrobenzene-d5 (surr.)	1	%	57	77	73	84



Client Sample ID Sample Matrix Eurofins mgt Sample No. Date Sampled			MW111 Water S19-Jn22332 Jun 05, 2019	GW4 Water S19-Jn22333 Jun 05, 2019	GW1 Water S19-Jn22334 Jun 05, 2019	GW2 Water S19-Jn22335 Jun 05, 2019
Test/Reference	LOR	Unit				
Semivolatile Organics						
2-Fluorobiphenyl (surr.)	1	%	55	85	85	93
2.4.6-Tribromophenol (surr.)	1	%	48	84	47	86

Client Sample ID			MW109
Sample Matrix			Water
Eurofins mgt Sample No.			S19-Jn22336
Date Sampled			Jun 05, 2019
Test/Reference	LOR	Unit	
Semivolatile Organics	1 2011	Onne	
2-Methyl-4.6-dinitrophenol	0.03	mg/L	< 0.03
1-Chloronaphthalene	0.005	mg/L	< 0.005
1-Naphthylamine	0.005	mg/L	< 0.005
1.2-Dichlorobenzene	0.005	mg/L	< 0.005
1.2.3-Trichlorobenzene	0.005	mg/L	< 0.005
1.2.3.4-Tetrachlorobenzene	0.005	mg/L	< 0.005
1.2.3.5-Tetrachlorobenzene	0.005	mg/L	< 0.005
1.2.4-Trichlorobenzene	0.005	mg/L	< 0.005
1.2.4.5-Tetrachlorobenzene	0.005	mg/L	< 0.005
1.3-Dichlorobenzene	0.005	mg/L	< 0.005
1.3.5-Trichlorobenzene	0.005	mg/L	< 0.005
1.4-Dichlorobenzene	0.005	mg/L	< 0.005
2-Chloronaphthalene	0.005	mg/L	< 0.005
2-Chlorophenol	0.003	mg/L	< 0.003
2-Methylnaphthalene	0.005	mg/L	< 0.005
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003
2-Naphthylamine	0.005	mg/L	< 0.005
2-Nitroaniline	0.005	mg/L	< 0.005
2-Nitrophenol	0.01	mg/L	< 0.01
2-Picoline	0.005	mg/L	< 0.005
2.3.4.6-Tetrachlorophenol	0.01	mg/L	< 0.01
2.4-Dichlorophenol	0.003	mg/L	< 0.003
2.4-Dimethylphenol	0.003	mg/L	< 0.003
2.4-Dinitrophenol	0.03	mg/L	< 0.03
2.4-Dinitrotoluene	0.005	mg/L	< 0.005
2.4.5-Trichlorophenol	0.01	mg/L	< 0.01
2.4.6-Trichlorophenol	0.01	mg/L	< 0.01
2.6-Dichlorophenol	0.003	mg/L	< 0.003
2.6-Dinitrotoluene	0.005	mg/L	< 0.005
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006
3-Methylcholanthrene	0.005	mg/L	< 0.005
3.3'-Dichlorobenzidine	0.005	mg/L	< 0.005
4-Aminobiphenyl	0.005	mg/L	< 0.005
4-Bromophenyl phenyl ether	0.005	mg/L	< 0.005
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01
4-Chlorophenyl phenyl ether	0.005	mg/L	< 0.005
4-Nitrophenol	0.03	mg/L	< 0.03
4.4'-DDD	0.005	mg/L	< 0.005
4.4'-DDE	0.005	mg/L	< 0.005



Client Sample ID			MW109
Sample Matrix			Water
Eurofins mgt Sample No.			S19-Jn22336
Date Sampled			Jun 05, 2019
Test/Reference	LOR	Unit	
Semivolatile Organics	LOIK	Offic	
4.4'-DDT	0.005	mg/L	< 0.005
7.12-Dimethylbenz(a)anthracene	0.005	mg/L	< 0.005
a-BHC	0.005	mg/L	< 0.005
Acenaphthene	0.003	mg/L	< 0.003
Acenaphthylene	0.001	mg/L	< 0.001
Acetophenone	0.005	mg/L	< 0.005
Aldrin	0.005	mg/L	< 0.005
Aniline	0.005	mg/L	< 0.005
Anthracene	0.001	mg/L	< 0.001
b-BHC	0.005	mg/L	< 0.005
Benz(a)anthracene	0.001	mg/L	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001
Benzyl chloride	0.005	mg/L	< 0.005
Bis(2-chloroethoxy)methane	0.005	mg/L	< 0.005
Bis(2-chloroisopropyl)ether	0.005	mg/L	< 0.005
Bis(2-ethylhexyl)phthalate	0.005	mg/L	< 0.005
Butyl benzyl phthalate	0.005	mg/L	< 0.005
Chrysene	0.003	mg/L	< 0.003
d-BHC	0.005	mg/L	< 0.005
Di-n-butyl phthalate	0.005	mg/L	< 0.005
Di-n-octyl phthalate	0.005	mg/L	< 0.005
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001
Dibenz(a.j)acridine	0.005	mg/L	< 0.005
Dibenzofuran	0.005	mg/L	< 0.005
Dieldrin	0.005	mg/L	< 0.005
Diethyl phthalate	0.005	mg/L	< 0.005
Dimethyl phthalate	0.005	mg/L	< 0.005
Dimethylaminoazobenzene	0.005	mg/L	< 0.005
Diphenylamine	0.005	mg/L	< 0.005
Endosulfan I	0.005	mg/L	< 0.005
Endosulfan II	0.005	mg/L	< 0.005
Endosulfan sulphate	0.005	mg/L	< 0.005
Endrin	0.005	mg/L	< 0.005
Endrin aldehyde	0.005	mg/L	< 0.005
Endrin aldenyde Endrin ketone	0.005	mg/L	< 0.005
Fluoranthene	0.003	mg/L	< 0.003
Fluorene	0.001	mg/L	< 0.001
g-BHC (Lindane)	0.001	mg/L	< 0.005
Heptachlor	0.005	mg/L	< 0.005
Heptachlor epoxide	0.005	mg/L	< 0.005
Hexachlorobenzene	0.005	mg/L	< 0.005
Hexachlorobutadiene	0.005	mg/L	< 0.005
Hexachlorocyclopentadiene	0.005		< 0.005
Hexachlorocyclopentadiene Hexachloroethane	0.005	mg/L	< 0.005
	0.005	mg/L	
Indeno(1.2.3-cd)pyrene Methoxychlor	0.001	mg/L mg/L	< 0.001 < 0.005



Client Sample ID Sample Matrix			MW109 Water
Eurofins mgt Sample No.			S19-Jn22336
Date Sampled			Jun 05, 2019
Test/Reference	LOR	Unit	
Semivolatile Organics			
N-Nitrosodibutylamine	0.005	mg/L	< 0.005
N-Nitrosodipropylamine	0.005	mg/L	< 0.005
N-Nitrosopiperidine	0.005	mg/L	< 0.005
Naphthalene	0.001	mg/L	< 0.001
Nitrobenzene	0.05	mg/L	< 0.05
Pentachlorobenzene	0.005	mg/L	< 0.005
Pentachloronitrobenzene	0.005	mg/L	< 0.005
Pentachlorophenol	0.01	mg/L	< 0.01
Phenanthrene	0.001	mg/L	< 0.001
Phenol	0.003	mg/L	< 0.003
Pronamide	0.005	mg/L	< 0.005
Pyrene	0.001	mg/L	< 0.001
Trifluralin	0.005	mg/L	< 0.005
Phenol-d6 (surr.)	1	%	34
Nitrobenzene-d5 (surr.)	1	%	67
2-Fluorobiphenyl (surr.)	1	%	76
2.4.6-Tribromophenol (surr.)	1	%	77



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeSemivolatile OrganicsMelbourneJun 20, 20197 Day

- Method: LTM-ORG-2190 SVOC in Water & Soil by GC-MS



1901031

mgt

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Eurofins | mgt Analytical Services Manager : Nibha Vaidya

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Jun 19, 2019 4:08 PM

Company Name: Geo-Logix P/L Order No.: Received:

Semivolatile Organics

Warriewood Phone: 02 9979 1722 Priority: 2 Day

NSW 2102 Fax: 02 9979 1222 Contact Name: Morgan Singleton-Fookes

Project Name: AUBURN

Sample Detail

Melbourne Laboratory - NATA Site # 1254 & 14271 X
Sydney Laboratory - NATA Site # 18217
Brisbane Laboratory - NATA Site # 20794
Perth Laboratory - NATA Site # 23736

External Laboratory

Date Reported:Jun 24, 2019

Address:

Project ID:

Exte	rnal Laboratory	<u>'</u>				
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	MW101	Jun 05, 2019		Water	S19-Jn22275	Х
2	MW102	Jun 05, 2019		Water	S19-Jn22325	Х
3	MW103	Jun 05, 2019		Water	S19-Jn22326	Х
4	MW104	Jun 05, 2019		Water	S19-Jn22327	Х
5	MW106	Jun 05, 2019		Water	S19-Jn22328	Х
6	MW107	Jun 05, 2019		Water	S19-Jn22329	Х
7	MW108	Jun 05, 2019		Water	S19-Jn22330	Х
8	MW110	Jun 05, 2019		Water	S19-Jn22331	Х
9	MW111	Jun 05, 2019		Water	S19-Jn22332	Х

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Address:

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Company Name: Geo-Logix P/L Order No.: Received: Jun 19, 2019 4:08 PM

Warriewood Phone: 02 9979 1722 Priority: 2 Day

NSW 2102 Fax: 02 9979 1222 Contact Name: Morgan Singleton-Fookes

Project Name: AUBURN

Project ID: 1901031

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Semivolatile Organics Sample Detail Χ Melbourne Laboratory - NATA Site # 1254 & 14271 Sydney Laboratory - NATA Site # 18217 Brisbane Laboratory - NATA Site # 20794 Perth Laboratory - NATA Site # 23736 GW4 Χ 10 Jun 05, 2019 Water S19-Jn22333 GW1 Χ 11 Jun 05, 2019 S19-Jn22334 Water Χ 12 GW2 Jun 05. 2019 Water S19-Jn22335 13 MW109 Jun 05, 2019 Water S19-Jn22336 Χ 13 **Test Counts**



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis
- 8. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

ppm: Parts per million **ppb:** Parts per billion
%: Percentage

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody

SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.2 2018
CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Eurofins | mgt Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 Page 14 of 20
ABN : 50 005 085 521 Telephone: +61 2 9900 8400 Report Number: 661654-W



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Semivolatile Organics					
2-Methyl-4.6-dinitrophenol	mg/L	< 0.03	0.03	Pass	
1-Chloronaphthalene	mg/L	< 0.005	0.005	Pass	
1-Naphthylamine	mg/L	< 0.005	0.005	Pass	
1.2-Dichlorobenzene	mg/L	< 0.005	0.005	Pass	
1.2.3-Trichlorobenzene	mg/L	< 0.005	0.005	Pass	
1.2.3.4-Tetrachlorobenzene	mg/L	< 0.005	0.005	Pass	
1.2.3.5-Tetrachlorobenzene	mg/L	< 0.005	0.005	Pass	
1.2.4-Trichlorobenzene	mg/L	< 0.005	0.005	Pass	
1.2.4.5-Tetrachlorobenzene	mg/L	< 0.005	0.005	Pass	
1.3-Dichlorobenzene	mg/L	< 0.005	0.005	Pass	
1.3.5-Trichlorobenzene	mg/L	< 0.005	0.005	Pass	
1.4-Dichlorobenzene	mg/L	< 0.005	0.005	Pass	
2-Chloronaphthalene	mg/L	< 0.005	0.005	Pass	
2-Chlorophenol	mg/L	< 0.003	0.003	Pass	
2-Methylnaphthalene	mg/L	< 0.005	0.005	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.003	0.003	Pass	
2-Naphthylamine	mg/L	< 0.005	0.005	Pass	
2-Nitroaniline	mg/L	< 0.005	0.005	Pass	
2-Nitrophenol	mg/L	< 0.01	0.01	Pass	
2-Picoline	mg/L	< 0.005	0.005	Pass	
2.3.4.6-Tetrachlorophenol	mg/L	< 0.01	0.01	Pass	
2.4-Dichlorophenol	mg/L	< 0.003	0.003	Pass	
2.4-Dimethylphenol	mg/L	< 0.003	0.003	Pass	
2.4-Dinitrophenol	mg/L	< 0.03	0.03	Pass	
2.4-Dinitrotoluene	mg/L	< 0.005	0.005	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.01	0.01	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.01	0.01	Pass	
2.6-Dichlorophenol	mg/L	< 0.003	0.003	Pass	
2.6-Dinitrotoluene	mg/L	< 0.005	0.005	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.006	0.006	Pass	
3-Methylcholanthrene	mg/L	< 0.005	0.005	Pass	
3.3'-Dichlorobenzidine	mg/L	< 0.005	0.005	Pass	
4-Aminobiphenyl	mg/L	< 0.005	0.005	Pass	
4-Bromophenyl phenyl ether	mg/L	< 0.005	0.005	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.01	0.01	Pass	
4-Chlorophenyl phenyl ether	mg/L	< 0.005	0.005	Pass	
4-Nitrophenol	mg/L	< 0.03	0.03	Pass	
4.4'-DDD	mg/L	< 0.005	0.005	Pass	
4.4'-DDE	mg/L	< 0.005	0.005	Pass	
4.4'-DDT	mg/L	< 0.005	0.005	Pass	
7.12-Dimethylbenz(a)anthracene	mg/L	< 0.005	0.005	Pass	
a-BHC	mg/L	< 0.005	0.005	Pass	
Acenaphthene	mg/L	< 0.005	0.003	Pass	
Acenaphthylene	mg/L	< 0.001	0.001	Pass	
Acetophenone	mg/L	< 0.001	0.001	Pass	
Aldrin	mg/L	< 0.005	0.005	Pass	
Aniline	mg/L	< 0.005	0.005	Pass	
		< 0.005	0.005	Pass	
Anthracene	mg/L	1			
b-BHC	mg/L	< 0.005 < 0.001	0.005 0.001	Pass Pass	



Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Benzo(a)pyrene	mg/L	< 0.001	0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001	0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001	0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001	0.001	Pass	
Benzyl chloride	mg/L	< 0.005	0.005	Pass	
Bis(2-chloroethoxy)methane	mg/L	< 0.005	0.005	Pass	
Bis(2-chloroisopropyl)ether	mg/L	< 0.005	0.005	Pass	
Bis(2-ethylhexyl)phthalate	mg/L	< 0.005	0.005	Pass	
Butyl benzyl phthalate	mg/L	< 0.005	0.005	Pass	
Chrysene	mg/L	< 0.001	0.001	Pass	
d-BHC	mg/L	< 0.005	0.005	Pass	
Di-n-butyl phthalate	mg/L	< 0.005	0.005	Pass	
Di-n-octyl phthalate	mg/L	< 0.005	0.005	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001	0.001	Pass	
Dibenz(a.i)acridine	mg/L	< 0.005	0.005	Pass	
Dibenzofuran	mg/L	< 0.005	0.005	Pass	
Dieldrin	mg/L	< 0.005	0.005	Pass	
Diethyl phthalate	mg/L	< 0.005	0.005	Pass	
Dimethyl phthalate	mg/L	< 0.005	0.005	Pass	
Dimethylaminoazobenzene	mg/L	< 0.005	0.005	Pass	
Diphenylamine	mg/L	< 0.005	0.005	Pass	
Endosulfan I		< 0.005	0.005	Pass	
	mg/L				
Endosulfan aulahata	mg/L	< 0.005	0.005	Pass	
Endosulfan sulphate	mg/L	< 0.005	0.005	Pass	
Endrin	mg/L	< 0.005	0.005	Pass	
Endrin aldehyde	mg/L	< 0.005	0.005	Pass	
Endrin ketone	mg/L	< 0.005	0.005	Pass	
Fluoranthene	mg/L	< 0.001	0.001	Pass	
Fluorene	mg/L	< 0.001	0.001	Pass	
g-BHC (Lindane)	mg/L	< 0.005	0.005	Pass	
Heptachlor	mg/L	< 0.005	0.005	Pass	
Heptachlor epoxide	mg/L	< 0.005	0.005	Pass	
Hexachlorobenzene	mg/L	< 0.005	0.005	Pass	
Hexachlorobutadiene	mg/L	< 0.005	0.005	Pass	
Hexachlorocyclopentadiene	mg/L	< 0.005	0.005	Pass	
Hexachloroethane	mg/L	< 0.005	0.005	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001	0.001	Pass	
Methoxychlor	mg/L	< 0.005	0.005	Pass	
N-Nitrosodibutylamine	mg/L	< 0.005	0.005	Pass	
N-Nitrosodipropylamine	mg/L	< 0.005	0.005	Pass	
N-Nitrosopiperidine	mg/L	< 0.005	0.005	Pass	
Naphthalene	mg/L	< 0.001	0.001	Pass	
Nitrobenzene	mg/L	< 0.05	0.05	Pass	
Pentachlorobenzene	mg/L	< 0.005	0.005	Pass	
Pentachloronitrobenzene	mg/L	< 0.005	0.005	Pass	
Pentachlorophenol	mg/L	< 0.01	0.01	Pass	
Phenanthrene	mg/L	< 0.001	0.001	Pass	
Phenol	mg/L	< 0.003	0.003	Pass	
Pronamide	mg/L	< 0.005	0.005	Pass	
Pyrene	mg/L	< 0.001	0.001	Pass	
Trifluralin	mg/L	< 0.005	0.005	Pass	
LCS - % Recovery					
Semivolatile Organics					
1.4-Dichlorobenzene	%	71	70-130	Pass	



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Chlorophenol			%	73			30-130	Pass	
2-Methylphenol (o-Cresol)	2-Methylphenol (o-Cresol)			43			30-130	Pass	
2-Nitrophenol			%	49			30-130	Pass	
2.4-Dichlorophenol			%	35			30-130	Pass	
2.4-Dimethylphenol			%	53			30-130	Pass	
2.4-Dinitrotoluene			%	110			70-130	Pass	
2.4.6-Trichlorophenol			%	42			30-130	Pass	
2.6-Dichlorophenol			%	57			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)			%	51			30-130	Pass	
4-Chloro-3-methylphenol			%	48			30-130	Pass	
4-Nitrophenol			%	60			30-130	Pass	
Acenaphthene			%	111			70-130	Pass	
Acenaphthylene			%	81			70-130	Pass	
Anthracene			%	76			70-130	Pass	
Benz(a)anthracene	-		%	81			70-130	Pass	
Benzo(a)pyrene			%	95			70-130	Pass	
Benzo(b&i)fluoranthene			%	72			70-130	Pass	
Benzo(g.h.i)perylene			%	92			70-130	Pass	
Benzo(k)fluoranthene			%	114			70-130	Pass	
Dibenz(a.h)anthracene			%	102			70-130	Pass	
Fluoranthene			%	102			70-130	Pass	
Fluorene			%	84			70-130	Pass	
				94					
Indeno(1.2.3-cd)pyrene			%	90			70-130	Pass	
N-Nitrosodipropylamine			% %				70-130	Pass	
•	Pentachlorophenol			38			30-130	Pass	
Phenanthrene			%	80			70-130	Pass	
Phenol			%	33			30-130	Pass	
Pyrene		0.4	%	105			70-130	Pass	O. alifedia a
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate Semivolatile Organies							1		
Semivolatile Organics				Docult 1	Dogult 2				
	C40 In 2227E	CD		Result 1	Result 2	RPD	200/	Door	
2-Methyl-4.6-dinitrophenol	S19-Jn22275	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass	
1-Chloronaphthalene	S19-Jn22275	СР	mg/L	< 0.03 < 0.005	< 0.03 < 0.005	<1 <1	30%	Pass	
1-Chloronaphthalene 1-Naphthylamine	S19-Jn22275 S19-Jn22275	CP CP	mg/L mg/L	< 0.03 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005	<1 <1 <1	30% 30%	Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP	mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1	30% 30% 30%	Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP	mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1	30% 30% 30% 30%	Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP	mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1	30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4.5-Tetrachlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4.5-Tetrachlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.2.4.5-Tetrachlorobenzene 1.3-Dichlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-5-Tetrachlorobenzene 1.3-Dichlorobenzene 1.3-Dirchlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP CP CP CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4.5-Tetrachlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 2-Chloronaphthalene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP CP CP CP CP C	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 2-Chloronaphthalene 2-Chlorophenol	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP CP CP CP CP C	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 2-Chloronaphthalene 2-Chlorophenol 2-Methylnaphthalene	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP CP CP CP CP C	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 2-Chloronaphthalene 2-Chlorophenol 2-Methylphenol (o-Cresol)	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP CP CP CP CP CP CP CP CP CP CP CP CP C	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 2-Chloronaphthalene 2-Chlorophenol 2-Methylphenol (o-Cresol) 2-Naphthylamine	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 2-Chloronaphthalene 2-Chlorophenol 2-Methylnaphthalene 2-Methylphenol (o-Cresol) 2-Naphthylamine 2-Nitroaniline	\$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275 \$19-Jn22275	CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.4-Dichlorobenzene 2-Chloronaphthalene 2-Chlorophenol 2-Methylnaphthalene 2-Methylphenol (o-Cresol) 2-Naphthylamine 2-Nitroaniline 2-Nitrophenol	\$19-Jn22275 \$19-Jn22275	CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	
1-Chloronaphthalene 1-Naphthylamine 1.2-Dichlorobenzene 1.2.3-Trichlorobenzene 1.2.3.4-Tetrachlorobenzene 1.2.3.5-Tetrachlorobenzene 1.2.4-Trichlorobenzene 1.2.4-Trichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 1.3-Dichlorobenzene 2-Chloronaphthalene 2-Chloronaphthalene 2-Chlorophenol 2-Methylnaphthalene 2-Methylphenol (o-Cresol) 2-Naphthylamine 2-Nitroaniline 2-Nitrophenol 2-Picoline	\$19-Jn22275 \$19-Jn22275	CP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.03 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005 < 0.005	<0.03 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005 <0.005	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate		Source					Lillits	Lilling	Code
Semivolatile Organics				Result 1	Result 2	RPD			
2.4-Dinitrophenol	S19-Jn22275	СР	mg/L	< 0.03	< 0.03	<1	30%	Pass	
2.4-Dinitrotoluene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
2.4.5-Trichlorophenol	S19-Jn22275	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
2.4.6-Trichlorophenol	S19-Jn22275	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
2.6-Dichlorophenol	S19-Jn22275	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
2.6-Dinitrotoluene	S19-Jn22275	СР	mg/L	< 0.005	< 0.005	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S19-Jn22275	СР	mg/L	< 0.006	< 0.006	<1	30%	Pass	
3-Methylcholanthrene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
3.3'-Dichlorobenzidine	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
4-Aminobiphenyl	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
4-Bromophenyl phenyl ether	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
4-Chloro-3-methylphenol	S19-Jn22275	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
4-Chlorophenyl phenyl ether	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
4-Nitrophenol	S19-Jn22275	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass	
4.4'-DDD	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
4.4'-DDE	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
4.4'-DDT	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
7.12-Dimethylbenz(a)anthracene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
a-BHC	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Acenaphthene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acetophenone	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Aldrin	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Aniline	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Anthracene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
b-BHC	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Benz(a)anthracene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&i)fluoranthene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzyl chloride	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Bis(2-chloroethoxy)methane	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Bis(2-chloroisopropyl)ether	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Bis(2-ethylhexyl)phthalate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Butyl benzyl phthalate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chrysene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
d-BHC	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Di-n-butyl phthalate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Di-n-octyl phthalate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Dibenz(a.h)anthracene	S19-Jn22275	CP	mg/L	< 0.003	< 0.001	<1	30%	Pass	
Dibenz(a.i)acridine	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Dibenzofuran	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Dieldrin	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Diethyl phthalate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Dimethyl phthalate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Dimethylaminoazobenzene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Diphenylamine	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Endosulfan I	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Endosulfan II	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Endosulfan sulphate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Endrin Sulphate	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Semivolatile Organics				Result 1	Result 2	RPD			
Endrin aldehyde	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Endrin ketone	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Fluoranthene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
g-BHC (Lindane)	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Heptachlor	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Heptachlor epoxide	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Hexachlorobenzene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Hexachlorobutadiene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Hexachlorocyclopentadiene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Hexachloroethane	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Methoxychlor	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
N-Nitrosodibutylamine	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
N-Nitrosodipropylamine	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
N-Nitrosopiperidine	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Naphthalene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Nitrobenzene	S19-Jn22275	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Pentachlorobenzene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Pentachloronitrobenzene	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Pentachlorophenol	S19-Jn22275	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Phenanthrene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenol	S19-Jn22275	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Pronamide	S19-Jn22275	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Pyrene	S19-Jn22275	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trifluralin	S19-Jn22275	СР	mg/L	< 0.005	< 0.005	<1	30%	Pass	



Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code Description

Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

Nibha Vaidya Analytical Services Manager Joseph Edouard Senior Analyst-Organic (VIC)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Melbourne

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Morgan Singleton-Fookes

AUBURN Project name: Project ID: 1901031 COC number: Not provided

Turn around time: 2 Day

Jun 19, 2019 4:08 PM Date/Time received:

Eurofins | mgt reference: 661654

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt: 3.2 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \square Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone: +61 (2) 9900 8415 or by e.mail: Nibha Vaidya@eurofins.com

Results will be delivered electronically via e.mail to Morgan Singleton-Fookes - morgan@geo-logix.com.au.





COC NSW

To: Enviro Sample NSW

Subject: RE: Eurofins | mgt Amended Test Results - Report 659452 : Site AUBURN (1901031)

From: Morgan Singleton-Fookes [mailto:morgan@qeo-loqix.com.au]

Sent: Wednesday, 19 June 2019 3:26 PM

To: Ursula Long

Subject: RE: Eurofins | mgt Amended Test Results - Report 659452 : Site AUBURN (1901031)

EXTERNAL EMAIL*

Afternoon Ursula,

Could you please schedule testing of SVOCs on all these samples (except DW1 and R1) on a 48 hour turnaround?

Includes: GW1, GW2, GW4, MW101, MW102, MW103, MW104, MW106, MW107, MW108, MW109, MW110, MW111

Thanks very much,

Morgan

From: UrsulaLong@eurofins.com [mailto:UrsulaLong@eurofins.com]

Sent: Tuesday, 18 June 2019 3:42 PM

To: Morgan Singleton-Fookes < morgan@geo-logix.com.au >

Subject: Eurofins | mgt Amended Test Results - Report 659452 : Site AUBURN (1901031)

Dear Morgan,

Please find attached amended (V2) results for your project in the subject header.

Results from report 659749 have been combined onto this V2 report.

Regards

Ursula Long

Eurofins | mgt

Unit F3, Parkview Building

16 Mars Road

LANE COVE WEST NSW 2066

AUSTRALIA

Phone: +61 299 008 420

Email: <u>UrsulaLong@eurofins.com</u>
Website: <u>environment.eurofins.com.au</u>
EnviroNote 1079 - PFAS Fingerprinting

EnviroNote 1080 - Total Organofluorine Analysis & PFAS Investigations

Click <u>here</u> to report this email as spam.

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Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Morgan Singleton-Fookes

 Report
 659768-W

 Project name
 AUBURN

 Project ID
 1901031

 Received Date
 Jun 05, 2019

Client Sample ID			TW1
Sample Matrix			Water
Eurofins mgt Sample No.			S19-Jn05339
Date Sampled			Jun 05, 2019
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEP		Offic	
TRH C6-C9	0.02	mg/L	0.14
TRH C10-C14	0.05	mg/L	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1
TRH C10-36 (Total)	0.1	mg/L	< 0.1
Volatile Organics	<u> </u>		
1.1-Dichloroethane	0.001	mg/L	0.037
1.1-Dichloroethene	0.001	mg/L	0.030
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.005
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001



Client Sample ID			TW1
Sample Matrix			Water
Eurofins mgt Sample No.			S19-Jn05339
Date Sampled			Jun 05, 2019
Test/Reference	LOR	Unit	
Volatile Organics	'	1	
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	< 0.005
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	0.21
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001
Dibromomethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
Iodomethane	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	0.005
trans-1.2-Dichloroethene	0.001	mg/L	0.003
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001
Trichloroethene	0.001	mg/L	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	0.048
Xylenes - Total	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	0.005
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	0.291
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	0.243
4-Bromofluorobenzene (surr.)	1	%	65
Toluene-d8 (surr.)	1	%	68
Total Recoverable Hydrocarbons - 2013 NEPM Frac	ctions		
Naphthalene ^{N02}	0.01	mg/L	< 0.01
TRH C6-C10	0.02	mg/L	0.16
TRH C6-C10 less BTEX (F1)N04	0.02	mg/L	0.16
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	0.001	mg/L	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001
Anthracene	0.001	mg/L	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001
Chrysene	0.001	mg/L	< 0.001
	0.001		< 0.001



Client Sample ID Sample Matrix			TW1 Water
Eurofins mgt Sample No.			S19-Jn05339
Date Sampled			Jun 05, 2019
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.001	mg/L	< 0.001
Fluorene	0.001	mg/L	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001
Naphthalene	0.001	mg/L	< 0.001
Phenanthrene	0.001	mg/L	< 0.001
Pyrene	0.001	mg/L	< 0.001
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	67
p-Terphenyl-d14 (surr.)	1	%	72
Heavy Metals			
Arsenic (filtered)	0.001	mg/L	< 0.001
Cadmium (filtered)	0.0002	mg/L	< 0.0002
Chromium (filtered)	0.001	mg/L	< 0.001
Copper (filtered)	0.001	mg/L	< 0.001
Lead (filtered)	0.001	mg/L	< 0.001
Mercury (filtered)	0.0001	mg/L	< 0.0001
Nickel (filtered)	0.001	mg/L	0.013
Zinc (filtered)	0.005	mg/L	0.040

Report Number: 659768-W



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins mgt Suite B8 (filtered metals)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Jun 11, 2019	7 Day
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Jun 11, 2019	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jun 11, 2019	7 Day
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jun 11, 2019	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Melbourne	Jun 11, 2019	7 Day
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8 filtered	Melbourne	Jun 11, 2019	28 Day
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			

Report Number: 659768-W



ABN - 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

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Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901031

Order No.: Report #:

3202 659768

02 9979 1722

Phone: Fax: 02 9979 1222 Received: Jun 5, 2019 5:45 PM

Due: Jun 17, 2019

Priority:

Contact Name: Morgan Singleton-Fookes

7 Day

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Eurofins | mgt Suite B8 (filtered Sample Detail metals) Χ Melbourne Laboratory - NATA Site # 1254 & 14271 Sydney Laboratory - NATA Site # 18217 Brisbane Laboratory - NATA Site # 20794 Perth Laboratory - NATA Site # 23736 **External Laboratory** No Sample ID Sample Date Sampling **Matrix** LAB ID Time TW1 Jun 05, 2019 Water S19-Jn05339 Х **Test Counts**

Eurofins | mgt Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400

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Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis
- 8. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

ppm: Parts per million **ppb:** Parts per billion
%: Percentage

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody

SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.2 2018
CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

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Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Total Recoverable Hydrocarbons - 1999 NEPM Frac	tions				
TRH C6-C9	mg/L	< 0.02	0.02	Pass	
TRH C10-C14	mg/L	< 0.05	0.05	Pass	
TRH C15-C28	mg/L	< 0.1	0.1	Pass	
TRH C29-C36	mg/L	< 0.1	0.1	Pass	
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
Iodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	



Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Styrene	mg/L	< 0.001	0.001	Pass	0000
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.001	0.001	Pass	
Vinyl chloride	mg/L	< 0.001	0.001	Pass	
Xylenes - Total	mg/L	< 0.003	0.003	Pass	
Method Blank	<u> </u>			1 333	
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				T	
Naphthalene	mg/L	< 0.01	0.01	Pass	
TRH C6-C10	mg/L	< 0.02	0.02	Pass	
TRH >C10-C16	mg/L	< 0.05	0.05	Pass	
TRH >C16-C34	mg/L	< 0.1	0.1	Pass	
TRH >C34-C40	mg/L	< 0.1	0.1	Pass	
Method Blank	1 111g/L	, , , , ,		1 000	
Polycyclic Aromatic Hydrocarbons				T	
Acenaphthene	mg/L	< 0.001	0.001	Pass	
Acenaphthylene	mg/L	< 0.001	0.001	Pass	
Anthracene	mg/L	< 0.001	0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001	0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001	0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001	0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001	0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001	0.001	Pass	
Chrysene	mg/L	< 0.001	0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001	0.001	Pass	
Fluoranthene	mg/L	< 0.001	0.001	Pass	
Fluorene	mg/L	< 0.001	0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001	0.001	Pass	
Naphthalene	mg/L	< 0.001	0.001	Pass	
Phenanthrene	mg/L	< 0.001	0.001	Pass	
Pyrene	mg/L	< 0.001	0.001	Pass	
Method Blank	IIIg/L	\ 0.001	0.001	1 433	
Heavy Metals				T	
Arsenic (filtered)	mg/L	< 0.001	0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0002	0.0002	Pass	
Chromium (filtered)	mg/L	< 0.001	0.001	Pass	
Copper (filtered)	mg/L	< 0.001	0.001	Pass	
Lead (filtered)	mg/L	< 0.001	0.001	Pass	
Mercury (filtered)	mg/L	< 0.001	0.0001	Pass	
Nickel (filtered)	mg/L	< 0.001	0.001	Pass	
Zinc (filtered)	mg/L	< 0.005	0.005	Pass	
LCS - % Recovery	1 111g/L	1 10.000	1 0.000	1 000	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				T	
TRH C6-C9	%	99	70-130	Pass	
TRH C10-C14	%	119	70-130	Pass	
LCS - % Recovery	,,,,			, , ,,,,,	
Volatile Organics					
1.1-Dichloroethene	%	85	70-130	Pass	
1.1.1-Trichloroethane	%	90	70-130	Pass	
1.2-Dichlorobenzene	%	104	70-130	Pass	



Test			Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Benzene			%	96	70-130	Pass	
Ethylbenzene			%	105	70-130	Pass	
m&p-Xylenes			%	109	70-130	Pass	
Toluene			%	99	70-130	Pass	
Trichloroethene			%	88	70-130	Pass	
Xylenes - Total			%	109	70-130	Pass	
LCS - % Recovery				,			
Total Recoverable Hydrocarbons -	2013 NEPM Frac	tions					
Naphthalene			%	99	70-130	Pass	
TRH C6-C10			%	102	70-130	Pass	
TRH >C10-C16			%	112	70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons	<u> </u>						
Acenaphthene			%	88	70-130	Pass	
Acenaphthylene			%	88	70-130	Pass	
Anthracene			%	72	70-130	Pass	
Benz(a)anthracene			%	74	70-130	Pass	
Benzo(a)pyrene			%	81	70-130	Pass	
Benzo(b&j)fluoranthene			%	99	70-130	Pass	
Benzo(g.h.i)perylene			%	91	70-130	Pass	
Benzo(k)fluoranthene			%	91	70-130	Pass	
				99			
Chrysene			%		70-130	Pass	
Dibenz(a.h)anthracene			%	125	70-130	Pass	
Fluoranthene			%	71	70-130	Pass	
Fluorene			%	92	70-130	Pass	
Indeno(1.2.3-cd)pyrene			%	87	70-130	Pass	
Naphthalene			%	96	70-130	Pass	
Phenanthrene			%	80	70-130	Pass	
Pyrene			%	76	70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery							
Total Recoverable Hydrocarbons -				Result 1			
Total Recoverable Hydrocarbons - TRH C10-C14	1999 NEPM Frac M19-Jn11582	NCP	%	Result 1	70-130	Pass	
Total Recoverable Hydrocarbons - TRH C10-C14 Spike - % Recovery	M19-Jn11582	NCP	%	113	70-130	Pass	
Total Recoverable Hydrocarbons - TRH C10-C14 Spike - % Recovery Total Recoverable Hydrocarbons -	M19-Jn11582 2013 NEPM Frac	NCP		113 Result 1			
Total Recoverable Hydrocarbons - TRH C10-C14 Spike - % Recovery Total Recoverable Hydrocarbons - TRH >C10-C16	M19-Jn11582	NCP	%	113	70-130	Pass Pass	
Total Recoverable Hydrocarbons - TRH C10-C14 Spike - % Recovery Total Recoverable Hydrocarbons - TRH >C10-C16 Spike - % Recovery	M19-Jn11582 2013 NEPM Fract M19-Jn11582	NCP		113 Result 1 106			
Total Recoverable Hydrocarbons - TRH C10-C14 Spike - % Recovery Total Recoverable Hydrocarbons - TRH >C10-C16 Spike - % Recovery Polycyclic Aromatic Hydrocarbons	M19-Jn11582 2013 NEPM Fract M19-Jn11582	NCP tions NCP	%	113 Result 1 106 Result 1	70-130	Pass	
Total Recoverable Hydrocarbons - TRH C10-C14 Spike - % Recovery Total Recoverable Hydrocarbons - TRH >C10-C16 Spike - % Recovery Polycyclic Aromatic Hydrocarbons Acenaphthene	M19-Jn11582 2013 NEPM Fract M19-Jn11582 N19-Jn05444	NCP tions NCP	%	113 Result 1 106 Result 1 107	70-130 70-130		
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Report Number: 659768-W



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic (filtered)	M19-Jn17149	NCP	%	112			70-130	Pass	
Cadmium (filtered)	M19-Jn17149	NCP	%	113			70-130	Pass	
Chromium (filtered)	M19-Jn17149	NCP	%	116			70-130	Pass	
Copper (filtered)	M19-Jn17149	NCP	%	113			70-130	Pass	
Lead (filtered)	M19-Jn17149	NCP	%	114			70-130	Pass	
Mercury (filtered)	M19-Jn17149	NCP	%	112			70-130	Pass	
Nickel (filtered)	M19-Jn17149	NCP	%	113			70-130	Pass	
Zinc (filtered)	M19-Jn17149	NCP	%	117			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate		1 2 2 2 2 2 2							
Total Recoverable Hydrocarbor	s - 1999 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH C10-C14	M19-Jn07262	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	M19-Jn07262	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	M19-Jn07262	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate			<u> </u>						
Total Recoverable Hydrocarbor	s - 2013 NEPM Fract	ions		Result 1	Result 2	RPD			
TRH >C10-C16	M19-Jn07262	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	M19-Jn07262	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	M19-Jn07262	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate			J				•		
Polycyclic Aromatic Hydrocarb	ons			Result 1	Result 2	RPD			
Acenaphthene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b&j)fluoranthene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g.h.i)perylene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a.h)anthracene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	N19-Jn05443	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic (filtered)	M19-Jn17149	NCP	mg/L	0.018	0.019	3.0	30%	Pass	
Cadmium (filtered)	M19-Jn17149	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium (filtered)	M19-Jn17149	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	M19-Jn17149	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead (filtered)	M19-Jn17149	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Mercury (filtered)	M19-Jn17149	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	M19-Jn17149	NCP	mg/L	0.002	0.002	7.0	30%	Pass	
Zinc (filtered)	M19-Jn17149	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	



Comments

Sample Integrity

Custody Seals Intact (if used) N/A Attempt to Chill was evident Yes Sample correctly preserved Yes Appropriate sample containers have been used Yes Sample containers for volatile analysis received with minimal headspace Yes Samples received within HoldingTime Yes Some samples have been subcontracted No

Qualifier Codes/Comments

Code Description

F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).

N01

Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.

F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes. N04

Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs N07

Authorised By

N02

Nibha Vaidya Analytical Services Manager Emily Rosenberg Senior Analyst-Metal (VIC) Harry Bacalis Senior Analyst-Volatile (VIC) Joseph Edouard Senior Analyst-Organic (VIC)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Melbourne

Sydney Unit F3, Building F

Brishane Histoane
1/21 Smallwood Place
Murarrie QLD 4172
Phone: +61 7 3902 4600
NATA # 1261 Site # 20794 Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Morgan Singleton-Fookes

AUBURN Project name: Project ID: 1901031 COC number: Not provided

Turn around time: 7 Day

Jun 5, 2019 5:45 PM Date/Time received:

Eurofins | mgt reference: 659768

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt: 3.2 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \square Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone: +61 (2) 9900 8415 or by e.mail: Nibha Vaidya@eurofins.com

Results will be delivered electronically via e.mail to Morgan Singleton-Fookes - morgan@geo-logix.com.au.





ABN: 86 116 892 936 P: (02) 9979 1722 F: (02) 9979 1222		Project Project		er:	A	نطا	Nn	_		D	Ju					Quot	e Rel	feren	ce:											50	
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	W 108				+	4	+	-			+	+	100	1	-		+	1	+	+	H					+	-	-		1	B7A TRHIBTEXNIPAH/Phenois/M8 TRH/VOC/PAH/M8
	W110	1			K	+	+	+	ACCUSED TO SERVICE		+		1	-			+			+								+	+	+	BU TRH/BTEXN/PAH/OCP/M8
	WIII				X	+	+	+		+	+	+		8			+	1												1	B10 TRHIBTEXNIPA-HOCP/OPP/M8 B11 NaK/CaMb/Cl/SO,/CO,/HCO,/NH,/N
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0	WI				*	+	+		NAME OF TAXABLE		+			1)											6						B118 B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanol
R		V			K	1	1				1			ı	A									2							B12A TRH/BTEXN/Oxygenates B13 OCP/PCB
Media C		1,000	1.60		-		T	1	Contractor												li										B1# CCP/OPP
3-16		1	100							18				10																	B15 OCPIOPPIPCB B16 TDS/SOJ/CHJ/AIN/BOD/COD/HPC/CI
1379.91	THE REAL	A CONTRACTOR												K										1							B17 SO,/NOyFe++/HPC/CUB
		11.4		7							1						1								1				-	-	B18 CI/SO/pH B19 NP/K
		-1-V	IU								1			1																	B20 CEC/NESP/Ca/Ma/Na/K
Metals**(circle) As, C	Cd, Cr, Cu, Ni, P	b, Zn, Hg.	Cr et, Cr	r3*, Fe	2", F	e 3*.	Be, B	, AI, V	Mn, Fe, Co, Se, Sr, Sn, Mo, A	g, Ba, TI,	Bi,	Sb		3																	
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Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Morgan Singleton-Fookes

 Report
 661490-W

 Project name
 AUBURN

 Project ID
 1901031

 Received Date
 Jun 19, 2019

Client Sample ID			R16MW102	MW103
Sample Matrix			Water	Water
Eurofins mgt Sample No.			S19-Jn20854	S19-Jn20855
Date Sampled			Jun 18, 2019	Jun 18, 2019
Test/Reference	LOR	Unit	, , ,	, , ,
Volatile Organics	1 2011	U.III		
1.1-Dichloroethane	0.001	mg/L	< 0.1	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.1	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.1	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.1	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.1	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.1	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.1	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.1	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.1	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.1	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.1	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.1	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.1	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.1	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.1	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.1	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.1	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.1	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.1	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.1	< 0.001
Allyl chloride	0.001	mg/L	< 0.1	< 0.001
Benzene	0.001	mg/L	< 0.1	< 0.001
Bromobenzene	0.001	mg/L	< 0.1	< 0.001
Bromochloromethane	0.001	mg/L	< 0.1	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.1	< 0.001
Bromoform	0.001	mg/L	< 0.1	< 0.001
Bromomethane	0.001	mg/L	< 0.1	< 0.001
Carbon disulfide	0.001	mg/L	< 0.1	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.1	< 0.001
Chlorobenzene	0.001	mg/L	< 0.1	< 0.001
Chloroethane	0.001	mg/L	< 0.1	< 0.001
Chloroform	0.005	mg/L	< 0.5	< 0.005
Chloromethane	0.001	mg/L	< 0.1	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	1.9	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.1	< 0.001



Client Sample ID Sample Matrix			R16MW102 Water	MW103 Water
Eurofins mgt Sample No.			S19-Jn20854	S19-Jn20855
Date Sampled			Jun 18, 2019	Jun 18, 2019
Test/Reference	LOR	Unit		
Volatile Organics	·			
Dibromochloromethane	0.001	mg/L	< 0.1	< 0.001
Dibromomethane	0.001	mg/L	< 0.1	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.1	< 0.001
Ethylbenzene	0.001	mg/L	< 0.1	< 0.001
lodomethane	0.001	mg/L	< 0.1	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.1	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.2	< 0.002
Methylene Chloride	0.001	mg/L	< 1	< 0.001
o-Xylene	0.001	mg/L	< 0.1	< 0.001
Styrene	0.001	mg/L	< 0.1	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.1	< 0.001
Toluene	0.001	mg/L	< 0.1	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.1	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.1	< 0.001
Trichloroethene	0.001	mg/L	6.1	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.1	< 0.001
Vinyl chloride	0.001	mg/L	< 0.1	< 0.001
Xylenes - Total	0.003	mg/L	< 0.3	< 0.003
Total MAH*	0.003	mg/L	< 0.2	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	8	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	8	< 0.005
4-Bromofluorobenzene (surr.)	1	%	91	95
Toluene-d8 (surr.)	1	%	103	109



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsSydneyJun 19, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices



mgt

ABN - 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Melbourne 6 Monterey Road Dandenong South VIC 3175 Phone: +61 3 8564 5000

NATA # 1261 Site # 1254 & 14271

Unit F3. Building F 16 Mars Road Lane Cove West NSW 2066 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217

Sydney

Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone: +61 7 3902 4600 NATA # 1261 Site # 20794

Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Jun 19, 2019 11:26 AM

Company Name: Geo-Logix P/L Order No.: PO 3220 Received: Address:

Volatile Organics

2

Bld Q2 Level 3, 2309/4 Daydream St Report #: 661490 Due: Jun 20, 2019

Warriewood Phone: 02 9979 1722 **Priority:** 1 Day

NSW 2102 Fax: 02 9979 1222 **Contact Name:** Morgan Singleton-Fookes

Project Name: AUBURN

Project ID: 1901031 Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail

Melbourne Laboratory - NATA Site # 1254 & 14271 Sydney Laboratory - NATA Site # 18217 Χ Brisbane Laboratory - NATA Site # 20794

Perth Laboratory - NATA Site # 23736

External Laboratory No Sample ID Sample Date Sampling Matrix LAB ID Time MW102 Jun 18, 2019 Water S19-Jn20854 Х MW103 Χ Jun 18, 2019 Water S19-Jn20855

> Eurofins | mgt Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400

Page 4 of 9

Date Reported:Jun 20, 2019

Test Counts



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure, April 2011 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis
- 8. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

ppm: Parts per million **ppb:** Parts per billion
%: Percentage

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody

SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.2 2018
CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.2 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported
 in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

 Eurofins | mgt Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066
 Page 5 of 9

 ABN: 50 005 085 521 Telephone: +61 2 9900 8400
 Report Number: 661490-W



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
	mg/L	< 0.001	0.001	Pass	
Chlorobenzene Chloroethane		< 0.001	0.001	Pass	
	mg/L	< 0.001			
Chloroform	mg/L		0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001 < 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	1	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane District Land I'' and a second to a se	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	-
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	



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Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichlorofluoromethane			mg/L	< 0.001			0.001	Pass	
Vinyl chloride			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
LCS - % Recovery									
Volatile Organics									
1.1-Dichloroethene			%	127			70-130	Pass	
1.1.1-Trichloroethane			%	89			70-130	Pass	
1.2-Dichlorobenzene			%	111			70-130	Pass	
1.2-Dichloroethane			%	91			70-130	Pass	
Benzene			%	113			70-130	Pass	
Ethylbenzene			%	121			70-130	Pass	
m&p-Xylenes			%	106			70-130	Pass	
o-Xylene			%	105			70-130	Pass	
Toluene			%	106			70-130	Pass	
Trichloroethene			%	93			70-130	Pass	
Xylenes - Total			%	105			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1-Dichloroethene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1-Trichloroethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichlorobenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichloropropane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3.5-Trimethylbenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.4-Dichlorobenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Butanone (MEK)	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Propanone (Acetone)	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chlorotoluene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Allyl chloride	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromobenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromochloromethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromoform	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon disulfide	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	S19-Jn11713	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.2-Dichloroethene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.3-Dichloropropene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	



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Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dibromochloromethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dichlorodifluoromethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Isopropyl benzene (Cumene)	S19-Jn11713	NCP	mg/L	0.002	0.002	6.0	30%	Pass	
m&p-Xylenes	S19-Jn11713	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Methylene Chloride	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
o-Xylene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Styrene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.2-Dichloroethene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.3-Dichloropropene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichlorofluoromethane	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	S19-Jn11713	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S19-Jn11713	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	



Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code Description

R16 The LORs have been raised due to the high concentration of one or more analytes

Authorised By

Nibha Vaidya Analytical Services Manager

fight.

Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Melbourne

Sydney Unit F3, Building F

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Murarrie QLD 4172
Phone: +61 7 3902 4600
NATA # 1261 Site # 20794 Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Morgan Singleton-Fookes

AUBURN Project name: Project ID: 1901031 COC number: Not provided

Turn around time: 1 Day

Jun 19, 2019 11:26 AM Date/Time received:

Eurofins | mgt reference: 661490

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 11.4 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \square Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone: +61 (2) 9900 8415 or by e.mail: Nibha Vaidya@eurofins.com

Results will be delivered electronically via e.mail to Morgan Singleton-Fookes - morgan@geo-logix.com.au.





Geo-Logix Pty Ltd		Page 1 of 1	
2309/4 Daydream St Warriewood NSW 2102	Contact email: MIYOON @ OPD-look . Com . OW		
ABN: 86 116 892 936			
P: (02) 9979 1722	Project Number: 1901031 Date Submitted: 186	TAT required:	
E; (02) 9979 1222	ANALYSIS	QUIRED	
	Matrix	· (1)	
	filters	C6 - C10 C10 - C40	Eurofins MGT Suite Codes
Lab ID Sample ID	Date soil water air paint, other	TRH VOCS BTEXI PAHS PCBS OCPS OPPS Pheno Metals Metals TCLP Asbess Foreign	
7	X 24 h	×	BIA TRH/MAH
SCINIA MINITS			
			B2A TRH/MAH/Pb
			1
			B5 TRHBTEXNM7
			B6 TRH/BTEXN/M8
			B7 TRHBTEXN/PAH/M8 B7A TRHBTEXN/PAH/Phenols/M8
			B9 TRH/BTEXN/PAH/OCP/M8
			B118 B11/Alkalinity
			B12 TRH/BTEXN/Oxygenates/Ethanol
			B12A TRH/BTEXN/Oxygenates B13 OCP/PCB
			B14 OCP/OPP
			B15 OCP/OPP/PCB B16 TDS/SO_/CH_/AIK/BOD/COD/HPC/CUB
			B18 CH/SO/pH
Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 5*, Cr 3*, Fe 2*, Fe	b, Zn, Hg, Cr ⁶⁺ , Cr ³⁺ , Fe ²⁺ , Fe ³⁺ , Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb	a, T1, Bi, Sb	DEO SEGREDA CONTRACTOR
		Chain of Custody	利用的一种人们的一种人们的
Relinquished by: NFox	Date/Time: 1916 Signature: ODY Received by:	ed by: \$1.0 83 Date/Time: [4] & Signature:	
	EUD: Gracet 19/6 11:26am	# 661490	



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 681313-W

 Project name
 AUBURN

 Project ID
 1901048B

 Received Date
 Oct 08, 2019

Client Sample ID			DW3	R8	MW117	MW118
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Oc11596	S19-Oc11597	S19-Oc11598	S19-Oc11599
Date Sampled			Oct 08, 2019	Oct 08, 2019	Oct 08, 2019	Oct 08, 2019
Test/Reference	LOR	Unit	,	,	,	,
Volatile Organics	LOIL	Orac				
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	0.002	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	0.003	< 0.001	0.001	0.016
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			DW3	R8	MW117	MW118
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Oc11596	S19-Oc11597	S19-Oc11598	S19-Oc11599
Date Sampled			Oct 08, 2019	Oct 08, 2019	Oct 08, 2019	Oct 08, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	0.002	< 0.001	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	0.005	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
o-Xylene	0.001	mg/L	0.001	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	0.008	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Bromofluorobenzene (surr.)	1	%	78	70	98	91
Toluene-d8 (surr.)	1	%	72	76	104	96

Client Sample ID			MW119	MW120	MW121	MW204
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Oc11600	S19-Oc11601	S19-Oc11602	S19-Oc11603
Date Sampled			Oct 08, 2019	Oct 08, 2019	Oct 08, 2019	Oct 08, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	0.002	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	0.003	0.003	< 0.001	0.009



Client Sample ID			MW119	MW120	MW121	MW204
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Oc11600	S19-Oc11601	S19-Oc11602	S19-Oc11603
Date Sampled			Oct 08, 2019	Oct 08, 2019	Oct 08, 2019	Oct 08, 2019
Test/Reference	LOR	Unit				
Volatile Organics	<u>'</u>	-				
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	0.001	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.001 0.005	< 0.001	< 0.001
Isopropyl benzene (Cumene) m&p-Xylenes	0.001	mg/L	< 0.001 < 0.002	< 0.005	< 0.001 < 0.002	< 0.001 < 0.002
Methylene Chloride	0.002	mg/L mg/L	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	0.001	< 0.001	0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.002
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	0.007	< 0.003	0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Bromofluorobenzene (surr.)	1	%	83	89	97	107
Toluene-d8 (surr.)	1	%	88	81	102	111



Client Sample ID Sample Matrix			MW205 Water
•			
Eurofins Sample No.			S19-Oc11604
Date Sampled			Oct 08, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
1.1-Dichloroethane	0.001	mg/L	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.004
2-Propanone (Acetone)	0.001	mg/L	< 0.01
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	< 0.005
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001
Dibromochloromethane Dibromomethane	0.001	mg/L	< 0.001
Dibromomethane Diabloradifluoromethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
loanrend hanzens (Cumana)	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001
m&p-Xylenes Methylono Chlorido	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene Styropo	0.001	mg/L	0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene Toluene	0.001 0.001	mg/L	< 0.001 0.002
trans-1.2-Dichloroethene		mg/L	
trans-1.2-Dichloroethene trans-1.3-Dichloropropene	0.001 0.001	mg/L mg/L	< 0.001 < 0.001



Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled			MW205 Water S19-Oc11604 Oct 08, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
Trichloroethene	0.001	mg/L	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005
4-Bromofluorobenzene (surr.)	1	%	115
Toluene-d8 (surr.)	1	%	119



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsMelbourneOct 09, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)



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Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood NSW 2102

Project Name: Project ID:

AUBURN 1901048B Order No.: Report #:

Phone:

Fax:

Volatile Organics

Χ

3393 681313

02 9979 1722 02 9979 1222 Received:

Oct 8, 2019 4:36 PM

Due:Oct 10, 2019Priority:2 DayContact Name:Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

Sample Detail

Melbourne Laboratory - NATA Site # 1254 & 14271

Sydney Laboratory - NATA Site # 18217

Brisbane Laboratory - NATA Site # 20794

Perth Laboratory - NATA Site # 23736

External Laboratory

Exte	rnal Laboratory					
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	DW3	Oct 08, 2019		Water	S19-Oc11596	Х
2	R8	Oct 08, 2019		Water	S19-Oc11597	Х
3	MW117	Oct 08, 2019		Water	S19-Oc11598	Х
4	MW118	Oct 08, 2019		Water	S19-Oc11599	Х
5	MW119	Oct 08, 2019		Water	S19-Oc11600	Х
6	MW120	Oct 08, 2019		Water	S19-Oc11601	Х
7	MW121	Oct 08, 2019		Water	S19-Oc11602	Х
8	MW204	Oct 08, 2019		Water	S19-Oc11603	Х
9	MW205	Oct 08, 2019		Water	S19-Oc11604	Х



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NATA # 1261 Site # 20794

Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID: AUBURN 1901048B Order No.: Report #:

Phone:

Fax:

3393 681313

02 9979 1722 02 9979 1222 **Received:** Oct 8, 2019 4:36 PM **Due:** Oct 10, 2019

Priority: 2 Day
Contact Name: Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

Sample Detail	Volatile Organics
Melbourne Laboratory - NATA Site # 1254 & 14271	Х
Sydney Laboratory - NATA Site # 18217	
Brisbane Laboratory - NATA Site # 20794	
Perth Laboratory - NATA Site # 23736	
Test Counts	9



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane		< 0.001	0.001	Pass	
	mg/L	< 0.005	0.001	Pass	
Chloroform	mg/L			Pass	
Chloromethane cis-1.2-Dichloroethene	mg/L	< 0.001	0.001		
	mg/L	< 0.001 < 0.001	0.001	Pass	
cis-1.3-Dichloropropene Dibromochloromethane	mg/L		0.001	Pass	
	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	1



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichlorofluoromethane			mg/L	< 0.001			0.001	Pass	
Vinyl chloride			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
LCS - % Recovery									
Volatile Organics									
1.1-Dichloroethene			%	102			70-130	Pass	
1.1.1-Trichloroethane	ichloroethane						70-130	Pass	
1.2-Dichlorobenzene	ichlorobenzene						70-130	Pass	
1.2-Dichloroethane	Dichloroethane						70-130	Pass	
Benzene	zene						70-130	Pass	
Ethylbenzene	hylbenzene						70-130	Pass	
m&p-Xylenes	n&p-Xylenes						70-130	Pass	
Toluene			%	107			70-130	Pass	
Trichloroethene			%	95			70-130	Pass	
Xylenes - Total	Ţ.		%	114			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Benzene	M19-Oc06616	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M19-Oc06616	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M19-Oc06616	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	M19-Oc06616 NC		mg/L	< 0.001	< 0.001 < 0.001 <		30%	Pass	
Toluene	M19-Oc06616 NCP		mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	M19-Oc06616	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	



Comments

Sample Integrity

 Custody Seals Intact (if used)
 N/A

 Attempt to Chill was evident
 Yes

 Sample correctly preserved
 Yes

 Appropriate sample containers have been used
 Yes

 Sample containers for volatile analysis received with minimal headspace
 Yes

 Samples received within HoldingTime
 Yes

 Some samples have been subcontracted
 No

Authorised By

Ursula Long Analytical Services Manager Harry Bacalis Senior Analyst-Volatile (VIC)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Page 12 of 12



Environment Testing Melbourne 6 Monterey Road Dandenong South Vic 3175 16 Mars Road Phone: +61 3 8564 5000 NATA # 1261 Site # 1254 & 14271 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 20794

Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048B COC number: Not provided

Turn around time: 2 Day

Oct 8, 2019 4:36 PM Date/Time received:

Eurofins reference: 681313

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 2.4 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

Building Q2, L		Project Mana													Purc	has	e Or	der I	No:													
2309/4 Daydre Warriewood, I		Contact email	1: _	6	peo	urc	e @	geo-logix.com.	au						Quo	te R	efere	ence	: .			II de						. 1				
ABN: 86 116 892	936	Project Name	: _	Ã	ub	uri									Sen	d Inv	voice	to:		acc	oun	ts@	geo-	logi	x.co	m.a	u					
P: (02) 9979 17 F: (02) 9979 12		Project Numb	er: _	19	101	04	8B.	Date Submitted:8_							TAT	req	uired	l:		_2	2 de	ry										
	No. St. Line	Marine Control		Y.	45)			ANALYSI	S RE	QL	JIR	ED						id														
					latri	filters	Je.		COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	S	BTEXN	4s	38	Sc	Sc	Phenois	Metals - M8	Metals - Lead	Metals - Specify **	a,	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)					TE	Eurofins MGT Suite Codes
Lab ID	Sample ID	Date	soil	water	air	paint,	other	Comments	8	TR	TR	VOCs	BTE	PAHS	PCE	OCPs	OPPs	Phe	Met	Met	Met	TCLP	Asb	Asb	For	Co	표		Hold	4	SUITE	B1 TRH/BTEXN
	DW3	8/10/19		X					1			×																		+		BIA TRH/MAH
ARMENIA.	R8			X					-		-	X																		+		B2 TRH/BTEXN/Pb B2A TRH/MAH/Pb
TEMP 7	MW117			X					-			X																		+		B3 PAH/PhenoIs
	MW118			X					-		-	X																	-	+		B4 TRH/BTEXN/PAH B4A TRH/BTEXN/PAH/Phenols
	MW119			X					-		-	X	400												-					+		B5 TRH/BTEXN/M7
	MW120			X			3		-	-	-	×																		+		B6 TRH/BTEXN/M8 B7 TRH/BTEXN/PAH/M8
100-101-11	MW121			X					-	-		X											- 4			-				+		B7A TRH/BTEXN/PAH/Phenols/M8
1298	MW204			X					-			×						h											-	+		B8 TRH/VOC/PAH/M8 B9 TRH/BTEXN/PAH/OCP/M8
La Ba	MW205	V		X					1			X																		+		B10 TRH/BTEXN/PAH/OCP/OPP/M8
The Na	melet need	THE WALL				10		della di salita	-	-			1											-						-		B11 Na/K/Ca/Mg/Cl/SO ₃ /CO ₃ /HCO ₃ /NH ₃ /NO ₃ B11A B11/Alkalinity
2 100	distribution of	146			A				1				100										3							+		B11B B11/EC/TDS
									-			-								-										+		B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates
To Disk		The second			17.5				-	-				200					- 60								2			+		B13 OCP/PCB
DE LOS									-		-								31											+	4	B14 OCP/OPP B15 OCP/OPP/PCB
	R H H								1	-		-	100			- 5														+		B16 TDS/SO ₄ /CH ₄ /Alk/BOD/COD/HPC/CUB
		1 10 10 10							1					76									110						-	+		B17 SO ₄ /NO ₃ /Fe++/HPC/CUB
						110			-						-11														_	+		B18 CI-/SO₄/pH B19 N/P/K
									L																				9		MI	B20 CEC/%ESP/Ca/Ma/Na/K
Metals**(circle	a) As, Cd, Cr, Cu, Ni,	Pb, Zn, Hg, Cr 6+,	Cr 3+, F	e 2+,	Fe 3	, Be,	B, AI, V, 1	Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, E	Ba, TI, I	Bi, St	,																					
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CHAIN OF CUSTODY

Geo-Logix Pty Ltd

#AU04_Enviro_Sample_NSW

To:Alena BounkeuaSubject:RE: Auburn POs

From: Morgan Singleton-Fookes [mailto:morgan@geo-logix.com.au]

Sent: Tuesday, 8 October 2019 5:40 PM

To: Ursula Long **Subject:** Auburn POs

EXTERNAL EMAIL*

Hi Ursula,

Please use PO 3392 and PO 3393 for the samples I just dropped off for Auburn.

Thanks very much, Morgan

Morgan Singleton-Fookes | Project Scientist

Unit 2309/4 Daydream St, Warriewood NSW 2102 M: 0417 217 179 | T: 02 9979 1722 | www.geo-logix.com.au



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Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 681308-W

 Project name
 AUBURN

 Project ID
 1901048B

 Received Date
 Oct 08, 2019

Client Sample ID			TW3
Sample Matrix			Water
Eurofins Sample No.			S19-Oc11593
Date Sampled			Oct 08, 2019
Test/Reference	LOR	Unit	
Volatile Organics	1 20		
1.1-Dichloroethane	0.001	mg/L	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	< 0.005
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001



Client Sample ID Sample Matrix			TW3 Water
Eurofins Sample No.			S19-Oc11593
Date Sampled			Oct 08, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
Dibromochloromethane	0.001	mg/L	< 0.001
Dibromomethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
lodomethane	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	0.003
m&p-Xylenes	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001
Trichloroethene	0.001	mg/L	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005
4-Bromofluorobenzene (surr.)	1	%	89
Toluene-d8 (surr.)	1	%	97



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsSydneyOct 08, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices



ABN - 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Melbourne 6 Monterey Road Dandenong South VIC 3175 Phone: +61 3 8564 5000 NATA # 1261

Site # 1254 & 14271

Unit F3. Building F 16 Mars Road Lane Cove West NSW 2066 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217

Sydney

Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone: +61 7 3902 4600 NATA # 1261 Site # 20794

Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901048B Order No.:

3392 681308

Report #: Phone: 02 9979 1722 Fax:

02 9979 1222

Received: Oct 8, 2019 4:36 PM

Due: Oct 10, 2019 **Priority:** 2 Day

Contact Name:

Eurofins Analytical Services Manager: Ursula Long

Ben Pearce

Volatile Organics Sample Detail Melbourne Laboratory - NATA Site # 1254 & 14271 Sydney Laboratory - NATA Site # 18217 Χ Brisbane Laboratory - NATA Site # 20794 Perth Laboratory - NATA Site # 23736 **External Laboratory** No Sample ID Sample Date Sampling **Matrix** LAB ID Time TW3 Oct 08, 2019 Water S19-Oc11593 Х

Eurofins Environment Testing Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400

Page 4 of 8 Report Number: 681308-W

Date Reported:Oct 10, 2019

Test Counts



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane			0.001	Pass	
	mg/L	< 0.001			
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	



Test	Units	Result 1		Pass imits	Qualifying Code
Trichlorofluoromethane	mg/L	< 0.001	0.001 F	Pass	
Vinyl chloride	mg/L	< 0.001	0.001 F	Pass	
Xylenes - Total	mg/L	< 0.003	0.003	Pass	
LCS - % Recovery					
Volatile Organics					
1.1-Dichloroethene	%	124	70-130 F	Pass	
1.1.1-Trichloroethane	%	101	70-130 F	Pass	
1.2-Dichlorobenzene	%	116	70-130 F	Pass	
1.2-Dichloroethane	%	114	70-130 F	Pass	
Benzene	%	95	70-130 F	Pass	
Ethylbenzene	%	125	70-130 F	Pass	
m&p-Xylenes	%	128	70-130 F	Pass	
o-Xylene	%	127	70-130 F	Pass	
Toluene	%	120	70-130 F	Pass	
Trichloroethene	%	116	70-130 F	Pass	
Xylenes - Total	%	127	70-130 F	Pass	



Comments

Sample Integrity

 Custody Seals Intact (if used)
 N/A

 Attempt to Chill was evident
 Yes

 Sample correctly preserved
 Yes

 Appropriate sample containers have been used
 Yes

 Sample containers for volatile analysis received with minimal headspace
 Yes

 Samples received within HoldingTime
 Yes

 Some samples have been subcontracted
 No

Authorised By

Ursula Long Analytical Services Manager



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



Environment Testing Melbourne 6 Monterey Road Dandenong South Vic 3175 16 Mars Road Phone: +61 3 8564 5000 NATA # 1261 Site # 1254 & 14271 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 20794

Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048B COC number: Not provided

Turn around time: 2 Day

Oct 8, 2019 4:36 PM Date/Time received:

Eurofins reference: 681308

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 2.4 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

Geo-Logix Pty Ltd 3uilding Q2, Level 3 309/4 Daydream St Varriewood, NSW 2102 BN: 86 116 892 936 P: (02) 9979 1722 F: (02) 9979 1222		Project Manager: Ben Pearce Contact email: bpearce@geo-logix.com.au Project Name: Auburn							Page of Purchase Order No: Quote Reference: Send Invoice to: accounts@geo-logix.com.au TAT required: 2 day																						
Lab ID	Sample ID	Date	soil	water	latrix	paint, filters	other	Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40		BTEXN	PAHS	PCBs	OCPs	OPPs	Phenois	Metals - M8		Metals - Specify **	TCLP Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	Hd		77		SUITE	Eurofins MGT Suite Codes
	TW3	8/10/19		X			Plea	ase send to bourne lab.	+		3	×	6															3 4			B1A TRH/MAH B2 TRH/BTEXN/Pb
				K									8	1/4																	B2A TRH/MAH/Pb B3 PAH/Phenois
	and the same			8					-			-										8									B4 TRH/BTEXN/PAH B4A TRH/BTEXN/PAH/Phenois
												-	2							24			-	-	-				1		B5 TRH/BTEXN/M7
							A BOTT				-		30								-		-	-				4	+		B6 TRH/BTEXN/M8 B7 TRH/BTEXN/PAH/M8
				TV.								-	-					- 11			-		+	-					-		B7A TRH/BTEXN/PAH/Phenois/M8
						-						-	1							-	-	+		+	-				-	421	B8 TRH/VOC/PAH/M8 B9 TRH/BTEXN/PAH/OCP/M8
						-												N.		13				-							B10 TRH/BTEXN/PAH/OCP/OPP/M8
												-												+					+		B11 Na/K/Ca/Mg/Cl/SO ₄ /CO ₃ /HCO ₃ /NH ₃ /NO ₃ B11A B11/Alkalinity
																															B11B B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanol
	IN E U PER SE			7 1			7 7 7 7 7		1		-										+			+							B12A TRH/BTEXN/Oxygenates
Vision 1991														2							+			+	15			18			B13 OCP/PCB B14 OCP/OPP
																															B15 OCP/OPP/PCB
																														Vel	B16 TDS/SO ₄ /CH ₄ /Alk/BOD/COD/HPC/CUB B17 SO ₄ /NO ₃ /Fe++/HPC/CUB
- ST 1000	7, 50 3					1													1.0												B18 CH/SO,/pH
THE REAL PROPERTY.		N. W. W.					19 00 19				1						9		M					-				100			B19 N/P/K B20 CEC/%ESP/Ca/Ma/Na/K
Antolott/ole-1-1	An Cd Cn Cu NI	Ph 7n Ha Ca 6+ 1	3+ 5	2+	En 3+	Do F	AL V. Ma	, Fe, Co, Se, Sr, Sn, Mo, Ag, E	Ro TI S	21 24																1		38 1			DEC CECIMEOFICAIMAINAIN
netals (Clicle)	As, ou, or, ou, M,	ru, zii, rig, or , (9 ,	, ,	56, 1	, rai, w, Will	Chai	-	-	Name of	dv		-	ST.		No.		18					1112			A S				

C	nair	01	Cu	sto)d	y
				77.7		

Relinquished by: M. Singleton Date/Time: 8/10 Signature: M.F. Received by: Grave

#AU04_Enviro_Sample_NSW

To:Alena BounkeuaSubject:RE: Auburn POs

From: Morgan Singleton-Fookes [mailto:morgan@geo-logix.com.au]

Sent: Tuesday, 8 October 2019 5:40 PM

To: Ursula Long **Subject:** Auburn POs

EXTERNAL EMAIL*

Hi Ursula,

Please use PO 3392 and PO 3393 for the samples I just dropped off for Auburn.

Thanks very much, Morgan

Morgan Singleton-Fookes | Project Scientist

Unit 2309/4 Daydream St, Warriewood NSW 2102 M: 0417 217 179 | T: 02 9979 1722 | www.geo-logix.com.au



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Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 679525-W

 Project name
 AUBURN

 Project ID
 1901048A

 Received Date
 Sep 27, 2019

Client Sample ID			TW2
Sample Matrix			Water
Eurofins Sample No.			S19-Se41722
Date Sampled			Sep 27, 2019
Test/Reference	LOR	Unit	
Volatile Organics	LOIK	Onit	
1.1-Dichloroethane	0.001	mg/L	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	< 0.005
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001



Client Sample ID Sample Matrix			TW2 Water
Eurofins Sample No.			S19-Se41722
Date Sampled			Sep 27, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
Dibromochloromethane	0.001	mg/L	< 0.001
Dibromomethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
lodomethane	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001
Trichloroethene	0.001	mg/L	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005
4-Bromofluorobenzene (surr.)	1	%	65
Toluene-d8 (surr.)	1	%	81



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsSydneySep 27, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices



ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au Melbourne 6 Monterey Road Dandenong South VIC 3175 Phone: +61 3 8564 5000 NATA # 1261

Site # 1254 & 14271

Unit F3, Building F 16 Mars Road Lane Cove West NSW 2066 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217

Sydney

Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone: +61 7 3902 4600 NATA # 1261 Site # 20794 Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901048A Order No.: Report #:

Phone:

Fax:

3370 679525

02 9979 1722 02 9979 1222 **Received:** Sep 27, 2019 2:28 PM

Due: Oct 4, 2019 **Priority:** 5 Day

Contact Name: - cc ALL RESULTS Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

		Sa	mple Detail			Volatile Organics	
Melb	ourne Laborato	ry - NATA Site	# 1254 & 142	71			
Sydn	ey Laboratory -	NATA Site # 1	8217			Χ	
Brisk	oane Laboratory	/ - NATA Site #	20794				
Perth	n Laboratory - N	IATA Site # 237	36				
Exte	rnal Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	TW2	Sep 27, 2019		Water	S19-Se41722	Х	
Test	Counts					1	

Eurofins Environment Testing Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichlorofluoromethane			mg/L	< 0.001			0.001	Pass	
Vinyl chloride			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
LCS - % Recovery									
Volatile Organics									
1.1-Dichloroethene			%	108			70-130	Pass	
1.1.1-Trichloroethane			%	98			70-130	Pass	
1.2-Dichlorobenzene			%	106			70-130	Pass	
1.2-Dichloroethane			%	100			70-130	Pass	
Benzene			%	100			70-130	Pass	
Ethylbenzene			%	114			70-130	Pass	
m&p-Xylenes			%	109			70-130	Pass	
o-Xylene			%	104			70-130	Pass	
Toluene			%	99			70-130	Pass	
Trichloroethene			%	94			70-130	Pass	
Xylenes - Total			%	107			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S19-Se41742	NCP	%	115			70-130	Pass	
1.1.1-Trichloroethane	S19-Se41742	NCP	%	99			70-130	Pass	
1.2-Dichlorobenzene	S19-Se41742	NCP	%	99			70-130	Pass	
1.2-Dichloroethane	S19-Se41742	NCP	%	102			70-130	Pass	
Benzene	S19-Se41742	NCP	%	102			70-130	Pass	
Ethylbenzene	S19-Se41742	NCP	%	111			70-130	Pass	
m&p-Xylenes	S19-Se41742	NCP	%	105			70-130	Pass	
o-Xylene	S19-Se41742	NCP	%	100			70-130	Pass	
Toluene	S19-Se41742	NCP	%	103			70-130	Pass	
Trichloroethene	S19-Se41742	NCP	%	98			70-130	Pass	
Xylenes - Total	S19-Se41742	NCP	%	103			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1-Dichloroethene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1-Trichloroethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	 - -	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
	S19-Se41741	1101	_						
1.2-Dichloroethane	S19-Se41741 S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
			-	< 0.001 < 0.001	< 0.001 < 0.001	<1 <1	30% 30%	Pass Pass	
1.2-Dichloroethane	S19-Se41741	NCP	mg/L	1					
1.2-Dichloroethane 1.2-Dichloropropane	S19-Se41741 S19-Se41741	NCP NCP	mg/L mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane 1.2-Dichloropropane 1.2.3-Trichloropropane	S19-Se41741 S19-Se41741 S19-Se41741	NCP NCP NCP	mg/L mg/L mg/L	< 0.001 < 0.001	< 0.001 < 0.001	<1 <1	30% 30%	Pass Pass	
1.2-Dichloroethane 1.2-Dichloropropane 1.2.3-Trichloropropane 1.2.4-Trimethylbenzene	S19-Se41741 S19-Se41741 S19-Se41741 S19-Se41741	NCP NCP NCP	mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001	< 0.001 < 0.001 < 0.001	<1 <1 <1	30% 30% 30%	Pass Pass Pass	
1.2-Dichloroethane 1.2-Dichloropropane 1.2.3-Trichloropropane 1.2.4-Trimethylbenzene 1.3-Dichlorobenzene	\$19-\$e41741 \$19-\$e41741 \$19-\$e41741 \$19-\$e41741 \$19-\$e41741	NCP NCP NCP NCP	mg/L mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001 < 0.001	< 0.001 < 0.001 < 0.001 < 0.001	<1 <1 <1 <1	30% 30% 30% 30%	Pass Pass Pass Pass	
1.2-Dichloroethane 1.2-Dichloropropane 1.2.3-Trichloropropane 1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane	\$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741	NCP NCP NCP NCP NCP	mg/L mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001	<1 <1 <1 <1 <1	30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass	
1.2-Dichloroethane 1.2-Dichloropropane 1.2.3-Trichloropropane 1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane 1.3-Trimethylbenzene	\$19-\$e41741 \$19-\$e41741 \$19-\$e41741 \$19-\$e41741 \$19-\$e41741 \$19-\$e41741 \$19-\$e41741	NCP NCP NCP NCP NCP NCP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001	<1 <1 <1 <1 <1 <1	30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass	
1.2-Dichloroethane 1.2-Dichloropropane 1.2.3-Trichloropropane 1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane 1.3.5-Trimethylbenzene 1.4-Dichlorobenzene	\$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741	NCP NCP NCP NCP NCP NCP NCP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass	
1.2-Dichloroethane 1.2-Dichloropropane 1.2.3-Trichloropropane 1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane 1.3-Trimethylbenzene 1.4-Dichlorobenzene 2-Butanone (MEK)	\$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741	NCP NCP NCP NCP NCP NCP NCP NCP NCP	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001 < 0.001	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001 <0.001	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	30% 30% 30% 30% 30% 30% 30% 30%	Pass Pass Pass Pass Pass Pass Pass Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Allyl chloride	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromobenzene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromochloromethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromoform	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon disulfide	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	S19-Se41741	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.2-Dichloroethene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.3-Dichloropropene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromochloromethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dichlorodifluoromethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Isopropyl benzene (Cumene)	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S19-Se41741	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Methylene Chloride	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
o-Xylene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Styrene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.2-Dichloroethene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.3-Dichloropropene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichlorofluoromethane	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	S19-Se41741	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S19-Se41741	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	



Comments

Sample Integrity

 Custody Seals Intact (if used)
 N/A

 Attempt to Chill was evident
 Yes

 Sample correctly preserved
 Yes

 Appropriate sample containers have been used
 Yes

 Sample containers for volatile analysis received with minimal headspace
 Yes

 Samples received within HoldingTime
 Yes

 Some samples have been subcontracted
 No

Authorised By

Ursula Long Analytical Services Manager



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Environment Testing Melbourne 6 Monterey Road Dandenong South Vic 3175 16 Mars Road Phone: +61 3 8564 5000 NATA # 1261 Site # 1254 & 14271 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 20794

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Geo-Logix P/L Company name:

Contact name: - cc ALL RESULTS Ben Pearce

Project name: **AUBURN** Project ID: 1901048A COC number: Not provided

Turn around time: 5 Day

Date/Time received: Sep 27, 2019 2:28 PM

Eurofins reference: 679525

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 5.4 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to - cc ALL RESULTS Ben Pearce - bpearce@geologix.com.au.

CHAIN OF CUSTODY Geo-Logix Pty Ltd Project Manager: Ben Pearce 679525 Building Q2, Level 3 bpearce @ geo-logix.com.au 2309/4 Daydream St Warriewood, NSW 2102 Contact email: Quote Reference: **Project Name:** Send Invoice to: accounts@geo-logix.com.au ABN: 86 116 892 936 Project Number: 1901048 A Date Submitted: 27/09/19 STD TAT required: P: (02) 9979 1722 F: (02) 9979 1222 **ANALYSIS REQUIRED** Matrix Asbestos (WA DOH) Asbestos (ID only) ductivity (EC) Metals - Specify TRH - C6 - C10 **Eurofins MGT Suite** filters - C10 -Codes paint, SUITE TCLP Hold io Hd Sample ID Comments Lab ID Date TRH/BTEXN X TWZ Please send to B1A TRH/MAH Melbourne lab. B2 TRH/BTEXN/Pb B2A TRH/MAH/Pb PAH/PhenoIs TRH/BTEXN/PAH B4A TRH/BTEXN/PAH/Phenois TRH/BTEXN/M7 TRH/BTEXN/M8 TRH/BTEXN/PAH/M8 B7A TRH/BTEXN/PAH/Phenols/M8 TRHA/OC/PAH/M8

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ^{6*}, Cr ^{3*}, Fe ²⁺, Fe ³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Relinquished by: M. Singleton Date/Time: 27/9 Signature: 1128 PM

14:20

Chain of Custody

Proceived by: 14:20

T! 5.40°C

B9 TRH/BTEXN/PAH/OCP/M8
B10 TRH/BTEXN/PAH/OCP/OPP/M8
B11 Na/K/Ca/Mg/Cl/SO₄/CO₃/HCO₃/NH₃/NO₃

B12 TRH/BTEXN/Oxygenates/Ethanol
B12A TRH/BTEXN/Oxygenates
B13 OCP/PCB
B14 OCP/OPP
B15 OCP/OPP/PCB

B16 TDS/SO₄/CH₄/AIK/BOD/COD/HPC/CUB
B17 SO₄/NO₃/Fe++/HPC/CUB
B18 CH/SO₄/pH
B19 N/P/K

B20 CEC/%ESP/Ca/Ma/Na/K

B11A B11/Alkalinity B11B B11/EC/TDS



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 679523-W-V2

 Project name
 AUBURN

 Project ID
 1901048A

 Received Date
 Sep 27, 2019

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled			MW108 Water S19-Se41705 Sep 27, 2019	MW203 Water S19-Se41706 Sep 27, 2019	GW04 Water S19-Se41707 Sep 27, 2019	MW202 Water S19-Se41708 Sep 27, 2019
Test/Reference	LOR	Unit				
Ammonia (as N)	0.01	mg/L	1.6	2.5	0.14	8.3
Chloride	1	mg/L	68	7700	970	7000
Nitrate (as N)	0.02	mg/L	< 0.02	< 0.02	1.0	< 0.02
Sulphate (as SO4)	5	mg/L	5.1	440	240	< 5
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	20	mg/L	800	930	450	930
Carbonate Alkalinity (as CaCO3)	10	mg/L	< 10	< 10	< 10	< 10
Alkali Metals						
Calcium	0.5	mg/L	40	250	26	430
Magnesium	0.5	mg/L	36	530	43	270
Potassium	0.5	mg/L	6.6	31	11	53
Sodium	0.5	mg/L	300	4400	960	3700

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	MW102 Water S19-Se41709 Sep 27, 2019	MW201 Water S19-Se41710 Sep 27, 2019
Ammonia (as N)	0.01	mg/L	5.0	3.0
Chloride	1	mg/L	6200	6900
Nitrate (as N)	0.02	mg/L	< 0.02	< 0.02
Sulphate (as SO4)	5	mg/L	340	38
Alkalinity (speciated)		_		
Bicarbonate Alkalinity (as CaCO3)	20	mg/L	< 20	1100
Carbonate Alkalinity (as CaCO3)	10	mg/L	860	< 10
Alkali Metals				
Calcium	0.5	mg/L	1000	330
Magnesium	0.5	mg/L	18	520
Potassium	0.5	mg/L	150	33
Sodium	0.5	mg/L	3600	4200



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Major Cations			
Ammonia (as N)	Melbourne	Oct 01, 2019	28 Days
- Method: LTM-INO-4200 Ammonia by Discrete Analyser			
Alkali Metals	Melbourne	Oct 01, 2019	180 Days
- Method: LTM-MET-3010 Alkali Metals S Si and P by ICP-AES			
Major Anions			
Chloride	Melbourne	Oct 01, 2019	28 Days
- Method: LTM-INO-4090 Chloride by Discrete Analyser			
Nitrate (as N)	Melbourne	Oct 01, 2019	28 Days
- Method: LTM-INO-4120 Analysis of NOx NO2 NH3 by FIA			
Sulphate (as SO4)	Melbourne	Oct 01, 2019	28 Days
- Method: LTM-INO-4110 Sulfate by Discrete Analyser			
Alkalinity (speciated)	Melbourne	Oct 01, 2019	14 Days
- Method: LTM-INO-4250 Alkalinity by Electrometric Titration			



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Major

HOLE

Major

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Company Name: Geo-Logix P/L

Address:

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Warriewood

NSW 2102

Project Name: Project ID: AUBURN 1901048A Order No.: Report #: 3371 679523

Phone: 02 9979 1722 **Fax:** 02 9979 1222

Received:

Sep 27, 2019 2:28 PM

Due: Oct 4, 2019
Priority: 5 Day
Contact Name: Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

		Sa	mple Detail			0	r Anions	r Cations			
Melb	Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydr	Sydney Laboratory - NATA Site # 18217										
Brisl	bane Laborator	y - NATA Site #	20794								
Pertl	h Laboratory - I	NATA Site # 237	36								
Exte	rnal Laboratory	/									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID						
1	MW108	Sep 27, 2019		Water	S19-Se41705		Х	Х			
2	MW203	Sep 27, 2019		Water	S19-Se41706		Х	Х			
3	GW04	Sep 27, 2019		Water	S19-Se41707		Х	Х			
4	MW202	Sep 27, 2019		Water	S19-Se41708		Х	Х			
5	MW102	Sep 27, 2019		Water	S19-Se41709		Х	Х			
6	MW201	Sep 27, 2019		Water	S19-Se41710		Х	Х			
7	DW2	Sep 27, 2019		Water	S19-Se41723	Х					
Test	Counts					1	6	6			



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank									
Ammonia (as N)			mg/L	< 0.01			0.01	Pass	
Chloride			mg/L	< 1			1	Pass	
Nitrate (as N)			mg/L	< 0.02			0.02	Pass	
Sulphate (as SO4)			mg/L	< 5			5	Pass	
Method Blank									
Alkali Metals									
Calcium			mg/L	< 0.5			0.5	Pass	
Magnesium			mg/L	< 0.5			0.5	Pass	
Potassium			mg/L	< 0.5			0.5	Pass	
Sodium			mg/L	< 0.5			0.5	Pass	
LCS - % Recovery			, j		,				
Ammonia (as N)			%	99			70-130	Pass	
Chloride			%	72			70-130	Pass	
Nitrate (as N)			%	100			70-130	Pass	
Sulphate (as SO4)			%	96			70-130	Pass	
LCS - % Recovery			70				, , , , , , ,		
Alkalinity (speciated)									
Carbonate Alkalinity (as CaCO3)			%	96			70-130	Pass	
LCS - % Recovery			/0] 30			70-130	1 033	
Alkali Metals							T		
			0/	101			70.120	Door	
Calcium			%	104			70-130	Pass	
Magnesium			%	103			70-130	Pass	
Potassium			%	108			70-130	Pass	
Sodium			%	114			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery				l					
	ı	1		Result 1					
Ammonia (as N)	M19-Oc01684	NCP	%	100			70-130	Pass	
Chloride	M19-Se39454	NCP	%	91			70-130	Pass	
Nitrate (as N)	M19-Oc01684	NCP	%	101			70-130	Pass	
Sulphate (as SO4)	M19-Se39442	NCP	%	128			70-130	Pass	
Spike - % Recovery				1					
Alkalinity (speciated)				Result 1					
Bicarbonate Alkalinity (as CaCO3)	M19-Se42455	NCP	%	108			70-130	Pass	
Carbonate Alkalinity (as CaCO3)	M19-Se39693	NCP	%	118			70-130	Pass	
Spike - % Recovery									
Alkali Metals				Result 1					
Calcium	S19-Se41708	CP	%	116			70-130	Pass	
Magnesium	S19-Se41708	CP	%	120			70-130	Pass	
Potassium	S19-Se41708	CP	%	123			70-130	Pass	
Sodium	S19-Se41708	СР	%	124			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate		, 234.00							3530
				Result 1	Result 2	RPD			
Ammonia (as N)	M19-Oc01684	NCP	mg/L	1.6	1.6	1.0	30%	Pass	
Chloride	M19-Se39682	NCP	mg/L	1200	1200	1.0	30%	Pass	
Nitrate (as N)	M19-Oc01684	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Sulphate (as SO4)	M19-Se39682	NCP	mg/L	76	77	1.0	30%	Pass	
Duplicate		. '					•		
•				I					
Alkalinity (speciated)				Result 1	Result 2	RPD			1



Comments

This report has been revised (V2) to include amended Alkali metals results for samples S19-Se41708 and S19-Se41709.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised By

Ursula Long Analytical Services Manager
Emily Rosenberg Senior Analyst-Metal (VIC)
Julie Kay Senior Analyst-Inorganic (VIC)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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ABN - 50 005 085 521

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web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: - cc ALL RESULTS Ben Pearce

Project name: **AUBURN** Project ID: 1901048A COC number: Not provided

Turn around time: 5 Day

Sep 27, 2019 2:28 PM Date/Time received:

Eurofins reference: 679523

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 5.4 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- XSplit sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.

Custody Seals intact (if used). Notes^{N/A}

EXTRA SAMPLE REC: DW2, placed on HOLD.

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to - cc ALL RESULTS Ben Pearce - bpearce@geologix.com.au.

B11A B11/Alkalinity B11B B11/EC/TOS B12 TRHBTEXN/Oxygenatea/Ethanol B12A TRHBTEXN/Oxygenatea/Ethanol B12A TRHBTEXN/Oxygenatea/Ethanol B13 CCP/CPB B14 CCP/CPB B15 CCP/CPP/PCB B16 CD/COP/PCB B16 CD/SO/JCH/Alk/BOD/COD/HPC/CU B17 SO/JNO/JFe+#/HPC/CUB B18 CL/SO/JPH B19 N/P/K B20 CEC/A/ESP/Ca/Ma/Na/K Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 6*, Cr 3*, Fe 2*, Fe 3*, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb	P: (02) 9979 17 F: (02) 9979 12					Matri			Date Submitted: 27			IRE	ED			AT re	100				TD		Î	in the last	A CORN		US	igisses	alius	
MW203	Lab ID		Date	Soil	water	air	paint, filters	other	Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PAHS	OCPs	OPPs	Phenois	Metals - M8		s - Specify	Asbestos (ID only)	Asbestos (WA DO	Foreign Materials	Conductivity (EC)	Hd	Anions/Catio	Hold	SUITE	Codes
## Company Com		-			-					1						-														
MW202				-						+						-	-					-	100				1000	-		
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### B10 TRH#STEXNPAHOCP/OPPAMS ### B11 NakCanAg/CUSO_/CO_HCO_JNH_/N ### B11 NakCanAg/CUSO_/CO_HCO_JNH_/N ### B11 NakCanAg/CUSO_/CO_HCO_JNH_/N ### B11 NakCanAg/CUSO_/CO_HCO_JNH_/N ### B11 NakCanAg/CUSO_/CO_HCO_JNH_/N ### B11 NakCanAg/CUSO_/CO_JHCO_JNH_/N ### B11 NakCanAg/CUSO_JCO_JHCO_JNH_/N ### B11 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JCO_JCO_JHCO_JNH_/N ### B12 NakCanAg/CUSO_JNH_/N ### B13 NakCanAg/CUSO_JNH_/N ### B13 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanAg/CUSO_JNH_/N ### B14 NakCanA	MANE																													
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B118 B11/EC/TDS B12 TR/BTEXN/Oxygenates/Ethanol B12A TR/BTEXN/Oxygenates/Ethanol B12A TR/BTEXN/Oxygenates B13 OCP/DPB B14 OCP/OPP B15 OCP/OPP/BCB B16 TDS/SO_/CH_/AIA/BOD/COD/APC/CU B17 SO_/NO_/Fe+7/FPC/CUB B18 CL/SO_/PH B19 N/P/K B20 CEC/%ESP/CaMMa/Na/K Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 6*, Cr 3*, Fe 2*, Fe 2*, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb																		7,8					Sil							B11 Na/K/Ca/Mg/Cl/SO ₂ /Co ₂ /HCO ₂ /NH ₂ /NO ₃
B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates B13 OCP/PCB B14 OCP/PCP B15 OCP/PCP B15 OCP/PCP B15 OCP/PCP B15 OCP/PCP B15 OCP/PCP B15 OCP/PCP B16 TDSSO/CHI/AIN/BODICOD/HPC/CU B17 SO/NOJ/F6+7/HPC/CUB B18 CIJSOJ/PH B19 NP/K B19	(174 green) H																													
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B15 OCP/OPP/PCB B16 TDS/SO_/CH_/AIA/BOD/COD/HPC/CU B17 SO_/NO_/Fe++//HPC/CUB B18 CH/SO_/pH B19 N/P/K B20 CEC/%ESP/Ca/Mai/Na/K Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺ , Cr ³⁺ , Fe ²⁺ , Fe ³⁺ , Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb			CHE ST																					1						
### B16 TDS/SO_/CH_/AIK/BOD/COD/HPC/CU ### B17 SO_/NO_/Fe++/HPC/CUB ### B18 CI-/SO_/PH ### B19 N/P/K ### B20 CEC/%ESP/Ca/Mai/Na/K Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺ , Cr ³⁺ , Fe ²⁺ , Fe ³⁺ , Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb	XXIII TO									-																				
## B18 CL/SO_/pH B19 N/P/K B20 CEC/KESP/Ca/Ma/Na/K Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺ , Cr ³⁺ , Fe ²⁺ , Fe ³⁺ , Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb				-						-					-															B16 TDS/SO ₂ /CH ₄ /Alk/BOD/COD/HPC/CUB
Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺ , Cr ³⁺ , Fe ²⁺ , Fe ³⁺ , Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb										-													-							
Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 6+, Cr 3+, Fe 2+, Fe 3+, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb										-								1												
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	Metals**(circle) As, Cd, Cr, Cu, Ni, F	b, Zn, Hg, Cr 6+,	Cr 3+,	Fe ²⁺ ,	Fe ³	, Be,	B, Al, V, I		STATE OF THE PARTY OF THE		16								87										
Chain of Custody Relinquished by: M. Singleton Date/Time: 27/9 Signature: 11.20 Chain of Custody Date/Time: 27/9 Signature: 21/9 Signature:			-				-		Chai	n of	Cus	to	dy			1		ni nis	e i Li	and a	der	Sec. 1		-	description of the last	2000	osuita	isia	Service.	

Page of

Purchase Order No:

679523

12th March 2009

Geo-Logix Pty Ltd

Building Q2, Level 3

2309/4 Daydream St

1.1 QF_024 Eurofins Chain of Custody2

Project Manager: Ben Pearce



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102 lac MRA



NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 679521-W

 Project name
 AUBURN

 Project ID
 1901048A

 Received Date
 Sep 27, 2019

Client Sample ID			MW108	MW203	GW04	MW202
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Se41741	S19-Se41742	S19-Se41743	S19-Se41744
Date Sampled			Sep 27, 2019	Sep 27, 2019	Sep 27, 2019	Sep 27, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	0.33	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	0.11	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	0.38	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			MW108	MW203	GW04	MW202
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Se41741	S19-Se41742	S19-Se41743	S19-Se41744
Date Sampled			Sep 27, 2019	Sep 27, 2019	Sep 27, 2019	Sep 27, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	0.009	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	0.17	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	0.16	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	0.829	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	0.669	< 0.005
4-Bromofluorobenzene (surr.)	1	%	60	59	71	65
Toluene-d8 (surr.)	1	%	76	77	91	74

Client Sample ID			MW102	MW201	DW2	R7
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Se41745	S19-Se41746	S19-Se41747	S19-Se41748
Date Sampled			Sep 27, 2019	Sep 27, 2019	Sep 27, 2019	Sep 27, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	0.005	< 0.001	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	0.019	< 0.001	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	0.010	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			MW102	MW201	DW2	R7
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Se41745	S19-Se41746	S19-Se41747	S19-Se41748
Date Sampled			Sep 27, 2019	Sep 27, 2019	Sep 27, 2019	Sep 27, 2019
Test/Reference	LOR	Unit				
Volatile Organics	'	<u>'</u>				
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	0.009
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	1.2	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromochloromethane Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane 5th all a season	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
lodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001 < 0.002	< 0.001 < 0.002	< 0.001 < 0.002	< 0.001 < 0.002
m&p-Xylenes Methylene Chloride	0.002	mg/L mg/L	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	0.003	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	0.034	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	5.5	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	0.033	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	0.003	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	6.796	< 0.005	< 0.005	0.009
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	6.763	< 0.005	< 0.005	0.009
4-Bromofluorobenzene (surr.)	1	%	63	65	57	65
Toluene-d8 (surr.)	1	%	80	74	75	83



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsSydneySep 27, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices



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Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901048A Order No.:

Phone:

Fax:

Volatile Organics

Χ

3369 679521

Report #: 02 9979 1722 02 9979 1222 Received: Sep 27, 2019 2:28 PM Due:

Contact Name:

Sep 30, 2019 **Priority:** 1 Day

Eurofins Analytical Services Manager: Ursula Long

Ben Pearce

Sample Detail

Melbourne Laboratory - NATA Site # 1254 & 14271

Sydney Laboratory - NATA Site # 18217 Brisbane Laboratory - NATA Site # 20794

Perth Laboratory - NATA Site # 23736

Exte	rnal Laboratory	<u>'</u>				
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	MW108	Sep 27, 2019		Water	S19-Se41741	Х
2	MW203	Sep 27, 2019		Water	S19-Se41742	Х
3	GW04	Sep 27, 2019		Water	S19-Se41743	Х
4	MW202	Sep 27, 2019		Water	S19-Se41744	Х
5	MW102	Sep 27, 2019		Water	S19-Se41745	Х
6	MW201	Sep 27, 2019		Water	S19-Se41746	Х
7	DW2	Sep 27, 2019		Water	S19-Se41747	Х
8	R7	Sep 27, 2019		Water	S19-Se41748	Х
Test	Counts					8



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
	mg/L	< 0.001	0.001	Pass	
Chlorobenzene Chloroethane		< 0.001	0.001	Pass	
	mg/L	< 0.001			
Chloroform	mg/L		0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001 < 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	1	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane District Land I'' and a second to a se	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	-
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichlorofluoromethane			mg/L	< 0.001			0.001	Pass	
Vinyl chloride			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
LCS - % Recovery			J				•		
Volatile Organics									
1.1-Dichloroethene			%	110			70-130	Pass	
1.1.1-Trichloroethane			%	93			70-130	Pass	
1.2-Dichlorobenzene			%	105			70-130	Pass	
1.2-Dichloroethane			%	100			70-130	Pass	
Benzene			%	102			70-130	Pass	
Ethylbenzene			%	115			70-130	Pass	
m&p-Xylenes			%	109			70-130	Pass	
o-Xylene			%	103			70-130	Pass	
Toluene			%	103			70-130	Pass	
Trichloroethene			%	96			70-130	Pass	
Xylenes - Total			%	107			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S19-Se41742	СР	%	115			70-130	Pass	
1.1.1-Trichloroethane	S19-Se41742	CP	%	99			70-130	Pass	
1.2-Dichlorobenzene	S19-Se41742	CP	%	99			70-130	Pass	
1.2-Dichloroethane	S19-Se41742	CP	%	102			70-130	Pass	
Benzene	S19-Se41742	CP	%	102			70-130	Pass	
Ethylbenzene	S19-Se41742	CP	%	111			70-130	Pass	
m&p-Xylenes	S19-Se41742	CP	%	105			70-130	Pass	
o-Xylene	S19-Se41742	CP	%	100			70-130	Pass	
Toluene	S19-Se41742	CP	%	103			70-130	Pass	
Trichloroethene	S19-Se41742	CP	%	98			70-130	Pass	
Xylenes - Total	S19-Se41742	CP	<u> </u>	103			70-130	Pass	
Ayleries - Total		QA	/0	103			Acceptance	Pass	Qualifying
Test	Lab Sample ID	Source	Units	Result 1			Limits	Limits	Code
Duplicate				Ι	I				
Volatile Organics	1			Result 1	Result 2	RPD			
1.1-Dichloroethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1-Dichloroethene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1-Trichloroethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	L C10 C-11711	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.5 Theiliotoproparie	S19-Se41741		a/I	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	S19-Se41741 S19-Se41741	CP	mg/L						i .
•		СР	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	S19-Se41741				< 0.001 < 0.001	<1 <1	30% 30%	Pass Pass	
1.2.4-Trimethylbenzene 1.3-Dichlorobenzene	S19-Se41741 S19-Se41741	СР	mg/L	< 0.001					
1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane	S19-Se41741 S19-Se41741 S19-Se41741	CP CP	mg/L mg/L	< 0.001 < 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane 1.3.5-Trimethylbenzene	\$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741	CP CP	mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001	< 0.001 < 0.001	<1 <1	30% 30%	Pass Pass	
1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane 1.3.5-Trimethylbenzene 1.4-Dichlorobenzene	\$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741	CP CP CP	mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001 < 0.001	< 0.001 < 0.001 < 0.001	<1 <1 <1	30% 30% 30%	Pass Pass Pass	
1.2.4-Trimethylbenzene 1.3-Dichlorobenzene 1.3-Dichloropropane 1.3.5-Trimethylbenzene 1.4-Dichlorobenzene 2-Butanone (MEK)	\$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741 \$19-Se41741	CP CP CP CP	mg/L mg/L mg/L mg/L mg/L	< 0.001 < 0.001 < 0.001 < 0.001 < 0.001	< 0.001 < 0.001 < 0.001 < 0.001	<1 <1 <1 <1	30% 30% 30% 30%	Pass Pass Pass Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Allyl chloride	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromobenzene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromochloromethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromoform	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon disulfide	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	S19-Se41741	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.2-Dichloroethene	S19-Se41741	СР	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.3-Dichloropropene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromochloromethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dichlorodifluoromethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Isopropyl benzene (Cumene)	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S19-Se41741	СР	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Methylene Chloride	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
o-Xylene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Styrene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.2-Dichloroethene	S19-Se41741	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.3-Dichloropropene	S19-Se41741	СР	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	S19-Se41741	СР	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichlorofluoromethane	S19-Se41741	СР	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	S19-Se41741	СР	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S19-Se41741	СР	mg/L	< 0.003	< 0.003	<1	30%	Pass	



Comments

Sample Integrity

 Custody Seals Intact (if used)
 N/A

 Attempt to Chill was evident
 Yes

 Sample correctly preserved
 Yes

 Appropriate sample containers have been used
 Yes

 Sample containers for volatile analysis received with minimal headspace
 Yes

 Samples received within HoldingTime
 Yes

 Some samples have been subcontracted
 No

Authorised By

Ursula Long Analytical Services Manager



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048A COC number: Not provided

Turn around time: 1 Day

Date/Time received: Sep 27, 2019 2:28 PM

Eurofins reference: 679521

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 5.4 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

Relinquished by: M, Singleton Date/Time: 24/9	Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁶⁺ , Cr ³⁺ , Fe ³⁺ , Fe ³⁺ ,											7.7	5000	מעל	NW20	MW/02	MWZOZ	6WO4	MW203	MMIOS	Lab ID Sample ID		No. of the life of the	P: (02) 9979 1722 F: (02) 9979 1222	ABN: 86 116 892 936	Warriewood, NSW 2102	Geo-Logix Pty Ltd Building Q2, Level 3
eton Date/Time: 24/c	Pb, Zn, Hg, Cr ⁶⁺ , Cr ³⁺ , Fe ²⁺											×		<	X	×	×	×	×	×	a के soil water		THE PERSON NAMED IN	Project Number:	Project Name:	Contact email:	CH Project Manager: <u>Ben Reacce</u>
19 Signature:	Be _e B																				air paint, filters	Matrix	STATE OF STREET	901048 A	Auburn "	pearce @ ge	CHA en Pearce
M4 Received by:	Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb Chain of Cu s																				Comments		ANALYSI	901048 A Date Submitted: 27/09/19	0	bpearce @ geo-logix, com, w	CHAIN OF CUSTODY
d by: While I	lo, Ag, Ba, Tl, Bi, Sb Chain of Custody											×	×	c ;	×	×	X	×	×	×	COMPOSITE TRH - C6 - C10 TRH - C10 - C40 VOCs BTEXN		ANALYSIS REQUIRED	109/19		זי מדול	DΥ
Date/Time: 24/09																					PAHS PCBs OCPs OPPs Phenois		THE STATE OF	TAT required:	Send Invoice to:	Quote Reference:	Page of Purchase Order No:
Signature:																					Metals - M8 Metals - Lead Metals - Specify ** TCLP Asbestos (ID only)			24/16	accounts@geo-logix.com.au	94	No: 3369
Consideration of the second																					Asbestos (WA DOH Foreign Materials Conductivity (EC) pH	+)	AND THE RESIDENCE		logix.com.au		69
#		8 8	В	8	8 8		B 0			0 0	0 00		P								Hold						
775649 带		B19 NP/K B20 CEC/%ESP/Ca/Ma/Na/K			B15 OCP/OPP/PCB B16 TDS/SO/JCH/JAIN/BOD/COD/MPC/CUB	B14 OCP/OPP	B13 OCP/PCB	B12 TRH/BTEXN/Oxygenates/Ethanol	B11B B11/EC/TDS	B11AB11/Akaliniv	B10 TRH/BTEXN/PAH/OCP/OPP/M8	B8 TRHNOC/PAH/M8	33		B6 TRH/BTEXN/M8	Р.	B4 TRH/BTEXN/PAH	B2A TRH/MAH/Pb	B2 TRH/BTEXN/Pb		Eurofins MGT Suite Codes						·



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 674140-W

 Project name
 AUBURN

 Project ID
 1901048

 Received Date
 Aug 29, 2019

Client Sample ID			MW108	MW109	GW1	GW2
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au44083	S19-Au44084	S19-Au44085	S19-Au44086
Date Sampled			Aug 28, 2019	Aug 28, 2019	Aug 28, 2019	Aug 28, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			MW108	MW109	GW1	GW2
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au44083	S19-Au44084	S19-Au44085	S19-Au44086
Date Sampled			Aug 28, 2019	Aug 28, 2019	Aug 28, 2019	Aug 28, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.002
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Bromofluorobenzene (surr.)	1	%	135	95	96	106
Toluene-d8 (surr.)	1	%	113	86	82	93

Client Sample ID Sample Matrix			R6 Water
Eurofins Sample No.			S19-Au44087
Date Sampled			Aug 28, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
1.1-Dichloroethane	0.001	mg/L	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001

Report Number: 674140-W



Client Sample ID			R6
Sample Matrix			Water
Eurofins Sample No.			S19-Au44087
Date Sampled			Aug 28, 2019
Test/Reference	LOR	Unit	
Volatile Organics	1 20.1		
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	0.011
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	0.019
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001
Dibromomethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
Iodomethane	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001
Trichloroethene	0.001	mg/L	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	0.019
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	0.019
4-Bromofluorobenzene (surr.)	1	%	73
Toluene-d8 (surr.)	1	%	91



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsSydneyAug 29, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices



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Sydney

Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Phone: +61 7 3902 4600 NATA # 1261 Site # 20794 Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901048 Order No.: Report #:

Phone:

Fax:

Volatile HOLD 6

674140 02 9979 1722

02 9979 1222

Received: Aug 29, 2019 2:45 PM

Due: Sep 5, 2019
Priority: 5 Day
Contact Name: Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

		Sa	mple Detail				Organics	
Melb	ourne Laborato	ory - NATA Site	# 1254 & 142	271				
Sydr	ney Laboratory	- NATA Site # 1	8217			Х	Х	
Brisl	oane Laboratory	y - NATA Site #	20794					
Perti	n Laboratory - N	NATA Site # 237	36					
Exte	rnal Laboratory	,						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	MW108	Aug 28, 2019		Water	S19-Au44083		Х	
2	MW109	Aug 28, 2019		Water	S19-Au44084		Х	
3	GW1	Aug 28, 2019		Water	S19-Au44085		Х	
4	GW2	Aug 28, 2019		Water	S19-Au44086		Х	
5 R6 Aug 28, 2019 Water S19-Au44087								
6	D4	Aug 28, 2019		Water	S19-Au44088	Х		
Test	Counts					1	5	

Eurofins Environment Testing Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400 Page 5 of 10

Date Reported:Sep 05, 2019



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
	mg/L	< 0.001	0.001	Pass	
Chlorobenzene Chloroethane		< 0.001	0.001	Pass	
	mg/L	< 0.001			
Chloroform	mg/L		0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001 < 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	1	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane District Land I'' and a second to a se	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	-
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichlorofluoromethane			mg/L	< 0.001			0.001	Pass	
Vinyl chloride			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
LCS - % Recovery									
Volatile Organics									
1.1-Dichloroethene			%	121			70-130	Pass	
1.1.1-Trichloroethane			%	102			70-130	Pass	
1.2-Dichlorobenzene			%	108			70-130	Pass	
1.2-Dichloroethane			%	101			70-130	Pass	
Benzene			%	105			70-130	Pass	
Ethylbenzene			%	122			70-130	Pass	
m&p-Xylenes			%	109			70-130	Pass	
o-Xylene			%	110			70-130	Pass	
Toluene			%	100			70-130	Pass	
Trichloroethene			%	95			70-130	Pass	
Xylenes - Total			%	109			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S19-Au34310	NCP	mg/L	0.028	0.030	10	30%	Pass	
1.1-Dichloroethene	S19-Au34310	NCP	mg/L	0.021	0.024	11	30%	Pass	
1.1.1-Trichloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichloropropane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3.5-Trimethylbenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.4-Dichlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Butanone (MEK)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Propanone (Acetone)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chlorotoluene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Allyl chloride	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromochloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromoform	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon disulfide	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	S19-Au34310	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.2-Dichloroethene	S19-Au34310	NCP	mg/L	0.14	0.16	9.0	30%	Pass	
cis-1.3-Dichloropropene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dibromochloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dichlorodifluoromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Isopropyl benzene (Cumene)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S19-Au34310	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Methylene Chloride	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
o-Xylene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Styrene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.2-Dichloroethene	S19-Au34310	NCP	mg/L	0.003	0.003	8.0	30%	Pass	
trans-1.3-Dichloropropene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichlorofluoromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	S19-Au34310	NCP	mg/L	0.021	0.022	3.0	30%	Pass	
Xylenes - Total	S19-Au34310	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	



Comments

Sample Integrity

 Custody Seals Intact (if used)
 N/A

 Attempt to Chill was evident
 Yes

 Sample correctly preserved
 Yes

 Appropriate sample containers have been used
 Yes

 Sample containers for volatile analysis received with minimal headspace
 Yes

 Samples received within HoldingTime
 Yes

 Some samples have been subcontracted
 No

Authorised By

Ursula Long Analytical Services Manager



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048 COC number: Not provided

Turn around time: 5 Day

Date/Time received: Aug 29, 2019 2:45 PM

Eurofins reference: 674140

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt: 4.2 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

CHAIN OF CUSTODY Geo-Logix Pty Ltd Page of Ben Pearce Project Manager: Building Q2, Level 3 Purchase Order No: 2309/4 Daydream St bleavce @geo-logx.com.au
Auburn Warriewood, NSW 2102 Contact email: Quote Reference: accounts@geo-logix.com.au Project Name: Send Invoice to: ABN: 86 116 892 936 Date Submitted: 28 8117 3+0 1901048 P: (02) 9979 1722 Project Number: TAT required: F: (02) 9979 1222 **ANALYSIS REQUIRED** Matrix Asbestos (WA DOH) Asbestos (ID only) Foreign Materials Conductivity (EC) Metals - Specify TRH - C10 - C40 TRH - C6 - C10 **Eurofins MGT Suite** filters Metals - Lead Metals - M8 PFAS Codes BTEXN paint, SUITE water PAHS PCBs OCPs other PIOH H Lab ID Sample ID Date Comments TRH/BTEXN MW108 28/8/19 X X B1A TRH/MAH POIWM X X TRH/BTEXN/Pb B2A TRH/MAH/Pb 6W1 × B3 PAH/Phenois GW2 B4 TRH/BTEXN/PAH 84A TRH/BTEXN/PAH/Phenois 06 李 × 04 TRH/BTEXN/M7 146 × B6 TRH/BTEXN/M8 TRH/BTEXN/PAH/M8 B7A TRH/BTEXN/PAH/Phenois/M8 TRH/VOC/PAH/M8 TRH/BTEXN/PAH/OCP/M8 B10 TRH/BTEXN/PAH/OCP/OPP/M8 B11 Na/K/Ca/Mg/Cl/SO₂/CO₂/HCO₂/NH₂/NO₃ B11A B11/Alkalinity B11B B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates nt-3134 TOC/SO /CH /AIK/BOD/COD/HPC/CUB Final Temp: O F17 SO/NO-/Fe++/HPC/CUB 6B18 CI-/SO_a/pH

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 6+, Cr 3+, Fe 2+, Fe 3+, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

	Chain of Custody	
Relinquished by: Bay Reuse Date/Time: 2916 Signature:	Received by: Date/Time:	Signature:

B20 CEC/%ESP/Ca/Ma/Na/K



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

Report673777-WProject nameAUBURNProject ID1901048Received DateAug 28, 2019

Client Sample ID			T2
Sample Matrix			Water
Eurofins Sample No.			S19-Au41247
Date Sampled			Aug 26, 2019
Test/Reference	LOR	Unit	
Volatile Organics	1 -2		
1.1-Dichloroethane	0.001	mg/L	0.005
1.1-Dichloroethene	0.001	mg/L	0.006
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	0.014
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	< 0.005
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	1.0
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001



Client Sample ID Sample Matrix			T2 Water
Eurofins Sample No.			S19-Au41247
Date Sampled			Aug 26, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
Dibromochloromethane	0.001	mg/L	< 0.001
Dibromomethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
lodomethane	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	0.028
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001
Trichloroethene	0.001	mg/L	3.5
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	0.045
Xylenes - Total	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	4.593
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	4.548
4-Bromofluorobenzene (surr.)	1	%	95
Toluene-d8 (surr.)	1	%	75



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsSydneyAug 29, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices



ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au Melbourne 6 Monterey Road Dandenong South VIC 3175 Phone : +61 3 8564 5000

NATA # 1261 Site # 1254 & 14271 Sydney Unit F3, Building F 16 Mars Road Lane Cove West NSW 2066 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 **Brisbane**1/21 Smallwood Place
Murarrie QLD 4172
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NATA # 1261 Site # 20794

Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name: Geo-Logix P/L

Address:

Project Name: Project ID:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood NSW 2102

AUBURN 1901048 Order No.: Report #:

673777

Phone: 02 9979 1722 **Fax:** 02 9979 1222

Received: Aug 28, 2019 12:04 PM **Due:** Sep 4, 2019

Priority: 5 Day
Contact Name: Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

		Sa	mple Detail			ПОП	Volatile Organics	
Melb	ourne Laborato	ry - NATA Site	# 1254 & 142	71				
Sydr	ney Laboratory	NATA Site # 1	8217			Х	Х	
Brist	pane Laboratory	/ - NATA Site #	20794					
	n Laboratory - N							
	rnal Laboratory							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	T2	Aug 26, 2019		Water	S19-Au41247		Х	
2 T3 Aug 26, 2019 Water S19-Au41248								
Test	Test Counts							



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane		1	0.001	Pass	
	mg/L	< 0.001			
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichlorofluoromethane			mg/L	< 0.001			0.001	Pass	
Vinyl chloride			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
LCS - % Recovery				•					
Volatile Organics									
1.1-Dichloroethene			%	121			70-130	Pass	
1.1.1-Trichloroethane			%	102			70-130	Pass	
1.2-Dichlorobenzene			%	108			70-130	Pass	
1.2-Dichloroethane			%	101			70-130	Pass	
Benzene			%	105			70-130	Pass	
Ethylbenzene			%	122			70-130	Pass	
m&p-Xylenes			%	109			70-130	Pass	
o-Xylene			%	110			70-130	Pass	
Toluene			%	100			70-130	Pass	
Trichloroethene			%	95			70-130	Pass	
Xylenes - Total			%	109			70-130	Pass	
•	1	QA					Acceptance	Pass	Qualifying
Test	Lab Sample ID	Source	Units	Result 1			Limits	Limits	Code
Duplicate					T _	_			
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S19-Au34310	NCP	mg/L	0.028	0.030	10	30%	Pass	
1.1-Dichloroethene	S19-Au34310	NCP	mg/L	0.021	0.024	11	30%	Pass	
1.1.1-Trichloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichloropropane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3.5-Trimethylbenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.4-Dichlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Butanone (MEK)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Propanone (Acetone)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chlorotoluene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Allyl chloride	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromochloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromoform	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon disulfide	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	S19-Au34310	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.2-Dichloroethene	S19-Au34310	NCP	mg/L	0.14	0.16	9.0	30%	Pass	
	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dibromochloromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dichlorodifluoromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Isopropyl benzene (Cumene)	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S19-Au34310	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Methylene Chloride	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
o-Xylene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Styrene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.2-Dichloroethene	S19-Au34310	NCP	mg/L	0.003	0.003	8.0	30%	Pass	
trans-1.3-Dichloropropene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichlorofluoromethane	S19-Au34310	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	S19-Au34310	NCP	mg/L	0.021	0.022	3.0	30%	Pass	
Xylenes - Total	S19-Au34310	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	



Comments

Sample Integrity

 Custody Seals Intact (if used)
 N/A

 Attempt to Chill was evident
 Yes

 Sample correctly preserved
 Yes

 Appropriate sample containers have been used
 Yes

 Sample containers for volatile analysis received with minimal headspace
 Yes

 Samples received within HoldingTime
 Yes

 Some samples have been subcontracted
 No

Authorised By

Ursula Long Analytical Services Manager



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048 COC number: Not provided

Turn around time: 5 Day

Date/Time received: Aug 28, 2019 12:04 PM

Eurofins reference: 673777

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt: 3.2 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

Please send to Melbourne lab. Auburn 2309/4 Daydream St # 673777 Warriewood, NSW 2102 Contact email: Quote Reference: Send Invoice to: accounts@geo-logix.com.au ABN: 86 116 892 936 **Project Name:** Project Number: 1901048 Date Submitted: 28/08/19 STD P: (02) 9979 1722 TAT required: F: (02) 9979 1222 **ANALYSIS REQUIRED** Matrix Asbestos (WA DOH) Asbestos (ID only) Foreign Materials Conductivity (EC) Metals - Specify TRH - C10 - C40 TRH - C6 - C10 PFAS paint, filters **Eurofins MGT Suite** Codes SUITE water Hold Soil Lab ID Sample ID Date Comments 26/08 B1 TRH/BTEXN B1A TRH/MAH 27/08 B2 TRH/BTEXN/Pb B2A TRH/MAH/Pb B3 PAH/Phenois TRH/BTEXN/PAH B4A TRH/BTEXN/PAH/Phenols TRH/BTEXN/M7 TRH/BTEXN/M8 TRH/BTEXN/PAH/M8 B7A TRH/BTEXN/PAH/Phenois/M8 B8 TRH/VOC/PAH/M8 TRH/BTEXN/PAH/OCP/M8 B10 TRH/BTEXN/PAH/OCP/OPP/M8 B11 Na/K/Ca/Mg/Cl/SO_a/CO₃/HCO₃/NH₃/NO₃ B11A B11/Alkalinity B11B B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates B13 OCP/PCB B14 OCP/OPP B15 OCP/OPP/PCB B16 TDS/SO_/CH_/AIK/BOD/COD/HPC/CUB B17 SO/NO/Fe++/HPC/CUB B18 CI-/SO₄/pH B19 N/P/K B20 CEC/%ESP/Ca/Ma/Na/K Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr, 6+, Cr, 3+, Fe, 2+, Fe, 3+, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb **Chain of Custody** Relinquished by: Ben Peolice ____ Date/Time: 28/8/19 Signature:

Purchase Order No:

CHAIN OF CUSTODY

Project Manager: Ben Pearce

Geo-Logix Pty Ltd

Building Q2, Level 3



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102 lac MRA



NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

Report673773-WProject nameAUBURNProject ID1901048Received DateAug 28, 2019

Client Sample ID			MW114	MW101	MW110	MW115
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au41232	S19-Au41233	S19-Au41234	S19-Au41235
Date Sampled			Aug 27, 2019	Aug 26, 2019	Aug 27, 2019	Aug 27, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.004
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			MW114	MW101	MW110	MW115
Sample Matrix			Water	Water	Water	Water
•			S19-Au41232			
Eurofins Sample No.				S19-Au41233	S19-Au41234	S19-Au41235
Date Sampled			Aug 27, 2019	Aug 26, 2019	Aug 27, 2019	Aug 27, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
4-Bromofluorobenzene (surr.)	1	%	55	80	88	92
Toluene-d8 (surr.)	1	%	54	79	82	88
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	-	-	=	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	-	=	=	< 0.01
Perfluorooctanoic acid (PFOA)N11	0.01	ug/L	-	-	-	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	-	-	-	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
13C4-PFBA (surr.)	1	%	-	-	-	52
13C5-PFPeA (surr.)	1	%	-	-	-	52
13C5-PFHxA (surr.)	1	%	-	-	-	55
13C4-PFHpA (surr.)	1	%	-	-	-	83
13C8-PFOA (surr.)	1	%	-	-	-	81
13C5-PFNA (surr.)	1	%	-	-	-	106
13C6-PFDA (surr.)	1	%	-	-	-	115
13C2-PFUnDA (surr.)	1	%	-	-	-	121
13C2-PFDoDA (surr.)	1	%	-	-	-	130
13C2-PFTeDA (surr.)	1	%	-	-	-	162



Client Sample ID			MW114	MW101	MW110	MW115
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au41232	S19-Au41233	S19-Au41234	S19-Au41235
Date Sampled			Aug 27, 2019	Aug 26, 2019	Aug 27, 2019	Aug 27, 2019
·	LOB	Linit	Aug 27, 2019	Aug 20, 2019	Aug 21, 2019	Aug 21, 2019
Test/Reference Perfluoroalkyl sulfonamido substances	LOR	Unit				
•	0.05	//				.0.05
Perfluorooctane sulfonamide (FOSA) ^{N11} N-methylperfluoro-1-octane sulfonamide (N-	0.05	ug/L	-	-	-	< 0.05
MeFOSA) ^{N11}	0.05	ug/L	-	-	-	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	-	-	-	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	-	-	-	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	-	-	-	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	-	-	-	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	-	-	-	< 0.05
13C8-FOSA (surr.)	1	%	-	-	-	95
D3-N-MeFOSA (surr.)	1	%	-	-	-	97
D5-N-EtFOSA (surr.)	1	%	-	-	-	96
D7-N-MeFOSE (surr.)	1	%	-	-	-	109
D9-N-EtFOSE (surr.)	1	%	-	-	-	116
D5-N-EtFOSAA (surr.)	1	%	-	-	-	81
D3-N-MeFOSAA (surr.)	1	%	-	-	-	100
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	-	-	-	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	-	-	-	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	-	-	-	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	-	-	-	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	-	-	-	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	-	-	-	< 0.01
13C3-PFBS (surr.)	1	%	-	-	-	78
18O2-PFHxS (surr.)	1	%	-	-	-	98
13C8-PFOS (surr.)	1	%	-	-	-	129
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	T	T				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	-	-	-	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	-	-	-	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N15}	0.01	ug/L	-	-	-	< 0.01
13C2-4:2 FTSA (surr.)	1	%	-	-	-	64
13C2-6:2 FTSA (surr.)	1	%	-	-	-	100
13C2-8:2 FTSA (surr.)	1	%	-	-	-	57
PFASs Summations		T		+		+
Sum (PFHxS + PFOS)*	0.01	ug/L	-	-	-	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	-	-	-	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	-	-	-	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	-	-	-	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	-	-	-	< 0.1



Client Sample ID			MW113	MW107	MW116	MW112
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au41236	S19-Au41237	S19-Au41238	S19-Au41239
Date Sampled			Aug 27, 2019	Aug 27, 2019	Aug 26, 2019	Aug 26, 2019
Test/Reference	LOR	Unit	7.tag 21, 2010	/ tag 27, 2010	7 tag 20, 2010	7.09 20, 20.0
Volatile Organics	LON	Offic				
	0.001		- 0.001	. 0.001	< 0.001	- 0.001
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001		< 0.001 < 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane 1.1.2-Trichloroethane	0.001	mg/L mg/L	< 0.001 < 0.001	< 0.001 < 0.001	< 0.001 < 0.001	< 0.001 < 0.001
1.1.2.2-Ticriloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoetriane 1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
					< 0.001	
1.2-Dichloropropane 1.2.3-Trichloropropane	0.001	mg/L mg/L	< 0.001	< 0.001 < 0.001	< 0.001	< 0.001 < 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	< 0.001	0.013	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
lodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			MW113	MW107	MW116	MW112
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au41236	S19-Au41237	S19-Au41238	S19-Au41239
Date Sampled			Aug 27, 2019	Aug 27, 2019	Aug 26, 2019	Aug 26, 2019
•	LOD	l lait	Aug 27, 2019	Aug 27, 2019	Aug 20, 2019	Aug 20, 2019
Test/Reference	LOR	Unit				
Volatile Organics		T ,	0.004			
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Vic EPA IWRG 621 Other CHC (Total)* 4-Bromofluorobenzene (surr.)	0.005	mg/L %	< 0.005 87	< 0.005	< 0.005 94	< 0.005 87
` /	1	%	84	65	94	88
Toluene-d8 (surr.)		70	04	66	91	00
Perfluoroalkyl carboxylic acids (PFCAs)	0.05	1 "			0.05	
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	-	-	< 0.05	-
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	-		< 0.01	-
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluorodecanoic acid (PFDA) ^{N11} Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
, ,	0.01	ug/L	-	-	< 0.01	-
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluorotridecanoic acid (PFTrDA) ^{N15} Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
13C4-PFBA (surr.)	0.01	ug/L %	-	-	< 0.01	-
13C4-PFDA (surr.)	1	%	-	-	43	-
13C5-PFHxA (surr.)	1	%	-	-	37	-
13C4-PFHpA (surr.)	1	%	_	-	71	
13C8-PFOA (surr.)	1	%	_	-	85	
13C5-PFNA (surr.)	1	%		-	96	
13C6-PFDA (surr.)	1	%	_		127	
13C2-PFUnDA (surr.)	1	%	_	_	130	_
13C2-PFDoDA (surr.)	1	%	_	_	124	_
13C2-PFTeDA (surr.)	1	%	_	_	147	_
Perfluoroalkyl sulfonamido substances		,,,				
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	_	_	< 0.05	_
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	_	-	< 0.05	_
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	-	-	< 0.05	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	-	-	< 0.05	-
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	-	-	< 0.05	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	-	-	< 0.05	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	-	-	< 0.05	-
13C8-FOSA (surr.)	1	%	-	-	94	-
D3-N-MeFOSA (surr.)	1	%	-	-	103	-
D5-N-EtFOSA (surr.)	1	%	-	-	102	-
D7-N-MeFOSE (surr.)	1	%	-	-	106	-
D9-N-EtFOSE (surr.)	1	%	-	-	120	-
D5-N-EtFOSAA (surr.)	1	%	-	-	68	-
D3-N-MeFOSAA (surr.)	1	%	-	-	86	-



Client Sample ID			MW113	MW107	MW116	MW112
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au41236	S19-Au41237	S19-Au41238	S19-Au41239
Date Sampled			Aug 27, 2019	Aug 27, 2019	Aug 26, 2019	Aug 26, 2019
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	-	-	< 0.01	-
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	-	-	< 0.01	-
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	-	-	< 0.01	-
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	-	-	< 0.01	-
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	-	-	< 0.01	-
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	-	-	< 0.01	-
13C3-PFBS (surr.)	1	%	-	-	82	-
18O2-PFHxS (surr.)	1	%	-	-	111	-
13C8-PFOS (surr.)	1	%	-	-	134	-
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	-	-	< 0.05	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	-	-	< 0.01	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N15}	0.01	ug/L	-	-	< 0.01	-
13C2-4:2 FTSA (surr.)	1	%	=	-	69	-
13C2-6:2 FTSA (surr.)	1	%	=	-	141	-
13C2-8:2 FTSA (surr.)	1	%	-	-	93	-
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	-	-	< 0.01	-
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	-	-	< 0.01	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	-	-	< 0.01	-
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	-	-	< 0.05	-
Sum of PFASs (n=30)*	0.1	ug/L	-	-	< 0.1	-

Client Sample ID				MW102	R20TRIP SPIKE	TRIP BLANK	R4
Sample Matrix				Water	Water	Water	Water
Eurofins Sample No.				S19-Au41240	S19-Au41241	S19-Au41242	S19-Au41243
Date Sampled				Aug 26, 2019	Not Provided	Not Provided	Aug 26, 2019
Test/Reference		LOR	Unit				
Total Recoverable Hydrocarbons - 20°	13 NEPM Fracti	ions					
Naphthalene ^{N02}		0.01	mg/L	-	110	< 0.01	-
BTEX							
Benzene		0.001	mg/L	-	86	< 0.001	-
Toluene		0.001	mg/L	-	91	< 0.001	-
Ethylbenzene		0.001	mg/L	-	91	< 0.001	-
m&p-Xylenes		0.002	mg/L	-	89	< 0.002	-
o-Xylene		0.001	mg/L	-	100	< 0.001	-
Xylenes - Total		0.003	mg/L	-	93	< 0.003	-
4-Bromofluorobenzene (surr.)		1	%	-	86	138	-



Client Sample ID			MW102	R20TRIP SPIKE	TRIP BLANK	R4
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au41240	S19-Au41241	S19-Au41242	S19-Au41243
Date Sampled			Aug 26, 2019	Not Provided	Not Provided	Aug 26, 2019
Test/Reference	LOR	Unit	3 ,			3 3,
Volatile Organics	LOIK	Offic				
Comments			G01			
1.1-Dichloroethane	0.001	mg/L	< 0.05	_	_	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.05	_	_	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.05	_	_	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.05	_	_	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.05	_	_	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.05	_	_	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.05	_	_	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.05	_	_	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.05	_	_	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.05		_	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.05	-	_	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.05	-	_	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.05	_	_	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.05	_	_	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.05	<u>-</u>	_	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.05	_	_	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.05	_	_	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.05	<u>-</u>	_	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.05	_	_	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.05	_	_	< 0.001
Allyl chloride	0.001	mg/L	< 0.05	_	-	< 0.001
Benzene	0.001	mg/L	< 0.05	_	-	< 0.001
Bromobenzene	0.001	mg/L	< 0.05	_	-	< 0.001
Bromochloromethane	0.001	mg/L	< 0.05	_	-	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.05	_	-	< 0.001
Bromoform	0.001	mg/L	< 0.05	-	-	< 0.001
Bromomethane	0.001	mg/L	< 0.05	-	-	< 0.001
Carbon disulfide	0.001	mg/L	< 0.05	-	-	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.05	-	-	< 0.001
Chlorobenzene	0.001	mg/L	< 0.05	-	-	< 0.001
Chloroethane	0.001	mg/L	< 0.05	-	-	< 0.001
Chloroform	0.005	mg/L	< 0.05	-	-	< 0.005
Chloromethane	0.001	mg/L	< 0.05	-	-	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	1.0	-	-	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.05	-	-	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.05	-	-	< 0.001
Dibromomethane	0.001	mg/L	< 0.05	-	-	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.05	-	-	< 0.001
Ethylbenzene	0.001	mg/L	< 0.05	-	-	< 0.001
lodomethane	0.001	mg/L	< 0.05	_	-	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.05	-	-	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.1	-	-	< 0.002
Methylene Chloride	0.001	mg/L	< 0.05	-	-	< 0.001
p-Xylene	0.001	mg/L	< 0.05	_	-	< 0.001
Styrene	0.001	mg/L	< 0.05	_	-	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.05	_	-	< 0.001
Toluene	0.001	mg/L	< 0.05	-	-	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.05	-	-	< 0.001



Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled	Lon		MW102 Water S19-Au41240 Aug 26, 2019	R20TRIP SPIKE Water S19-Au41241 Not Provided	TRIP BLANK Water S19-Au41242 Not Provided	R4 Water S19-Au41243 Aug 26, 2019
Test/Reference Volatile Organics	LOR	Unit				
Volatile Organics						
trans-1.3-Dichloropropene	0.001	mg/L	< 0.05	-	-	< 0.001
Trichloroethene	0.001	mg/L	2.8	-	-	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.05	-	-	< 0.001
Vinyl chloride	0.001	mg/L	< 0.05	-	-	< 0.001
Xylenes - Total	0.003	mg/L	< 0.15	-	-	< 0.003
Total MAH*	0.003	mg/L	< 0.1	-	-	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	3.8	-	-	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	3.8	-	-	< 0.005
4-Bromofluorobenzene (surr.)	1	%	82	-	-	87
Toluene-d8 (surr.)	1	%	78	-	-	83

Client Sample ID			D2
Sample Matrix			Water
Eurofins Sample No.			S19-Au41244
Date Sampled			Aug 26, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
Comments			G01
1.1-Dichloroethane	0.001	mg/L	< 0.05
1.1-Dichloroethene	0.001	mg/L	< 0.05
1.1.1-Trichloroethane	0.001	mg/L	< 0.05
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.05
1.1.2-Trichloroethane	0.001	mg/L	< 0.05
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.05
1.2-Dibromoethane	0.001	mg/L	< 0.05
1.2-Dichlorobenzene	0.001	mg/L	< 0.05
1.2-Dichloroethane	0.001	mg/L	< 0.05
1.2-Dichloropropane	0.001	mg/L	< 0.05
1.2.3-Trichloropropane	0.001	mg/L	< 0.05
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.05
1.3-Dichlorobenzene	0.001	mg/L	< 0.05
1.3-Dichloropropane	0.001	mg/L	< 0.05
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.05
1.4-Dichlorobenzene	0.001	mg/L	< 0.05
2-Butanone (MEK)	0.001	mg/L	< 0.05
2-Propanone (Acetone)	0.001	mg/L	< 0.05
4-Chlorotoluene	0.001	mg/L	< 0.05
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.05
Allyl chloride	0.001	mg/L	< 0.05
Benzene	0.001	mg/L	< 0.05
Bromobenzene	0.001	mg/L	< 0.05
Bromochloromethane	0.001	mg/L	< 0.05
Bromodichloromethane	0.001	mg/L	< 0.05
Bromoform	0.001	mg/L	< 0.05
Bromomethane	0.001	mg/L	< 0.05
Carbon disulfide	0.001	mg/L	< 0.05
Carbon Tetrachloride	0.001	mg/L	< 0.05
Chlorobenzene	0.001	mg/L	< 0.05



Client Sample ID Sample Matrix			D2 Water
Eurofins Sample No.			S19-Au41244
Date Sampled			Aug 26, 2019
Test/Reference	LOR	Unit	
Volatile Organics	'		
Chloroethane	0.001	mg/L	< 0.05
Chloroform	0.005	mg/L	< 0.05
Chloromethane	0.001	mg/L	< 0.05
cis-1.2-Dichloroethene	0.001	mg/L	0.86
cis-1.3-Dichloropropene	0.001	mg/L	< 0.05
Dibromochloromethane	0.001	mg/L	< 0.05
Dibromomethane	0.001	mg/L	< 0.05
Dichlorodifluoromethane	0.001	mg/L	< 0.05
Ethylbenzene	0.001	mg/L	< 0.05
lodomethane	0.001	mg/L	< 0.05
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.05
m&p-Xylenes	0.002	mg/L	< 0.1
Methylene Chloride	0.001	mg/L	< 0.05
o-Xylene	0.001	mg/L	< 0.05
Styrene	0.001	mg/L	< 0.05
Tetrachloroethene	0.001	mg/L	< 0.05
Toluene	0.001	mg/L	< 0.05
trans-1.2-Dichloroethene	0.001	mg/L	< 0.05
trans-1.3-Dichloropropene	0.001	mg/L	< 0.05
Trichloroethene	0.001	mg/L	2.1
Trichlorofluoromethane	0.001	mg/L	< 0.05
Vinyl chloride	0.001	mg/L	< 0.05
Xylenes - Total	0.003	mg/L	< 0.15
Total MAH*	0.003	mg/L	< 0.1
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	2.96
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	2.96
4-Bromofluorobenzene (surr.)	1	%	83
Toluene-d8 (surr.)	1	%	66



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
BTEX and Naphthalene			
BTEX	Melbourne	Aug 29, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Aug 29, 2019	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Aug 29, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Aug 29, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Aug 29, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Aug 29, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			



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Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901048

Order No.: Report #:

3318 673773

02 9979 1722 02 9979 1222

Received:

Aug 28, 2019 12:04 PM

Due: Sep 5, 2019 Priority: 5 Day **Contact Name:** Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

			mple Detail			НОГД	BTEX and Naphthalene ×	Volatile Organics	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271								Х	
Sydney Laboratory - NATA Site # 18217									
Brisbane Laboratory - NATA Site # 20794									Х
Pert	h Laboratory -	NATA Site # 237	36						
Exte	rnal Laboratory	у			1				
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	MW114	Aug 27, 2019		Water	S19-Au41232			Х	
2	MW101	Aug 26, 2019		Water	S19-Au41233			Х	
3	MW110	Aug 27, 2019		Water	S19-Au41234			Х	
4	MW115	Aug 27, 2019		Water	S19-Au41235			Х	Х
5	5 MW113 Aug 27, 2019 Water S19-Au41236							Х	
6	6 MW107 Aug 27, 2019 Water S19-Au41237							Х	
7	7 MW116 Aug 26, 2019 Water S19-Au41238								Х
8	MW112	Aug 26, 2019		Water	S19-Au41239			Х	
9	MW102	Aug 26, 2019		Water	S19-Au41240			Х	



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Project Name: //
Project ID:

AUBURN 1901048

 Order No.:
 3318
 Received:
 Aug 28, 2019 12:04 PM

 Report #:
 673773
 Due:
 Sep 5, 2019

 Phone:
 02 9979 1722
 Priority:
 5 Day

 Fax:
 02 9979 1222
 Contact Name:
 Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

Sample Detail							BTEX and Naphthalene	Volatile Organics	Per- and Polyfluoroalkyl Substances (PFASs)
		ory - NATA Site		271		Х	Х	Х	
		- NATA Site # 1 y - NATA Site #							X
		NATA Site # 237							^
10	TRIP SPIKE	Not Provided		Water	S19-Au41241		Х		
11	TRIP BLANK	Not Provided		Water	S19-Au41242		Х		
12	R4	Aug 26, 2019		Water	S19-Au41243			Х	
13	D2	Aug 26, 2019		Water	S19-Au41244			Х	
14	R5	Aug 27, 2019		Water	S19-Au41245	Х			
15	D3	Aug 27, 2019		Water	S19-Au41246	Х			
Test	Counts					2	2	2	



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene	mg/L	< 0.01	0.01	Pass	
Method Blank					
BTEX					
Benzene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Xylenes - Total	mg/L	< 0.003	0.003	Pass	
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene		< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L				
	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	



Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Methylene Chloride		< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene		< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.001	0.001	Pass	
Vinyl chloride	mg/L	< 0.001	0.001	Pass	
Method Blank		<u> </u>			
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05	0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01	0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01	0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01	0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01	0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01	0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01	0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L ug/L	< 0.01	0.01	Pass	
Perfluorododecanoic acid (PFDoDA)		< 0.01	0.01	Pass	
` '	ug/L				
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01	0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01	0.01	Pass	
Method Blank		T	T	l	
Perfluoroalkyl sulfonamido substances				_	
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05	0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05	0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05	0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N- MeFOSE)	ug/L	< 0.05	0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05	0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)		< 0.05	0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05	0.05	Pass	
Method Blank					
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01	0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01	0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01	0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01	0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01	0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01	0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01	0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01	0.01	Pass	
Method Blank	ug/L		0.01	1 433	
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ua/l	< 0.01	0.01	Pass	
	ug/L	 	0.01	<u> </u>	
1H.1H.2H.2H.perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05	0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01	0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01	0.01	Pass	
LCS - % Recovery					
Total Recoverable Hydrocarbons - 2013 NEPM Fractions		1 05		 	
Naphthalene	%	85	70-130	Pass	
LCS - % Recovery					
BTEX					
Benzene	%	92	70-130	Pass	
Toluene	%	85	70-130	Pass	
Ethylbenzene	%	85	70-130	Pass	



Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes				85		70-130	Pass	
Xylenes - Total			%	86		70-130	Pass	
LCS - % Recovery								
Volatile Organics								
1.1-Dichloroethene				98		70-130	Pass	
1.1.1-Trichloroethane			%	96		70-130	Pass	
1.2-Dichlorobenzene			%	83		70-130	Pass	
1.2-Dichloroethane			%	93		70-130	Pass	
Trichloroethene			%	80		70-130	Pass	
LCS - % Recovery					'			
Perfluoroalkyl carboxylic acids (PF	CAs)							
Perfluorobutanoic acid (PFBA)			%	102		50-150	Pass	
Perfluoropentanoic acid (PFPeA)			%	113		50-150	Pass	
Perfluorohexanoic acid (PFHxA)			%	85		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)			// //////////////////////////////////	98		50-150	Pass	
Perfluorooctanoic acid (PFOA)			%	82		50-150	Pass	
			<u>%</u> %					
Perfluorononanoic acid (PFNA)				88		50-150	Pass	
Perfluorodecanoic acid (PFUsDA)			%	87		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)			%	89		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)			%	90		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)			%	78		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA	A)		%	92		50-150	Pass	
LCS - % Recovery				I	Π			
Perfluoroalkyl sulfonamido substar		1					_	
Perfluorooctane sulfonamide (FOSA)			%	79		50-150	Pass	
N-methylperfluoro-1-octane sulfonam			%	80		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamio			%	77		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfon MeFOSE)	amido)-ethanol (N-		%	84		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonar	mido)-ethanol (N-EtF	OSE)	%	96		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoa	cetic acid (N-EtFOS)	AA)	%	85		50-150	Pass	
N-methyl-perfluorooctanesulfonamide	oacetic acid (N-MeFC	OSAA)	%	101		50-150	Pass	
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFSA	As)							
Perfluorobutanesulfonic acid (PFBS)	,		%	64		50-150	Pass	
Perfluorononanesulfonic acid (PFNS))		%	96		50-150	Pass	
Perfluoropropanesulfonic acid (PFPr	`			100		50-150	Pass	
Perfluoropentanesulfonic acid (PFPe	· · · · · · · · · · · · · · · · · · ·			78		50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)			% %	83		50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)			%	91		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)			// //////////////////////////////////	86		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS) Perfluorodecanesulfonic acid (PFDS)			<u> </u>	77		50-150	Pass	
LCS - % Recovery			/0			1 30-130	1 455	
	:2 FTQAs\							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			0/	102		50.150	Page	
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) 1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)			%	103		50-150	Pass	
· · · · · · · · · · · · · · · · · · ·	%	79		50-150	Pass			
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) 1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)			%	112		50-150	Pass	
ΟΛ			%	99		50-150 Acceptance	Pass Pass	Qualifying
Test	Lab Sample ID S	ource	Units	Result 1		Limits	Limits	Code
Spike - % Recovery				Danish 4				
BTEX				Result 1		70 :00	_	
Benzene		NCP	%	83		70-130	Pass	
Toluene		NCP	%	96		70-130	Pass	
Ethylbenzene M19-Au42391 NCP			%	93		70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	M19-Au42391	NCP	%	94	70-130	Pass	
o-Xylene	M19-Au42391	NCP	%	93	70-130	Pass	
Xylenes - Total	M19-Au42391	NCP	%	93	70-130	Pass	
Spike - % Recovery						1	
Perfluoroalkyl carboxylic acids (Pl	FCAs)			Result 1			
Perfluorobutanoic acid (PFBA)	M19-Au39781	NCP	%	119	50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M19-Au39781	NCP	%	107	50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M19-Au39781	NCP	%	76	50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M19-Au39781	NCP	%	96	50-150	Pass	
Perfluorooctanoic acid (PFOA)	M19-Au39781	NCP	%	101	50-150	Pass	
Perfluorononanoic acid (PFNA)	M19-Au39781	NCP	%	91	50-150	Pass	
Perfluorodecanoic acid (PFDA) Perfluoroundecanoic acid	M19-Au39781	NCP	%	81	50-150	Pass	
(PFUnDA)	M19-Au39781	NCP	%	75	50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M19-Au39781	NCP	%	91	50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M19-Au39781	NCP	%	78	50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M19-Au39781	NCP	%	81	50-150	Pass	
Spike - % Recovery						ı	
Perfluoroalkyl sulfonamido substa	inces			Result 1			
Perfluorooctane sulfonamide (FOSA)	M19-Au39781	NCP	%	89	50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M19-Au39781	NCP	%	66	50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M19-Au39781	NCP	%	55	50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M19-Au39781	NCP	%	101	50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M19-Au39781	NCP	%	52	50-150	Pass	
N-ethyl- perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M19-Au39781	NCP	%	81	50-150	Pass	
N-methyl- perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M19-Au39781	NCP	%	80	50-150	Pass	
Spike - % Recovery				1		т —	
Perfluoroalkyl sulfonic acids (PFS	As)	 		Result 1			
Perfluorobutanesulfonic acid (PFBS)	M19-Au39781	NCP	%	106	50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M19-Au39781	NCP	%	69	50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M19-Au39781	NCP	%	69	50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M19-Au39781	NCP	%	76	50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M19-Au39781	NCP	%	112	50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M19-Au39781	NCP	%	100	50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M19-Au39781	NCP	%	90	50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M19-Au39781	NCP	%	52	50-150	Pass	
Spike - % Recovery	OFTC:			D		I	
n:2 Fluorotelomer sulfonic acids (1	n:2 FTSAs)			Result 1			
perfluorohexanesulfonic acid (4:2 FTSA)	M19-Au39781	NCP	%	110	50-150	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1H.1H.2H.2H- perfluorooctanesulfonic acid (6:2 FTSA)	M19-Au39781	NCP	%	77			50-150	Pass	
1H.1H.2H.2H- perfluorodecanesulfonic acid (8:2 FTSA)	M19-Au39781	NCP	%	129			50-150	Pass	
1H.1H.2H.2H- perfluorododecanesulfonic acid (10:2 FTSA)	M19-Au39781	NCP	%	76			50-150	Pass	
Spike - % Recovery					1			ı	
Total Recoverable Hydrocarbons -				Result 1					
Naphthalene	M19-Au44201	NCP	%	96			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate				•					
BTEX				Result 1	Result 2	RPD			
Benzene	M19-Au44517	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	M19-Au44517	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M19-Au44517	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M19-Au44517	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	M19-Au44517	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	M19-Au44517	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
cis-1.2-Dichloroethene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate					1				
Perfluoroalkyl carboxylic acids (Pf	CAs)	1		Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	B19-Au42534	NCP	ug/L	0.18	0.19	2.0	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	B19-Au42534	NCP	ug/L	0.67	0.67	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M19-Au39778	NCP	ug/L	0.18	0.19	4.0	30%	Pass	
Perfluorooctanoic acid (PFOA)	B19-Au42534	NCP	ug/L	0.18	0.19	5.0	30%	Pass	
Perfluorononanoic acid (PFNA)	M19-Au39778	NCP	ug/L	0.17	0.17	1.0	30%	Pass	
Perfluorodecanoic acid (PFDA)	M19-Au39778	NCP	ug/L	0.05	0.06	3.0	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substa	nces			Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M19-Au39778	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M19-Au39778	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M19-Au39778	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M19-Au39778	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M19-Au39778	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl- perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	B19-Au42534	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl- perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M19-Au39778	NCP	ug/L	0.34	0.32	5.0	30%	Pass	



Duplicate									
Perfluoroalkyl sulfonic acids (PFS	(As)			Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M19-Au39778	NCP	ug/L	0.11	0.11	1.0	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M19-Au39778	NCP	-	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid			ug/L						
Perfluorohexanesulfonic acid	M19-Au39778	NCP	ug/L	0.03	0.03	3.0	30%	Pass	
(PFHxS) Perfluoroheptanesulfonic acid	B19-Au42534	NCP	ug/L	0.56	0.61	8.0	30%	Pass	
(PFHpS) Perfluorooctanesulfonic acid	M19-Au39778	NCP	ug/L	0.21	0.24	13	30%	Pass	
(PFOS) Perfluorodecanesulfonic acid	B19-Au42534	NCP	ug/L	0.75	0.78	3.0	30%	Pass	
(PFDS) Duplicate	M19-Au39778	NCP	ug/L	0.02	0.01	20	30%	Pass	
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			Result 1	Result 2	RPD			
1H.1H.2H.2H-	11.21 13.43)			ixesuit i	Nesuit 2	INI D			
perfluorohexanesulfonic acid (4:2 FTSA)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H- perfluorooctanesulfonic acid (6:2 FTSA)	B19-Au42534	NCP	ug/L	0.05	0.05	2.0	30%	Pass	
1H.1H.2H.2H- perfluorodecanesulfonic acid (8:2 FTSA)	B19-Au42534	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H- perfluorododecanesulfonic acid (10:2 FTSA)	M19-Au39778	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons	2013 NEPM Fract	ions		Result 1	Result 2	RPD			
Naphthalene	B19-Au42738	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate				I	1		T	1	
Volatile Organics	1			Result 1	Result 2	RPD		-	
1.1-Dichloroethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1-Dichloroethene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1-Trichloroethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane 1.2-Dichlorobenzene	M19-Au42108 M19-Au42108	NCP NCP	mg/L mg/L	< 0.001 < 0.001	< 0.001 < 0.001	<1 <1	30% 30%	Pass Pass	
1.2-Dichloroethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichlorobenzene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichloropropane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3.5-Trimethylbenzene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.4-Dichlorobenzene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Butanone (MEK)	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Propanone (Acetone)	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chlorotoluene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Allyl chloride	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromobenzene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
	1								
Bromochloromethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	



Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Bromoform	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon disulfide	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	M19-Au42108	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.3-Dichloropropene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromochloromethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dichlorodifluoromethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Isopropyl benzene (Cumene)	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Methylene Chloride	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Styrene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.2-Dichloroethene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.3-Dichloropropene	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichlorofluoromethane	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	M19-Au42108	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	



Comments

Sample Integrity

Custody Seals Intact (if used) N/A Attempt to Chill was evident Yes Sample correctly preserved Yes Appropriate sample containers have been used Yes Sample containers for volatile analysis received with minimal headspace Yes Samples received within HoldingTime Yes Some samples have been subcontracted No

Qualifier Codes/Comments

Code Description

G01 The LORs have been raised due to matrix interference

Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.

N02

Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds. N11

Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation). N15

R20 This sample is a Trip Spike and therefore all results are reported as a percentage

Authorised By

Ursula Long Analytical Services Manager Bryan Wilson Senior Analyst-PFAS (QLD) Harry Bacalis Senior Analyst-Volatile (VIC)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In or case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and to styr production arising from this report. This document shall not be reporteduced except in full and relates only to the letters tested. Unless indicated to therewise, the testes were performed on the samples as received.



Environment Testing Melbourne 6 Monterey Road Dandenong South Vic 3175 16 Mars Road Phone: +61 3 8564 5000 NATA # 1261 Site # 1254 & 14271 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 20794

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048 COC number: Not provided

Turn around time: 5 Day

Date/Time received: Aug 28, 2019 12:04 PM

Eurofins reference: 673773

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt: 3.2 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

Geo-Logix Pty Ltd

CHAIN OF CUSTODY

Project Manager: Ben Pearce

Purchase Order No:

673773

ABN: 86 116 892 936

P: (02) 9979 1722

F: (02) 9979 1222

Building Q2, Level 3

2309/4 Daydream St

Warriewood, NSW 2102

Contact email: Project Name:

Project Number:

Auburn De Jeo-logix, com.au

Date Submitted: 28/08/19 1901048

Quote Reference: Send Invoice to:

accounts@geo-logix.com.au

TAT required:

STD

						ANALYSIS	RE	QU	IRE	D			40		uies				Logic	-	a de la constante de la consta		120	-	and the		
Lab ID	Sample ID	Date	l ter	atrix	other	Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 - C40	VOCs	BTEXN	PCBs	OCPs	OPPs	Phenois	Metals - M8	Metals - Lead	TCLP	Asbestos (ID only)	Asbestos (WA DOH)	Foreign Materials	Conductivity (EC)	Hd	PFAS	Hold	SUITE	Eurofins MGT Suite Codes
	MW114	27/08/19	X	-						X											17.7					0,	B1 TRH/BTEXN
	MWIOI	26/08	X					A	-	X	1																B1A TRH/MAH B2 TRH/BTEXN/Pb
	MWIIO	24/08	×						_	X																	B2A TRH/MAH/Pb
	MW115	27/08	X							X														×			B3 PAH/Phonois B4 TRH/BTEXN/PAH
	MWI13	27/08	X						1	X	A													-			B4A TRH/BTEXN/PAH/Phenois
	MW107	27/08	X							X																	B5 TRH/BTEXN/M7 B6 TRH/BTEXN/M8
	MW116	26/08	X						-	X		1			7			1 7					10	×			B7 TRH/BTEXN/PAH/M8
	MW112	26/08	X					101	-	X																	B8 TRH/VOC/PAH/M8
	MW102	26/08	X							X	1										. 19						B9 TRH/BTEXN/PAH/OCP/M8
	Spike	0.0,00	X							7	×				B						100						B10 TRH/BTEXN/PAH/OCP/OPP/M8 B11 Na/K/Ca/Mg/CVSO ₄ /CO ₂ /HCO ₂ /NH ₂ /NO ₃
Tarle Spile	Blank		X							-	X				6												B11A B11/Alkalinity
	R4	26/08	X							X																	B11B B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanol
	R5	27/08	X					1.5																	×		B12A TRH/BTEXN/Oxygenates
	D2	26/08	X							×					15	10	1							4	1		B13 OCP/PCB B14 OCP/OPP
	D3	27/08	X																						×		B15 OCP/OPP/PCB
	1)0	41100																									B16 TDS/SO,/CH,/AIk/BOD/COD/HPC/CUB B17 SO,/NO,/Fe++/HPC/CUB
																											B18 CH/SO ₄ /pH
1 B 7 A																		0 9							-		B19 N/P/K
							_												-		_						B20 CEC/%ESP/Ca/Ma/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 6*, Cr 3*, Fe 2*, Fe 3*, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

	Chain of Custody	and the second second		
Relinquished by: Ben Reeval Date/Time: 28/8/19 Signature	1/		The Jak	>
	Ruper	28/08	12:04 Pm	

T: 3.20°C



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

Report672913-WProject nameAUBURNProject ID1901048Received DateAug 23, 2019

Client Sample ID			T1
Sample Matrix			Water
Eurofins Sample No.			S19-Au34310
Date Sampled			Aug 20, 2019
Test/Reference	LOR	Unit	
Volatile Organics	LOIN	Onit	
1.1-Dichloroethane	0.001	mg/L	0.028
1.1-Dichloroethene	0.001	mg/L	0.021
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	< 0.005
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	0.14
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001



Client Sample ID Sample Matrix			T1 Water
Eurofins Sample No.			S19-Au34310
Date Sampled			Aug 20, 2019
Test/Reference	LOR	Unit	
Volatile Organics			
Dibromochloromethane	0.001	mg/L	< 0.001
Dibromomethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
Iodomethane	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	0.003
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001
Trichloroethene	0.001	mg/L	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	0.021
Xylenes - Total	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	0.185
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	0.164
4-Bromofluorobenzene (surr.)	1	%	92
Toluene-d8 (surr.)	1	%	79



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeVolatile OrganicsSydneyAug 23, 20197 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices



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Geo-Logix P/L

Address:

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Warriewood

NSW 2102

Project Name: Project ID:

AUBURN 1901048

Order No.: Report #:

3310 672913

02 9979 1722

Phone: Fax: 02 9979 1222 Received: Aug 23, 2019 9:00 AM Due:

Aug 30, 2019 Priority: 5 Day

Contact Name: - cc ALL RESULTS Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

		Sa	mple Detail			Volatile Organics	
Melb	ourne Laborato	ry - NATA Site	# 1254 & 142	71			
Sydn	ey Laboratory	NATA Site # 1	8217			Χ	
Brisk	oane Laboratory	/ - NATA Site #	20794				
Perth	n Laboratory - N	IATA Site # 237	36				
Exte	rnal Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	T1	Aug 20, 2019		Water	S19-Au34310	Х	
Test	Counts					1	

Eurofins Environment Testing Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400



Internal Quality Control Review and Glossary

General

- 1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram mg/L: milligrams per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

Date Reported: Aug 30, 2019

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane		1	0.001	Pass	
	mg/L	< 0.001			
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
lodomethane	mg/L	< 0.001	0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
Methylene Chloride	mg/L	< 0.001	0.001	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Styrene	mg/L	< 0.001	0.001	Pass	
Tetrachloroethene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Trichloroethene	mg/L	< 0.001	0.001	Pass	



Test	i		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Trichlorofluoromethane			mg/L	< 0.001			0.001	Pass	
Vinyl chloride			mg/L	< 0.001			0.001	Pass	
Xylenes - Total			mg/L	< 0.003			0.003	Pass	
LCS - % Recovery									
Volatile Organics									
1.1-Dichloroethene			%	103			70-130	Pass	
1.1.1-Trichloroethane			%	99			70-130	Pass	
1.2-Dichlorobenzene			%	113			70-130	Pass	
1.2-Dichloroethane			%	97			70-130	Pass	
Benzene			%	101			70-130	Pass	
Ethylbenzene			%	119			70-130	Pass	
m&p-Xylenes			%	110			70-130	Pass	
o-Xylene			%	110			70-130	Pass	
Toluene			%	101			70-130	Pass	
Trichloroethene			%	98			70-130	Pass	
Xylenes - Total			%	110			70-130	Pass	
Test	Lab Sample ID	QA	Units	Result 1			Acceptance	Pass	Qualifying
Dunlicato	•	Source					Limits	Limits	Code
Duplicate Valatila Organica				Decult 4	Describ 0	DDD			
Volatile Organics	040 4 04040	0.0		Result 1	Result 2	RPD	000/	D	
1.1-Dichloroethane	S19-Au34310	CP	mg/L	0.028	0.030	10	30%	Pass	
1.1-Dichloroethene	S19-Au34310	CP	mg/L	0.021	0.024	11	30%	Pass	
1.1.1-Trichloroethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichlorobenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichloropropane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3.5-Trimethylbenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.4-Dichlorobenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Butanone (MEK)	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Propanone (Acetone)	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Chlorotoluene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Allyl chloride	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromobenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromochloromethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromoform	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon disulfide	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	S19-Au34310	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.2-Dichloroethene	S19-Au34310	CP	mg/L	0.14	0.16	9.0	30%	Pass	
cis-1.3-Dichloropropene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	į



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dibromochloromethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dichlorodifluoromethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Isopropyl benzene (Cumene)	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S19-Au34310	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
Methylene Chloride	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
o-Xylene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Styrene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.2-Dichloroethene	S19-Au34310	CP	mg/L	0.003	0.003	8.0	30%	Pass	
trans-1.3-Dichloropropene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichlorofluoromethane	S19-Au34310	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	S19-Au34310	CP	mg/L	0.021	0.022	3.0	30%	Pass	
Xylenes - Total	S19-Au34310	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	



Comments

Sample Integrity

 Custody Seals Intact (if used)
 N/A

 Attempt to Chill was evident
 Yes

 Sample correctly preserved
 Yes

 Appropriate sample containers have been used
 Yes

 Sample containers for volatile analysis received with minimal headspace
 Yes

 Samples received within HoldingTime
 Yes

 Some samples have been subcontracted
 No

Authorised By

Ursula Long Analytical Services Manager



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048 COC number: Not provided

Turn around time: 5 Day

Date/Time received: Aug 23, 2019 9:00 AM

Eurofins reference: 672913

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt: 1.8 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

to Melbourne Lab Morgaardgeo-logix com. aug Project Name: accounts@geo-logix.com.au ABN: 86 116 892 936 Send Invoice to: Project Number: 1901048 Date Submitted: 23/8/19 5 day P: (02) 9979 1722 TAT required: F: (02) 9979 1222 **ANALYSIS REQUIRED** Matrix Asbestos (WA DOH) Asbestos (ID only) Foreign Materials Conductivity (EC) TRH - C10 - C40 Metals - Specify TRH - C6 - C10 paint, filters Metals - Lead COMPOSITE **Eurofins MGT Suite** Metals - M8 Codes BTEXN water OCPs OPPs SUITE Hold air Lab ID Sample ID Date Comments TI 20/8/19 X B1 TRH/BTEXN B1A TRH/MAH B2 TRH/BTEXN/Pb B2A TRH/MAH/Pb B3 PAH/Phenois B4 TRH/BTEXN/PAH B4A TRH/BTEXN/PAH/Phenois B5 TRH/BTEXN/M7 TRH/BTEXN/M8 B7 TRH/BTEXN/PAH/M8 B7A TRH/BTEXN/PAH/Phenois/M8 TRH/VOC/PAH/M8 B9 TRH/BTEXN/PAH/OCP/M8 B10 TRH/BTEXN/PAH/OCP/OPP/M8 B11 Na/K/Ca/Mg/CVSO_/CO_/HCO_/NH_/NO_ B11A B11/Alkalinity B11B B11/EC/TOS B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates B13 OCP/PCB B14 OCP/OPP B15 OCP/OPP/PCB B16 TDS/SO_/CH_/AIWBOD/COD/HPC/CUB B17 SO,/NO,/Fe++/HPC/CUB B18 CI-/SO₄/pH B19 N/P/K B20 CEC/%ESP/Ca/Ma/Na/K Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁵⁺, Cr ⁵⁺, Fe ²⁺, Fe ³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb **Chain of Custody** Relinquished by: Ben Reach Date/Time: 23/8/19 Signature: Received by: 3/6 Date/Time: T:1.80C 2.1 QF_024 Eurofins Chain of Custody2

Page (or)

Purchase Order No:

12th March 2009

Quote Reference:

CHAIN OF CUSTOUT

Project Manager: Ben Pecke

Contact email:

GEU-LUGIA FLY LIU

Building Q2, Level 3

2309/4 Daydream St Warriewood, NSW 2102



Geo-Logix P/L Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102 lac MRA



NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 672909-W

 Project name
 AUBURN

 Project ID
 1901048

 Received Date
 Aug 23, 2019

Client Sample ID			G01MW103	G01MW104	G01 D1	MW111
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au34222	S19-Au34223	S19-Au34224	S19-Au34225
Date Sampled			Aug 20, 2019	Aug 20, 2019	Aug 20, 2019	Aug 20, 2019
Test/Reference	LOR	Unit				
Volatile Organics		J 0				
1.1-Dichloroethane	0.001	mg/L	< 0.001	0.028	0.028	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	0.020	0.019	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.01	< 0.002	< 0.002	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	0.16	0.15	0.022
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001



Client Sample ID			^{G01} MW103	^{G01} MW104	^{G01} D1	MW111
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au34222	S19-Au34223	S19-Au34224	S19-Au34225
Date Sampled			Aug 20, 2019	Aug 20, 2019	Aug 20, 2019	Aug 20, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.011
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	0.022	0.021	0.007
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	0.202	0.19	0.04
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	0.18	0.169	0.033
4-Bromofluorobenzene (surr.)	1	%	82	116	100	116
Toluene-d8 (surr.)	1	%	89	107	93	108

Client Sample ID			G01MW106	GW4	G01 R1	R20TRIP SPIKE
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au34226	S19-Au34227	S19-Au34228	S19-Au34229
Date Sampled			Aug 20, 2019	Aug 20, 2019	Aug 20, 2019	Not Provided
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Frac	tions					
Naphthalene ^{N02}	0.01	mg/L	-	-	-	98
BTEX						
Benzene	0.001	mg/L	-	-	-	100
Toluene	0.001	mg/L	-	-	-	100
Ethylbenzene	0.001	mg/L	-	-	-	100
m&p-Xylenes	0.002	mg/L	-	-	-	95
o-Xylene	0.001	mg/L	-	-	-	100
Xylenes - Total	0.003	mg/L	-	-	-	97
4-Bromofluorobenzene (surr.)	1	%	-	-	-	101
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	0.82	< 0.001	-
1.1-Dichloroethene	0.001	mg/L	< 0.001	0.18	< 0.001	-
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	0.002	< 0.001	-
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-



Client Sample ID			G01MW106	GW4	G01 R1	R20TRIP SPIKE
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au34226	S19-Au34227	S19-Au34228	S19-Au34229
Date Sampled			Aug 20, 2019	Aug 20, 2019	Aug 20, 2019	Not Provided
•	LOR	Linit	Aug 20, 2019	Aug 20, 2013	Aug 20, 2013	Not i iovided
Test/Reference	LOR	Unit				
Volatile Organics	0.004		.0.004	. 0.004	. 0.004	
1.2-Dichloroethane	0.001	mg/L	< 0.001 < 0.001	< 0.001	< 0.001	-
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2.3-Trichloropropane 1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001 < 0.001	< 0.001 < 0.001	-
1.3-Dichlorobenzene	0.001	mg/L mg/L	< 0.001	< 0.001	< 0.001	-
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	_
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	_
2-Propanone (Acetone)	0.001	mg/L	< 0.005	< 0.001	< 0.003	_
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	_
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	0.91	< 0.001	-
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
lodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trichloroethene Trichlorofluoromethane	0.001	mg/L	< 0.001 < 0.001	0.28 < 0.001	< 0.001 < 0.001	-
Vinyl chloride	0.001	mg/L	< 0.001	0.68	< 0.001	-
Xylenes - Total	0.001	mg/L mg/L	< 0.001	< 0.003	< 0.001	-
Total MAH*	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	2.052	< 0.005	-
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	1.372	< 0.005	
4-Bromofluorobenzene (surr.)	1	%	97	118	70	
Toluene-d8 (surr.)	1	%	93	138	76	



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Client Sample ID			TRIP BLANK	HP1	HP2	HP3
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au34230	S19-Au34231	S19-Au34232	S19-Au34233
Date Sampled			Not Provided	Aug 22, 2019	Aug 22, 2019	Aug 22, 2019
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Frac	ctions	'				
Naphthalene ^{N02}	0.01	mg/L	< 0.01	-	-	_
BTEX		, J				
Benzene	0.001	mg/L	< 0.001	-	-	_
Toluene	0.001	mg/L	< 0.001	_	_	_
Ethylbenzene	0.001	mg/L	< 0.001	_	_	_
m&p-Xylenes	0.002	mg/L	< 0.002	-	_	_
o-Xylene	0.001	mg/L	< 0.001	-	_	_
Xylenes - Total	0.003	mg/L	< 0.003	-	_	_
4-Bromofluorobenzene (surr.)	1	%	98	-	_	_
Volatile Organics		,,,				
1.1-Dichloroethane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.1.2.7-Tetrachloroethane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	_	< 0.001	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	-	< 0.001	0.009	< 0.001
4-Chlorotoluene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Benzene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Bromobenzene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Bromoform	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Bromomethane	0.001	mg/L		< 0.001	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Chloroethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Chloroform	0.005	mg/L	-	< 0.005	< 0.005	< 0.005
Chloromethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Dibromochloromethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
	1	mg/L		< 0.001	< 0.001	< 0.001



Client Sample ID			TRIP BLANK	HP1	HP2	НР3
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-Au34230	S19-Au34231	S19-Au34232	S19-Au34233
Date Sampled			Not Provided	Aug 22, 2019	Aug 22, 2019	Aug 22, 2019
Test/Reference	LOR	Unit				
Volatile Organics						
Iodomethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	-	< 0.002	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
o-Xylene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Styrene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	-	0.001	< 0.001	0.001
trans-1.2-Dichloroethene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	-	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	-	< 0.003	< 0.003	< 0.003
Total MAH*	0.003	mg/L	-	< 0.003	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	-	< 0.005	< 0.005	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	-	< 0.005	< 0.005	< 0.005
4-Bromofluorobenzene (surr.)	1	%	-	96	93	116
Toluene-d8 (surr.)	1	%	-	95	77	94

Client Sample ID			HP4	R3
Sample Matrix			Water	Water
Eurofins Sample No.			S19-Au34234	S19-Au34236
Date Sampled			Aug 22, 2019	Aug 22, 2019
Test/Reference	LOR	Unit		
Volatile Organics				
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001	G10< 0.007
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001
Allyl chloride	0.001	mg/L	< 0.001	< 0.001
Benzene	0.001	mg/L	< 0.001	< 0.001



Client Sample ID			HP4	R3
Sample Matrix			Water	Water
Eurofins Sample No.			S19-Au34234	S19-Au34236
Date Sampled			Aug 22, 2019	Aug 22, 2019
Test/Reference	LOR	Unit		
Volatile Organics				
Bromobenzene	0.001	mg/L	< 0.001	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001
Bromoform	0.001	mg/L	< 0.001	< 0.001
Bromomethane	0.001	mg/L	< 0.001	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001
Chloroethane	0.001	mg/L	< 0.001	< 0.001
Chloroform	0.005	mg/L	< 0.005	< 0.005
Chloromethane	0.001	mg/L	< 0.001	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	0.006	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001
Dibromomethane	0.001	mg/L	< 0.001	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001
lodomethane	0.001	mg/L	< 0.001	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001
o-Xylene	0.001	mg/L	< 0.001	< 0.001
Styrene	0.001	mg/L	< 0.001	< 0.001
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001
Trichloroethene	0.001	mg/L	< 0.001	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003
Total MAH*	0.003	mg/L	< 0.003	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	0.006	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	0.006	< 0.005
4-Bromofluorobenzene (surr.)	1	%	90	112
Toluene-d8 (surr.)	1	%	86	125



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
BTEX and Naphthalene			
BTEX	Melbourne	Aug 26, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Aug 28, 2019	7 Days

- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)



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Company Name: Geo-Logix P/L

Address:

Project Name: Project ID:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood NSW 2102

1901048

AUBURN

Order No.: Report #: PO3310 672909

02 9979 1722 02 9979 1222 **Received:** Aug 23, 2019 9:00 AM **Due:** Aug 30, 2019

Priority: 5 Day
Contact Name: Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

		Sa	mple Detail			HOLD	BTEX and Naphthalene	Volatile Organics	
Melb	Melbourne Laboratory - NATA Site # 1254 & 14271								
Sydr	ney Laboratory	- NATA Site # 1	8217						
Brisl	bane Laborator	y - NATA Site #	20794						
Pertl	h Laboratory - N	NATA Site # 237	'36						
Exte	rnal Laboratory	,							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	MW103	Aug 20, 2019		Water	S19-Au34222			Х	
2	MW104	Aug 20, 2019		Water	S19-Au34223			Х	
3	D1	Aug 20, 2019		Water	S19-Au34224			Х	
4	MW111	Aug 20, 2019		Water	S19-Au34225			Х	
5	MW106	Aug 20, 2019		Water	S19-Au34226			Х	
6	GW4	Aug 20, 2019		Water	S19-Au34227			Х	
7	R1	Aug 20, 2019		Water	S19-Au34228			Х	
8	TRIP SPIKE	Not Provided		Water	S19-Au34229		Х		
9	TRIP BLANK	Not Provided		Water	S19-Au34230		Х		

Eurofins Environment Testing Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400

Report Number: 672909-W

Page 8 of 15

Date Reported:Sep 02, 2019



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Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood

NSW 2102

Project Name: Project ID: AUBURN 1901048 Order No.: Report #: PO3310 672909

Phone: 02 9979 1722 **Fax:** 02 9979 1222

Received: Aug 23, 2019 9:00 AM **Due:** Aug 30, 2019

Priority: 5 Day
Contact Name: Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

		Sal	mple Detail			HOLD	BTEX and Naphthalene	Volatile Organics
		ory - NATA Site		271		Х	Х	Х
		- NATA Site # 1						
		y - NATA Site #						
	HP1	NATA Site # 237	36	Water	S10 Au24221			X
10	HP2	Aug 22, 2019		Water	S19-Au34231			X
11		Aug 22, 2019		Water	S19-Au34232			X
12	HP3	Aug 22, 2019			S19-Au34233			
13	HP4	Aug 22, 2019		Water	S19-Au34234			Х
14	R2	Aug 22, 2019		Water	S19-Au34235	Х		
15 R3 Aug 22, 2019 Water S19-Au34236								Х
Test	Counts					1	2	12



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene	mg/L	< 0.01	0.01	Pass	
Method Blank					
BTEX					
Benzene	mg/L	< 0.001	0.001	Pass	
Toluene	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	
m&p-Xylenes	mg/L	< 0.002	0.002	Pass	
o-Xylene	mg/L	< 0.001	0.001	Pass	
Xylenes - Total	mg/L	< 0.003	0.003	Pass	
Method Blank					
Volatile Organics					
1.1-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001	0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001	0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001	0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001	0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001	0.001	Pass	
• •		< 0.001	0.001	Pass	
1.3.5-Trimethylbenzene	mg/L				
1.4-Dichlorobenzene	mg/L	< 0.001	0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001	0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001	0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001	0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001	0.001	Pass	
Allyl chloride	mg/L	< 0.001	0.001	Pass	
Benzene	mg/L	< 0.001	0.001	Pass	
Bromobenzene	mg/L	< 0.001	0.001	Pass	
Bromochloromethane	mg/L	< 0.001	0.001	Pass	
Bromodichloromethane	mg/L	< 0.001	0.001	Pass	
Bromoform	mg/L	< 0.001	0.001	Pass	
Bromomethane	mg/L	< 0.001	0.001	Pass	
Carbon disulfide	mg/L	< 0.001	0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001	0.001	Pass	
Chlorobenzene	mg/L	< 0.001	0.001	Pass	
Chloroethane	mg/L	< 0.001	0.001	Pass	
Chloroform	mg/L	< 0.005	0.005	Pass	
Chloromethane	mg/L	< 0.001	0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001	0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001	0.001	Pass	
Dibromochloromethane	mg/L	< 0.001	0.001	Pass	
Dibromomethane	mg/L	< 0.001	0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001	0.001	Pass	
Ethylbenzene	mg/L	< 0.001	0.001	Pass	



Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Iodomethane			mg/L	< 0.001		0.001	Pass	
Isopropyl benzene (Cumene)			mg/L	< 0.001		0.001	Pass	
m&p-Xylenes			mg/L	< 0.002		0.002	Pass	
Methylene Chloride			mg/L	< 0.001		0.001	Pass	
o-Xylene			mg/L	< 0.001		0.001	Pass	
Styrene			mg/L	< 0.001		0.001	Pass	
Tetrachloroethene			mg/L	< 0.001		0.001	Pass	
Toluene			mg/L	< 0.001		0.001	Pass	
trans-1.2-Dichloroethene			mg/L	< 0.001		0.001	Pass	
trans-1.3-Dichloropropene			mg/L	< 0.001		0.001	Pass	
Trichloroethene			mg/L	< 0.001		0.001	Pass	
Trichlorofluoromethane			mg/L	< 0.001		0.001	Pass	
Vinyl chloride			mg/L	< 0.001		0.001	Pass	
Xylenes - Total			mg/L	< 0.003		0.003	Pass	
LCS - % Recovery				•				
Total Recoverable Hydrocarbons -	2013 NEPM Fract	ions						
Naphthalene			%	108		70-130	Pass	
LCS - % Recovery								
втех								
Benzene			%	85		70-130	Pass	
Toluene			%	85		70-130	Pass	
Ethylbenzene			%	72		70-130	Pass	
m&p-Xylenes			%	72		70-130	Pass	
Xylenes - Total			%	74		70-130	Pass	
LCS - % Recovery					<u>'</u>			
Volatile Organics								
1.1-Dichloroethene			%	75		70-130	Pass	
1.1.1-Trichloroethane			%	89		70-130	Pass	
1.2-Dichlorobenzene			%	86		70-130	Pass	
1.2-Dichloroethane			%	108		70-130	Pass	
Benzene		%	95		70-130	Pass		
Ethylbenzene			%	98		70-130	Pass	
m&p-Xylenes			%	99		70-130	Pass	
Toluene			%	99		70-130	Pass	
Trichloroethene			%	81		70-130	Pass	
Xylenes - Total			%	100		70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
втех				Result 1				
Benzene	M19-Au34489	NCP	%	105		70-130	Pass	
Toluene	M19-Au34489	NCP	%	110		70-130	Pass	
Ethylbenzene	M19-Au34489	NCP	%	84		70-130	Pass	
m&p-Xylenes	M19-Au34489	NCP	%	78		70-130	Pass	
o-Xylene	M19-Au34489	NCP	%	85		70-130	Pass	
Xylenes - Total	M19-Au34489	NCP	%	81		70-130	Pass	
Spike - % Recovery								
Volatile Organics				Result 1				
1.1-Dichloroethene	S19-Au26723	NCP	%	99		70-130	Pass	
1.1.1-Trichloroethane	S19-Au26723	NCP	%	116		70-130	Pass	
1.2-Dichlorobenzene	S19-Au26723	NCP	%	114		70-130	Pass	
1.2-Dichloroethane	S19-Au26723	NCP	%	114		70-130	Pass	
	S19-Au26723	NCP	%	116		70-130	Pass	
Trichloroethene	01374420723							
Trichloroethene Spike - % Recovery	013 Au20723	1101	7.0					
				Result 1				



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code				
Duplicate													
ВТЕХ				Result 1	Result 2	RPD							
Benzene	M19-Au34672	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Toluene	M19-Au34672	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Ethylbenzene	M19-Au34672	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
m&p-Xylenes	M19-Au34672	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass					
o-Xylene	M19-Au34672	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Xylenes - Total	M19-Au34672	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass					
Duplicate													
Volatile Organics				Result 1	Result 2	RPD							
1.1-Dichloroethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.1-Dichloroethene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.1.1-Trichloroethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.1.1.2-Tetrachloroethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.1.2-Trichloroethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.1.2.2-Tetrachloroethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.2-Dibromoethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.2-Dichlorobenzene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.2-Dichloroethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.2-Dichloropropane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.2.3-Trichloropropane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.2.4-Trimethylbenzene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.3-Dichlorobenzene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.3-Dichloropropane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.3.5-Trimethylbenzene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
1.4-Dichlorobenzene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
2-Butanone (MEK)	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
2-Propanone (Acetone)	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
4-Chlorotoluene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
4-Methyl-2-pentanone (MIBK)	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Allyl chloride	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Bromobenzene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Bromochloromethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Bromodichloromethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Bromoform	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Bromomethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Carbon disulfide	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Carbon Tetrachloride	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Chlorobenzene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Chloroethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Chloroform	M19-Au25438	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass					
Chloromethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
cis-1.2-Dichloroethene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
cis-1.3-Dichloropropene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Dibromochloromethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Dibromomethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Dichlorodifluoromethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
lodomethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Isopropyl benzene (Cumene)	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Methylene Chloride	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Styrene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Tetrachloroethene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
trans-1.2-Dichloroethene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
trans-1.3-Dichloropropene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					



Duplicate Control of the Control of													
Volatile Organics				Result 1	Result 2	RPD							
Trichloroethene	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Trichlorofluoromethane	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Vinyl chloride	M19-Au25438	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass					
Duplicate													
Total Recoverable Hydrocarbons - 2013 NEPM Fractions Result 1 Result 2 RPD													
Naphthalene	M19-Au34100	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass					



Comments

Sample Integrity

Custody Seals Intact (if used) N/A Attempt to Chill was evident Yes Sample correctly preserved Yes Appropriate sample containers have been used Yes Sample containers for volatile analysis received with minimal headspace Yes Samples received within HoldingTime Yes Some samples have been subcontracted No

Qualifier Codes/Comments

Code Description

G01 The LORs have been raised due to matrix interference G10 The LOR has been raised due to suspected contamination

Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.

N02

R20 This sample is a Trip Spike and therefore all results are reported as a percentage

Authorised By

Ursula Long Analytical Services Manager Senior Analyst-Volatile (VIC) Harry Bacalis



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Environment Testing Melbourne 6 Monterey Road Dandenong South Vic 3175 16 Mars Road Phone: +61 3 8564 5000 NATA # 1261 Site # 1254 & 14271 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 20794

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ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Company name: Geo-Logix P/L

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048 COC number: Not provided

Turn around time: 5 Day

Date/Time received: Aug 23, 2019 9:00 AM

Eurofins reference: 672909

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt: 1.8 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- \boxtimes Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

GEU-LUGIA FLY LIU

Building Q2, Level 3

2309/4 Daydream St

ABN: 86 116 892 936

P: (02) 9979 1722

F: (02) 9979 1222

Warriewood, NSW 2102

CHAIN OF CUSTOUT

Project Manager: Ken Pearce

morgan@geo-logix.com.au

Contact email: **Project Name:**

Project Number: 1901048

Date Submitted: 23/08/19

Page PO 3310 Purchase Order No:

Quote Reference: Send Invoice to:

accounts@geo-logix.com.au

TAT required:

Std

	S ALL DEVENOUS	A CONTRACTOR	C MANUE			ANALTSIS	IVL	. QU	1171		26.00	ALV NO.	-		MARK			A SEC	libra.			No.	1	100		High	-	
			Ma	trix			TE	.C10	-C40								M8	- Lead		(ID only)	Asbestos (WA DOH)	aterials	ity (EC)					Eurofins MGT Suite
Lab ID	Sample ID	Date	The second secon	air paint, filters	other	Comments	COMPOSITE	TRH - C6 - C10	TRH - C10 -	VOCs	BTEXN	PAHS	PCBs	OCPs	OPPs	U)	Metals - M	Metals - Lead	TCLP	Asbestos (ID only)	Asbestos	Foreign Materials	Conductivity (EC)	Hd		Hold	SUITE	Codes
	MW103	20/08	X							X																		B1 TRH/BTEXN B1A TRH/MAH
	MW104	20/08	X							X																		B2 TRH/BTEXN/Pb
	DI	20/08	X				15			X	- 1								1						N S			B2A TRH/MAH/Pb
	TH	20/08	X	-						×								3										B3 PAH/Phenois B4 TRH/BTEXN/PAH
	MWIII	20/08	X							X	V																	B4A TRH/BTEXN/PAH/Phenois
	MW106	20/08	X							X	1		140															B5 TRH/BTEXN/M7 B6 TRH/BTEXN/M8
	GW4	20/08	X							X	1																	B7 TRH/BTEXN/PAH/M8
	RI	20/08	X							×	J					1												B7A TRH/BTEXN/PAH/Phenois/M8 B8 TRH/VOC/PAH/M8
	Spike	20,00	X							3	X					-			-									B9 TRH/BTEXN/PAH/OCP/M8
	Blank		X				Н			3	X	0		1					+							-		B10 TRH/BTEXN/PAH/OCP/OPP/M8 B11 Na/K/Ca/Mg/CVSO ₄ /CO ₂ /HCO ₃ /NH ₂ /NC
	HP (22/08	X																+							1		B11A B11/Alkalinity
	HPZ	20100	X																-	-						X		B11B B11/EC/TDS
		-1										-			-		-		-	-						X		B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates
	HP3		X	-			H				-	-	-	-		-	+	-	-	-	-					×		B13 OCP/PCB
A STATE OF THE STA	HP4		X										-	-	-	-			-		10							B14 OCP/OPP B15 OCP/OPP/PCB
	RZ R3		X											-							1					X		B16 TDS/SO_/CH_/AIN/BOD/COD/HPC/CUB
	K3	V	X			The Tolkholder							-													X		B17 SO4/NOyFe++/HPC/CUB
																												B18 CI-/SO ₄ /pH
					Je X								18														-	B19 N/P/K B20 CEC/%ESP/Ca/Ma/Na/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr ⁸⁺, Cr ³⁺, Fe ²⁺, Fe ³⁺, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Chain of Custody

Relinquished by: Bon Peccal Date/Time: 23/8/19 Signature:

672909

Ursula Long

From: Morgan Singleton-Fookes <morgan@geo-logix.com.au>

Sent: Monday, 26 August 2019 10:50 AM

To: Ursula Long
Subject: 678909 schedule

Follow Up Flag: Follow up **Flag Status:** Flagged

EXTERNAL EMAIL*

Morning Ursula,

Hope you had a nice weekend.

For the Auburn samples dropped off last week, project 672909, could you please schedule HP1, HP2, HP3, HP4 and R3 for VOCs?

Thanks very much, Morgan

Morgan Singleton-Fookes | Project Scientist

Unit 2309/4 Daydream St, Warriewood NSW 2102 M: 0417 217 179 | T: 02 9979 1722 | www.geo-logix.com.au



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NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Ben Pearce

 Report
 687604-W

 Project name
 AUBURN

 Project ID
 1901048

 Received Date
 Nov 12, 2019

Client Sample ID			GW1	MW106	MW110	MW114
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-No16171	S19-No16172	S19-No16173	S19-No16174
Date Sampled			Nov 12, 2019	Nov 12, 2019	Nov 12, 2019	Nov 12, 2019
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	0.02	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	75	40	75	86
13C5-PFPeA (surr.)	1	%	63	31	63	74
13C5-PFHxA (surr.)	1	%	109	61	105	127
13C4-PFHpA (surr.)	1	%	70	40	67	78
13C8-PFOA (surr.)	1	%	164	121	163	173
13C5-PFNA (surr.)	1	%	146	96	145	147
13C6-PFDA (surr.)	1	%	130	72	124	134
13C2-PFUnDA (surr.)	1	%	142	97	136	153
13C2-PFDoDA (surr.)	1	%	141	129	139	144
13C2-PFTeDA (surr.)	1	%	52	63	60	58
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	113	96	103	114
D3-N-MeFOSA (surr.)	1	%	75	55	73	82
D5-N-EtFOSA (surr.)	1	%	69	40	69	76



Client Sample ID			GW1	MW106	MW110	MW114
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S19-No16171	S19-No16172	S19-No16173	S19-No16174
Date Sampled			Nov 12, 2019	Nov 12, 2019	Nov 12, 2019	Nov 12, 2019
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances	-	'				
D7-N-MeFOSE (surr.)	1	%	70	47	79	74
D9-N-EtFOSE (surr.)	1	%	68	57	75	71
D5-N-EtFOSAA (surr.)	1	%	73	87	73	73
D3-N-MeFOSAA (surr.)	1	%	72	71	61	81
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	^{N09} 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	N090.09	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)N11	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)N15	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	116	111	112	117
18O2-PFHxS (surr.)	1	%	140	144	150	149
13C8-PFOS (surr.)	1	%	143	127	137	143
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	62	54	53	62
13C2-6:2 FTSA (surr.)	1	%	121	128	125	123
13C2-8:2 FTSA (surr.)	1	%	141	183	136	150
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	0.09	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	0.09	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.1	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	0.11	< 0.1	< 0.1	< 0.1

Client Sample ID Sample Matrix			DW1 Water	R1 Water
Eurofins Sample No.			S19-No16175	S19-No16176
Date Sampled			Nov 12, 2019	Nov 12, 2019
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01



Client Sample ID			DW1	R1
Sample Matrix			Water	Water
Eurofins Sample No.			S19-No16175	S19-No16176
Date Sampled			Nov 12, 2019	Nov 12, 2019
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)N11	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	90	128
13C5-PFPeA (surr.)	1	%	77	116
13C5-PFHxA (surr.)	1	%	118	152
13C4-PFHpA (surr.)	1	%	76	81
13C8-PFOA (surr.)	1	%	181	151
13C5-PFNA (surr.)	1	%	147	157
13C6-PFDA (surr.)	1	%	135	108
13C2-PFUnDA (surr.)	1	%	152	123
13C2-PFDoDA (surr.)	1	%	142	123
13C2-PFTeDA (surr.)	1	%	51	56
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N- MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N- EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N- EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N- MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	110	90
D3-N-MeFOSA (surr.)	1	%	70	71
D5-N-EtFOSA (surr.)	1	%	71	77
D7-N-MeFOSE (surr.)	1	%	74	61
D9-N-EtFOSE (surr.)	1	%	74	68
D5-N-EtFOSAA (surr.)	1	%	77	59
D3-N-MeFOSAA (surr.)	1	%	77	66
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)N11	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)N15	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)N15	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)N15	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)N11	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)N15	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)N11	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)N15	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	118	120
18O2-PFHxS (surr.)	1	%	151	126
13C8-PFOS (surr.)	1	%	146	123



Client Sample ID Sample Matrix			DW1 Water	R1 Water
Eurofins Sample No.			S19-No16175	S19-No16176
Date Sampled			Nov 12, 2019	Nov 12, 2019
Test/Reference	LOR	Unit		
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N15}	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	62	88
13C2-6:2 FTSA (surr.)	1	%	131	81
13C2-8:2 FTSA (surr.)	1	%	157	113
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1

Page 4 of 12



Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Nov 13, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Nov 13, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Nov 13, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Nov 13, 2019	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			



ABN - 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

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Perth 2/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

Company Name:

Geo-Logix P/L

Address:

Bld Q2 Level 3, 2309/4 Daydream St

Warriewood NSW 2102

Project Name: Project ID:

AUBURN 1901048

Order No.:

Per- and Polyfluoroalkyl Substances (PFASs

PO3457

Report #: 687604 Phone: 02 9979 1722 Fax: 02 9979 1222

Received: Nov 12, 2019 3:45 PM Due:

Nov 13, 2019

Priority: 1 Day **Contact Name:** Ben Pearce

Eurofins Analytical Services Manager: Ursula Long

Sample Detail

	()
Melbourne Laboratory - NATA Site # 1254 & 14271	
Sydney Laboratory - NATA Site # 18217	
Brisbane Laboratory - NATA Site # 20794	Х
Perth Laboratory - NATA Site # 23736	

Exte	rnai Laboratory	<u> </u>				
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	GW1	Nov 12, 2019		Water	S19-No16171	Х
2	MW106	Nov 12, 2019		Water	S19-No16172	Х
3	MW110	Nov 12, 2019		Water	S19-No16173	Х
4	MW114	Nov 12, 2019		Water	S19-No16174	Х
5	DW1	Nov 12, 2019		Water	S19-No16175	Х
6	R1	Nov 12, 2019		Water	S19-No16176	Х
Test	Counts					6

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Date Reported:Nov 13, 2019



Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**NOTE: pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

Surr - Surrogate The addition of a like compound to the analyte target and reported as percentage recovery.

Duplicate A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50% $\,$

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$

QC Data General Comments

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

 Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



Quality Control Results

Test	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank					
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05	0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01	0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01	0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01	0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01	0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01	0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01	0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01	0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01	0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01	0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01	0.01	Pass	
Method Blank	J				
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05	0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05	0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05	0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05	0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05	0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05	0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05	0.05	Pass	
Method Blank	ug/L	\ 0.03	0.03	1 033	
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01	0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L ug/L	< 0.01	0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L ug/L	< 0.01	0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L ug/L	< 0.01	0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)		< 0.01	0.01	Pass	
` '	ug/L		0.01		
Perfluence of the soulf or in soid (PFHpS)	ug/L	< 0.01		Pass	
Perfluoroctanesulfonic acid (PFOS)	ug/L	< 0.01	0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01	0.01	Pass	
Method Blank					
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	"	0.04			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01	0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05	0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01	0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01	0.01	Pass	
LCS - % Recovery					
Perfluoroalkyl carboxylic acids (PFCAs)				_	
Perfluorobutanoic acid (PFBA)	%	116	50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	117	50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	80	50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	98	50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	72	50-150	Pass	
Perfluorononanoic acid (PFNA)	%	102	50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	115	50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	99	50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	107	50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	91	50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	107	50-150	Pass	



Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery					, , , , , , , , , , , , , , , , , , , ,	,		
Perfluoroalkyl sulfonamido substa	nces							
Perfluorooctane sulfonamide (FOSA	۸)		%	139		50-150	Pass	
N-methylperfluoro-1-octane sulfonar	mide (N-MeFOSA)		%	95		50-150	Pass	
N-ethylperfluoro-1-octane sulfonami	de (N-EtFOSA)		%	108		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfor MeFOSE)	namido)-ethanol (N	1-	%	106		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfona	ımido)-ethanol (N-E	EtFOSE)	%	120		50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoa	acetic acid (N-EtFC	DSAA)	%	100		50-150	Pass	
N-methyl-perfluorooctanesulfonamic	loacetic acid (N-Me	eFOSAA)	%	106		50-150	Pass	
LCS - % Recovery								
Perfluoroalkyl sulfonic acids (PFS)	As)							
Perfluorobutanesulfonic acid (PFBS))		%	90		50-150	Pass	
Perfluorononanesulfonic acid (PFNS	5)		%	108		50-150	Pass	
Perfluoropropanesulfonic acid (PFP)	rS)		%	101		50-150	Pass	
Perfluoropentanesulfonic acid (PFPe	eS)		%	95		50-150	Pass	
Perfluorohexanesulfonic acid (PFHx	S)		%	90		50-150	Pass	
Perfluoroheptanesulfonic acid (PFH)	oS)		%	81		50-150	Pass	
Perfluorooctanesulfonic acid (PFOS))		%	97		50-150	Pass	
Perfluorodecanesulfonic acid (PFDS	3)		%	109		50-150	Pass	
LCS - % Recovery								
n:2 Fluorotelomer sulfonic acids (r	n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfor	nic acid (4:2 FTSA)		%	99		50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfon	ic acid (6:2 FTSA)		%	104		50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfor	nic acid (8:2 FTSA)		%	120		50-150	Pass	
1H.1H.2H.2H-perfluorododecanesul	fonic acid (10:2 FT	SA)	%	125		50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Perfluoroalkyl carboxylic acids (PF	-CAs)			Result 1				
Perfluorobutanoic acid (PFBA)	S19-No16176	CP	%	116		50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S19-No16176	CP	%	122		50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S19-No16176	CP	%	81		50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S19-No16176	CP	%	103		50-150	Pass	
Perfluorooctanoic acid (PFOA)	S19-No16176	CP	%	75		50-150	Pass	
Perfluorononanoic acid (PFNA)	S19-No16176	CP	%	107		50-150	Pass	
Perfluorodecanoic acid (PFDA)	S19-No16176	CP	%	118		50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S19-No16176	СР	%	97		50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S19-No16176	СР	%	110		50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S19-No16176	СР	%	96		50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S19-No16176	СР	%	105		50-150	Pass	
Spike - % Recovery								
Perfluoroalkyl sulfonamido substa	nces			Result 1				
Perfluorooctane sulfonamide (FOSA)	S19-No16176	СР	%	133		50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S19-No16176	СР	%	94		50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S19-No16176	СР	%	104		50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S19-No16176	СР	%	104		50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S19-No16176	СР	%	118		50-150	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-ethyl- perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S19-No16176	СР	%	97			50-150	Pass	
N-methyl- perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S19-No16176	СР	%	106			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFS	As)			Result 1					
Perfluorobutanesulfonic acid (PFBS)	S19-No16176	СР	%	92			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S19-No16176	СР	%	99			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S19-No16176	СР	%	96			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S19-No16176	СР	%	94			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S19-No16176	СР	%	93			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S19-No16176	СР	%	85			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S19-No16176	СР	%	103			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S19-No16176	СР	%	104			50-150	Pass	
Spike - % Recovery					ı		T		
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	1		Result 1					
1H.1H.2H.2H- perfluorohexanesulfonic acid (4:2 FTSA)	S19-No16176	СР	%	107			50-150	Pass	
1H.1H.2H.2H- perfluorooctanesulfonic acid (6:2 FTSA)	S19-No16176	СР	%	107			50-150	Pass	
1H.1H.2H.2H- perfluorodecanesulfonic acid (8:2 FTSA)	S19-No16176	СР	%	126			50-150	Pass	
1H.1H.2H.2H- perfluorododecanesulfonic acid (10:2 FTSA)	S19-No16176	СР	%	116			50-150	Pass	
		QA		-			Acceptance	Pass	Qualifying
Test	Lab Sample ID	Source	Units	Result 1			Limits	Limits	Code
Duplicate									
Perfluoroalkyl carboxylic acids (Pf	CAs)			Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S19-No16173	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S19-No16173	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S19-No16173	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S19-No16173	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S19-No16173	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S19-No16173	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass	



Dunlingto										
Duplicate Perfluoroalkyl sulfonamido substances Result 1 Result 2 RPD										
Perfluoroactane sulfonamide	nces			Result I	Result 2	KPD				
(FOSA)	S19-No16173	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass		
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S19-No16173	СР	ug/L	< 0.05	< 0.05	<1	30%	Pass		
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S19-No16173	СР	ug/L	< 0.05	< 0.05	<1	30%	Pass		
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S19-No16173	СР	ug/L	< 0.05	< 0.05	<1	30%	Pass		
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S19-No16173	СР	ug/L	< 0.05	< 0.05	<1	30%	Pass		
N-ethyl- perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S19-No16173	СР	ug/L	< 0.05	< 0.05	<1	30%	Pass		
N-methyl- perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S19-No16173	СР	ug/L	< 0.05	< 0.05	<1	30%	Pass		
Duplicate										
Perfluoroalkyl sulfonic acids (PFSA	As)			Result 1	Result 2	RPD				
Perfluorobutanesulfonic acid (PFBS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Perfluorononanesulfonic acid (PFNS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Perfluoropropanesulfonic acid (PFPrS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Perfluoropentanesulfonic acid (PFPeS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Perfluorohexanesulfonic acid (PFHxS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Perfluoroheptanesulfonic acid (PFHpS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Perfluorooctanesulfonic acid (PFOS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Perfluorodecanesulfonic acid (PFDS)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
Duplicate				1	1					
n:2 Fluorotelomer sulfonic acids (n	:2 FTSAs)		1	Result 1	Result 2	RPD				
1H.1H.2H.2H- perfluorohexanesulfonic acid (4:2 FTSA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
1H.1H.2H.2H- perfluorooctanesulfonic acid (6:2 FTSA)	S19-No16173	СР	ug/L	< 0.05	< 0.05	<1	30%	Pass		
1H.1H.2H.2H- perfluorodecanesulfonic acid (8:2 FTSA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		
1H.1H.2H.2H- perfluorododecanesulfonic acid (10:2 FTSA)	S19-No16173	СР	ug/L	< 0.01	< 0.01	<1	30%	Pass		



Comments

Sample Integrity

Custody Seals Intact (if used) N/A Attempt to Chill was evident Yes Sample correctly preserved Yes Appropriate sample containers have been used Yes Sample containers for volatile analysis received with minimal headspace Yes Samples received within HoldingTime Yes Some samples have been subcontracted No

Qualifier Codes/Comments

Code Description

N09 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.

Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.

N11

Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation). N15

Authorised By

Ursula Long Analytical Services Manager Bryan Wilson Senior Analyst-PFAS (QLD)



Glenn Jackson

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to me ended rededlines and lost production arising from this record in other personal rededlines. And the rededlines and lost production arising from this record in other personal rededlines. And the rededlines are for the rededlines and to be introduced to arrive the rededlines. The rededlines are for the rededlines and to be introduced to arrive the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines and to the rededlines are for the rededlines and to the rededlines and to the rededlines are for the rededlines and the rededlines and the rededlines are for the rededlines and the rededlines and the rededlines are for the rededlines and the rededlines are for the rededlines are for the rededlines and the rededlines are for the rededlines and the rededlines are for the rededlines and the rededlines are for the rededlines are for the rededlines are for the rededlines and the rededlines are for the rededlines and the rededlines are for the rededlines are for the rededlines and the rededlines are for the rededlines are for the rededlines and the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the rededlines are for the



Environment Testing Melbourne 6 Monterey Road Dandenong South Vic 3175 16 Mars Road Phone: +61 3 8564 5000 NATA # 1261 Site # 1254 & 14271 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 18217 Phone: +61 2 9900 8400 NATA # 1261 Site # 20794

Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

Sample Receipt Advice

Geo-Logix P/L Company name:

Contact name: Ben Pearce Project name: **AUBURN** Project ID: 1901048 COC number: Not provided

Turn around time: 1 Day

Nov 12, 2019 3:45 PM Date/Time received:

Eurofins reference: 687604

Sample information

- \mathbf{V} A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- \mathbf{V} Sample Temperature of a random sample selected from the batch as recorded by Eurofins Sample Receipt : 6.4 degrees Celsius.
- \mathbf{V} All samples have been received as described on the above COC.
- \square COC has been completed correctly.
- \square Attempt to chill was evident.
- \mathbf{V} Appropriately preserved sample containers have been used.
- \mathbf{V} All samples were received in good condition.
- \mathbf{V} Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- \mathbf{V} Appropriate sample containers have been used.
- \mathbf{V} Sample containers for volatile analysis received with zero headspace.
- V Split sample sent to requested external lab.
- \boxtimes Some samples have been subcontracted.

Custody Seals intact (if used). Notes^{N/A}

PFAS sample bottle, TW1 forwarded to ALS.

Contact notes

If you have any questions with respect to these samples please contact:

Ursula Long on Phone : or by e.mail: UrsulaLong@eurofins.com

Results will be delivered electronically via e.mail to Ben Pearce - bpearce@geo-logix.com.au.

CHAIN OF CUSTODY Geo-Logix Pty Ltd of \ # 687604 Purchase Order No: P03457 Project Manager: BEN PEARCE Building Q2, Level 3 contact email: bpearceageo-logix com au/ kbabyageo-logix 2309/4 Daydream St Quote Reference: Warriewood NSW 2102 accounts@geo-logix.com.au Project Name: Send Invoice to: ABN: 86 116 892 936 24 HOUR (ASAP Project Number: 1901048 Date Submitted: | 2/1| TAT required: P: (02) 9979 1722 F: (02) 9979 1222 **ANALYSIS REQUIRED** Matrix Asbestos (WA DOH) Asbestos (ID only) Conductivity (EC) TRH - C10 - C40 Metals - Specify TRH - C6 - C10 **Eurofins MGT Suite** filters COMPOSITE Metals - M8 FA Codes SUITE PCBs OCPs TCLP VOCs water Hold H air Sample ID Comments Lab ID Date TRH/BTEXN Bora B1A TRH/MAH TRH/BTEXN/Pb GW B2A TRH/MAH/Pb mW106 PAH/PhenoIs TRH/BTEXN/PAH mw110 B4A TRH/BTEXN/PAH/Phenois mw114 TRH/BTEXN/M7 TRH/BTEXN/M8 DWI TRH/BTEXN/PAH/M8 RI 12/11 B7A TRH/BTEXN/PAH/Phenols/M8 TRH/VOC/PAH/M8 TRH/BTEXN/PAH/OCP/M8 B10 TRH/BTEXN/PAH/OCP/OPP/M8 B11 Na/K/Ca/Mg/Cl/SO₄/CO₃/HCO₃/NH₃/NO₃ B11A B11/Alkalinity B11B B11/EC/TDS B12 TRH/BTEXN/Oxygenates/Ethanol B12A TRH/BTEXN/Oxygenates B13 OCP/PCB B14 OCP/OPP B15 OCP/OPP/PCB B16 TDS/SO₄/CH₂/Alk/BOD/COD/HPC/CUB B17 SO₄/NO₃/Fe++/HPC/CUB B18 CI-/SO_e/pH B19 N/P/K

Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 6+, Cr 3+, Fe 2+, Fe 3+, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

			THE PROPERTY.	Chain of Custody			
Relinquished by:	В	Date/Time: 12/11	Signature:	Received by:	Date/Time:	Signature:	
				Pocc !	ne ford	12/11/19	Sexel
				No.			

B20 CEC/%ESP/Ca/Ma/Na/K



CERTIFICATE OF ANALYSIS

Work Order : **ES1937457**

Client : GEO-LOGIX PTY LTD

Contact : MR BEN PEARCE

Address : 41 RIVIERA AVE

AVALON NSW, AUSTRALIA 2107

Telephone : +61 02 9970 6444

Project : 1901048-Auburn

Order number : P03458

C-O-C number : ---Sampler : ---Site : ----

Quote number : EN/333

No. of samples received : 1

No. of samples analysed : 1

Page : 1 of 5

Laboratory : Environmental Division Sydney

Contact : Customer Services ES

Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

Telephone : +61-2-8784 8555

Date Samples Received : 13-Nov-2019 11:30

Date Analysis Commenced : 15-Nov-2019

Issue Date 21-Nov-2019 12:58



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories Position Accreditation Category

Alex Rossi Organic Chemist Sydney Organics, Smithfield, NSW

Page : 2 of 5 Work Order : ES1937457

Client : GEO-LOGIX PTY LTD

Project : 1901048-Auburn



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key: CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

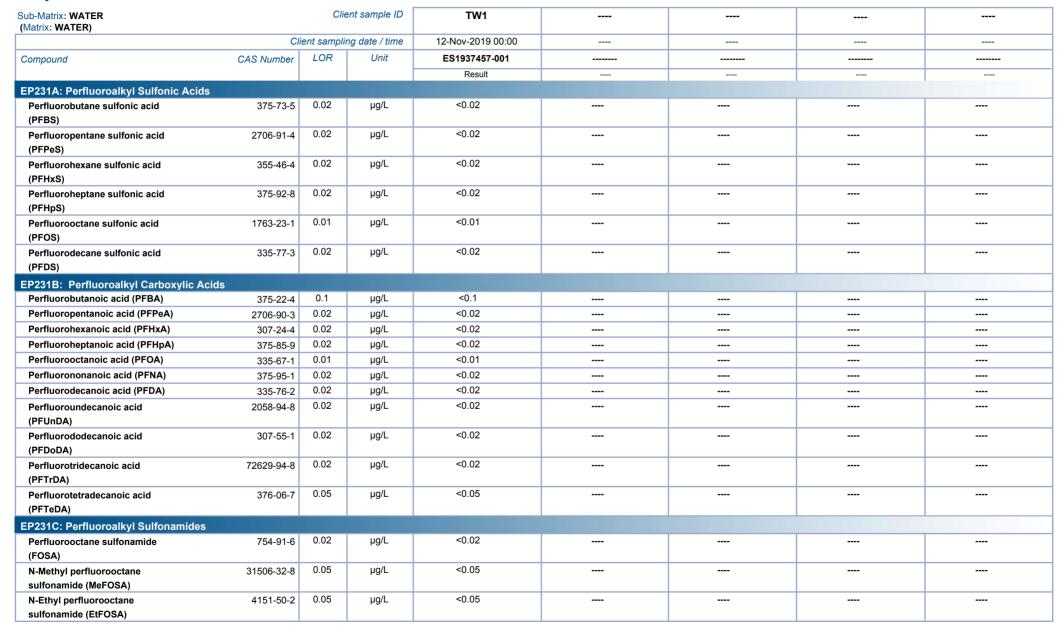
- ^ = This result is computed from individual analyte detections at or above the level of reporting
- ø = ALS is not NATA accredited for these tests.
- ~ = Indicates an estimated value.

Page : 3 of 5 Work Order : ES1937457

Client : GEO-LOGIX PTY LTD

Project : 1901048-Auburn

Analytical Results





Page : 4 of 5 Work Order : ES1937457

Client : GEO-LOGIX PTY LTD

Project : 1901048-Auburn

Analytical Results



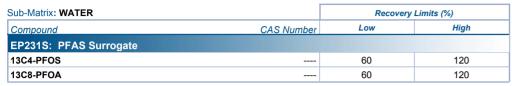
Sub-Matrix: WATER (Matrix: WATER)		Clie	ent sample ID	TW1								
	Cli	ient sampli	ng date / time	12-Nov-2019 00:00								
Compound	CAS Number	LOR	Unit	ES1937457-001								
				Result								
EP231C: Perfluoroalkyl Sulfonamides	- Continued											
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	μg/L	<0.05								
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	μg/L	<0.05								
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	μg/L	<0.02								
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	μg/L	<0.02								
EP231D: (n:2) Fluorotelomer Sulfonic	Acids											
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	μg/L	<0.05								
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	μg/L	<0.05								
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	μg/L	<0.05								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	μg/L	<0.05								
EP231P: PFAS Sums												
Sum of PFAS		0.01	μg/L	<0.01								
Sum of PFHxS and PFOS	355-46-4/1763-23- 1	0.01	μg/L	<0.01								
Sum of PFAS (WA DER List)		0.01	μg/L	<0.01								
EP231S: PFAS Surrogate												
13C4-PFOS		0.02	%	102								
13C8-PFOA		0.02	%	103								

Page : 5 of 5 Work Order : ES1937457

Client : GEO-LOGIX PTY LTD

Project : 1901048-Auburn

Surrogate Control Limits







QUALITY CONTROL REPORT

Work Order : ES1937457

: GEO-LOGIX PTY LTD

Contact : MR BEN PEARCE

Address : 41 RIVIERA AVE

AVALON NSW, AUSTRALIA 2107

Telephone : +61 02 9970 6444
Project : 1901048-Auburn

Order number : P03458

C-O-C number : ----

Sampler : ---Site : ----

Quote number : EN/333

No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 7

Laboratory : Environmental Division Sydney

Contact : Customer Services ES

Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

Telephone : +61-2-8784 8555

Date Samples Received : 13-Nov-2019
Date Analysis Commenced : 15-Nov-2019

Issue Date : 21-Nov-2019



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full. This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

Client

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories Position Accreditation Category

Alex Rossi Organic Chemist Sydney Organics, Smithfield, NSW

Page : 2 of 7
Work Order : ES1937457

Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key: Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot

CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

RPD = Relative Percentage Difference

= Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit: Result between 10 and 20 times LOR: 0% - 50%: Result > 20 times LOR: 0% - 20%.

Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report								
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)			
EP231A: Perfluoroa	lkyl Sulfonic Acids (QC	C Lot: 2703388)										
ES1937457-001	TW1	EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	μg/L	<0.01	<0.01	0.00	No Limit			
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
ES1937709-010	Anonymous	EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	μg/L	0.44	0.45	3.38	0% - 20%			
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	μg/L	0.17	0.17	0.00	No Limit			
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	μg/L	0.23	0.22	0.00	0% - 50%			
	I	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.02	μg/L	1.94	1.94	0.00	0% - 20%			
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	μg/L	0.07	0.07	0.00	No Limit			
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
EP231B: Perfluoro	alkyl Carboxylic Acids	(QC Lot: 2703388)										
ES1937457-001	TW1	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	μg/L	<0.01	<0.01	0.00	No Limit			
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	μg/L	<0.02	<0.02	0.00	No Limit			
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	μg/L	<0.05	<0.05	0.00	No Limit			
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	μg/L	<0.1	<0.1	0.00	No Limit			
ES1937709-010	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	μg/L	0.09	0.10	0.00	No Limit			

Page : 3 of 7
Work Order : ES1937457

Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)	
EP231B: Perfluoroa	ılkyl Carboxylic Acids(QC Lot: 2703388) - continued								
ES1937709-010	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	μg/L	0.06	0.06	0.00	No Limit	
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	μg/L	0.31	0.31	0.00	0% - 50%	
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	μg/L	0.04	0.04	0.00	No Limit	
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	μg/L	<0.1	<0.1	0.00	No Limit	
EP231C: Perfluoroa	Ikyl Sulfonamides (QC I	Lot: 2703388)								
ES1937457-001	TW1	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		EP231X: N-Methyl perfluorooctane	2355-31-9	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		sulfonamidoacetic acid (MeFOSAA)								
		EP231X: N-Ethyl perfluorooctane	2991-50-6	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		sulfonamidoacetic acid (EtFOSAA)								
		EP231X: N-Methyl perfluorooctane sulfonamide	31506-32-8	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		(MeFOSA)								
		EP231X: N-Ethyl perfluorooctane sulfonamide	4151-50-2	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		(EtFOSA)								
		EP231X: N-Methyl perfluorooctane	24448-09-7	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		sulfonamidoethanol (MeFOSE)								
		EP231X: N-Ethyl perfluorooctane	1691-99-2	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		sulfonamidoethanol (EtFOSE)								
ES1937709-010	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		EP231X: N-Methyl perfluorooctane	2355-31-9	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		sulfonamidoacetic acid (MeFOSAA)								
		EP231X: N-Ethyl perfluorooctane	2991-50-6	0.02	μg/L	<0.02	<0.02	0.00	No Limit	
		sulfonamidoacetic acid (EtFOSAA)								
		EP231X: N-Methyl perfluorooctane sulfonamide	31506-32-8	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		(MeFOSA)	1151 50 0	0.05		0.05	0.05	0.00	N. 1	
		EP231X: N-Ethyl perfluorooctane sulfonamide	4151-50-2	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		(EtFOSA)	24440.00.7	0.05		*O OF	40.05	0.00	Nia I innit	
		EP231X: N-Methyl perfluorooctane	24448-09-7	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		sulfonamidoethanol (MeFOSE)	1691-99-2	0.05	ug/l	<0.05	<0.05	0.00	No Limit	
	EP231X: N-Ethyl perfluor		1091-99-2	0.05	μg/L	\0.05	~U.U5	0.00	INO LIITIIL	
ED224D: (***2) El	rotolomou Culfonio Anida	sulfonamidoethanol (EtFOSE)								
	otelomer Sulfonic Acids		757101 70	0.65		-0.05	-0.05	0.00	No. 12. 22	
ES1937457-001	TW1	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2	757124-72-4	0.05	μg/L	<0.05	<0.05	0.00	No Limit	
		FTS)								

Page : 4 of 7
Work Order : ES1937457

Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



Sub-Matrix: WATER			Laboratory Duplicate (DUP) Report								
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EP231D: (n:2) Fluor	otelomer Sulfonic Acids	(QC Lot: 2703388) - continued									
ES1937457-001	TW1	EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	μg/L	<0.05	<0.05	0.00	No Limit		
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	μg/L	<0.05	<0.05	0.00	No Limit		
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	μg/L	<0.05	<0.05	0.00	No Limit		
ES1937709-010 Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	μg/L	<0.05	<0.05	0.00	No Limit			
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	μg/L	<0.05	<0.05	0.00	No Limit		
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	μg/L	<0.05	<0.05	0.00	No Limit		
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	μg/L	<0.05	<0.05	0.00	No Limit		
EP231P: PFAS Sum	s (QC Lot: 2703388)										
ES1937457-001	TW1	EP231X: Sum of PFAS		0.01	μg/L	<0.01	<0.01	0.00	No Limit		
ES1937709-010	Anonymous	EP231X: Sum of PFAS		0.01	μg/L	3.35	3.36	0.298	0% - 20%		

Page : 5 of 7
Work Order : ES1937457

Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: WATER				Method Blank (MB)	Laboratory Control Spike (LCS) Report					
				Report	Spike	Spike Recovery (%)	Recovery	Limits (%)		
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High		
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 270338	8)									
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	μg/L	<0.02	0.5 μg/L	80.2	70.0	130		
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	μg/L	<0.02	0.5 μg/L	88.0	70.0	130		
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.02	μg/L	<0.02	0.5 μg/L	84.0	70.0	130		
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	μg/L	<0.02	0.5 μg/L	89.0	70.0	130		
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	μg/L	<0.01	0.5 μg/L	89.6	70.0	130		
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	μg/L	<0.02	0.5 μg/L	89.2	70.0	130		
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 270	3388)									
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	μg/L	<0.1	2.5 μg/L	89.1	70.0	130		
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	μg/L	<0.02	0.5 μg/L	94.0	70.0	130		
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	μg/L	<0.02	0.5 μg/L	91.0	70.0	130		
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	μg/L	<0.02	0.5 μg/L	93.8	70.0	130		
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	μg/L	<0.01	0.5 μg/L	91.2	70.0	130		
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	μg/L	<0.02	0.5 μg/L	89.8	70.0	130		
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	μg/L	<0.02	0.5 μg/L	89.4	70.0	130		
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	μg/L	<0.02	0.5 μg/L	86.8	70.0	130		
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	μg/L	<0.02	0.5 μg/L	86.2	70.0	130		
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	μg/L	<0.02	0.5 μg/L	79.8	70.0	130		
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	μg/L	<0.05	1.25 μg/L	87.8	70.0	150		
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 2703388	3)									
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	μg/L	<0.02	0.5 μg/L	91.0	70.0	130		
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	μg/L	<0.05	1.25 μg/L	91.8	70.0	150		
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	μg/L	<0.05	1.25 μg/L	86.6	70.0	150		
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	μg/L	<0.05	1.25 μg/L	89.3	70.0	150		
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	μg/L	<0.05	1.25 μg/L	89.6	70.0	150		
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	μg/L	<0.02	0.5 μg/L	91.2	70.0	130		
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	μg/L	<0.02	0.5 μg/L	92.8	70.0	130		
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 2	703388)									
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	μg/L	<0.05	0.5 μg/L	89.4	70.0	130		
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	μg/L	<0.05	0.5 μg/L	83.0	70.0	130		
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	μg/L	<0.05	0.5 μg/L	101	70.0	130		

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Work Order : ES1937457

Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



Sub-Matrix: WATER			Method Blank (MB)	Laboratory Control Spike (LCS) Report							
			Report	Spike	Spike Recovery (%)	Recovery	Limits (%)				
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS Low		High			
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot	P231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 2703388) - continued										
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	μg/L	<0.05	0.5 μg/L	104	70.0	130			

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

ub-Matrix: WATER		Matrix Spike (MS) Report							
				Spike	SpikeRecovery(%)	Recovery L	imits (%)		
aboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High		
P231A: Perfluoro	alkyl Sulfonic Acids (QCLot: 2703388)								
S1937457-001	TW1	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.5 μg/L	87.2	50.0	130		
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.5 μg/L	93.0	50.0	130		
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.5 μg/L	91.2	50.0	130		
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.5 μg/L	95.2	50.0	130		
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.5 μg/L	95.2	50.0	130		
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.5 μg/L	87.0	50.0	130		
P231B: Perfluor	palkyl Carboxylic Acids (QCLot: 2703388)								
S1937457-001	TW1	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	2.5 μg/L	71.4	50.0	130		
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.5 μg/L	103	50.0	130		
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.5 μg/L	103	50.0	130		
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.5 μg/L	105	50.0	130		
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.5 μg/L	104	50.0	130		
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.5 μg/L	90.8	50.0	130		
	EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.5 μg/L	98.6	50.0	130			
	EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.5 μg/L	96.0	50.0	130			
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.5 μg/L	90.2	50.0	130		
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.5 μg/L	83.2	50.0	130		
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1.25 μg/L	85.8	50.0	150		
231C: Perfluoro	alkyl Sulfonamides (QCLot: 2703388)								
S1937457-001	TW1	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.5 μg/L	89.0	50.0	130		
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	1.25 μg/L	88.2	50.0	150		
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	1.25 μg/L	83.9	50.0	150		
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	1.25 μg/L	83.0	50.0	150		
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	1.25 μg/L	94.2	50.0	150		
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.5 μg/L	99.0	50.0	130		

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Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



Matrix Spike (MS) Report Sub-Matrix: WATER Spike SpikeRecovery(%) Recovery Limits (%) Laboratory sample ID Client sample ID CAS Number Concentration MS Low High Method: Compound EP231C: Perfluoroalkyl Sulfonamides (QCLot: 2703388) - continued TW1 ES1937457-001 EP231X: N-Ethyl perfluorooctane sulfonamidoacetic 2991-50-6 0.5 µg/L 105 50.0 130 acid (EtFOSAA) EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 2703388) ES1937457-001 TW1 757124-72-4 130 0.5 µg/L 100 50.0 EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS) 27619-97-2 0.5 µg/L 109 50.0 130 EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS) 39108-34-4 0.5 µg/L 130 EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS) 101 50.0 120226-60-0 0.5 µg/L 101 50.0 130 EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)



QA/QC Compliance Assessment to assist with Quality Review

Work Order : **ES1937457** Page : 1 of 4

Client : GEO-LOGIX PTY LTD Laboratory : Environmental Division Sydney

 Contact
 : MR BEN PEARCE
 Telephone
 : +61-2-8784 8555

 Project
 : 1901048-Auburn
 Date Samples Received
 : 13-Nov-2019

 Site
 : --- Issue Date
 : 21-Nov-2019

Sampler : --- No. of samples received : 1
Order number : P03458 No. of samples analysed : 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers: Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- NO Method Blank value outliers occur.
- NO Duplicate outliers occur.
- NO Laboratory Control outliers occur.
- NO Matrix Spike outliers occur.
- For all regular sample matrices, NO surrogate recovery outliers occur.

Outliers: Analysis Holding Time Compliance

NO Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

• NO Quality Control Sample Frequency Outliers exist.

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Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for <u>VOC in soils</u> vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: WATER Evaluation: ▼ = Holding time breach; ✓ = Within holding time.

							0
Method	Sample Date	Ex	traction / Preparation				
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) TW1	12-Nov-2019	15-Nov-2019	10-May-2020	1	20-Nov-2019	10-May-2020	1
EP231B: Perfluoroalkyl Carboxylic Acids							•
HDPE (no PTFE) (EP231X) TW1	12-Nov-2019	15-Nov-2019	10-May-2020	✓	20-Nov-2019	10-May-2020	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) TW1	12-Nov-2019	15-Nov-2019	10-May-2020	✓	20-Nov-2019	10-May-2020	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) TW1	12-Nov-2019	15-Nov-2019	10-May-2020	✓	20-Nov-2019	10-May-2020	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) TW1	12-Nov-2019	15-Nov-2019	10-May-2020	✓	20-Nov-2019	10-May-2020	✓

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GEO-LOGIX PTY LTD Client : 1901048-Auburn Project



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: WATER		Evaluation: × = Quality Control frequency not within specification; ✓ = Quality Control frequency within s											
Quality Control Sample Type		C	ount		Rate (%)		Quality Control Specification						
Analytical Methods	Method	QC	Reaular	Actual	Expected	Evaluation							
Laboratory Duplicates (DUP)													
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard						
Laboratory Control Samples (LCS)													
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard						
Method Blanks (MB)													
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard						
Matrix Spikes (MS)													
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	FP231X	1	20	5.00	5.00	1	NEPM 2013 B3 & ALS QC Standard						

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Client : GEO-LOGIX PTY LTD
Project : 1901048-Auburn



Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In house: Direct injection analysis of fresh waters after dilution (1:1) with methanol. Analysis by LC-Electrospray-MS-MS, Negative Mode using MRM. Where commercially available, isotopically labelled analogues of the target analytes are used as internal standards for quantification. Where a labelled analogue is not commercially available, the internal standard with similar chemistry and the closest retention time to the target is used for quantification. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. This method complies with the quality control definitions as stated in QSM 5.1. Data is reviewed in line with the DQOs as stated in QSM5.1
Preparation Methods	Method	Matrix	Method Descriptions
Preparation for PFAS in water.	EP231-PR	WATER	Method presumes direct injection without workup. Preparation includes addition of internal standard and surrogate, and filtration prior to analysis.

Purchase Order No: Page | of ___

CHAIN OF CUSTODY

Project Manager: BEN PEARCE

Geo-Logix Pty Ltd

2309/4 Daydream St Building Q2, Level 3

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Metals**(circle) As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Cr 6*, Cr 3*, Fe 2*, Fe 3*, Be, B, Al, V, Mn, Fe, Co, Se, Sr, Sn, Mo, Ag, Ba, Tl, Bi, Sb

Chain of Custody

_ Received by: _

Reclinquished by: KB Date/Time: \$12/11 Signature: Fr / Reclind: 89-A15 Crows Nest 13/11/19 1138am 10.3°C

Q3.2.1 QF_034 Chain of Custody3

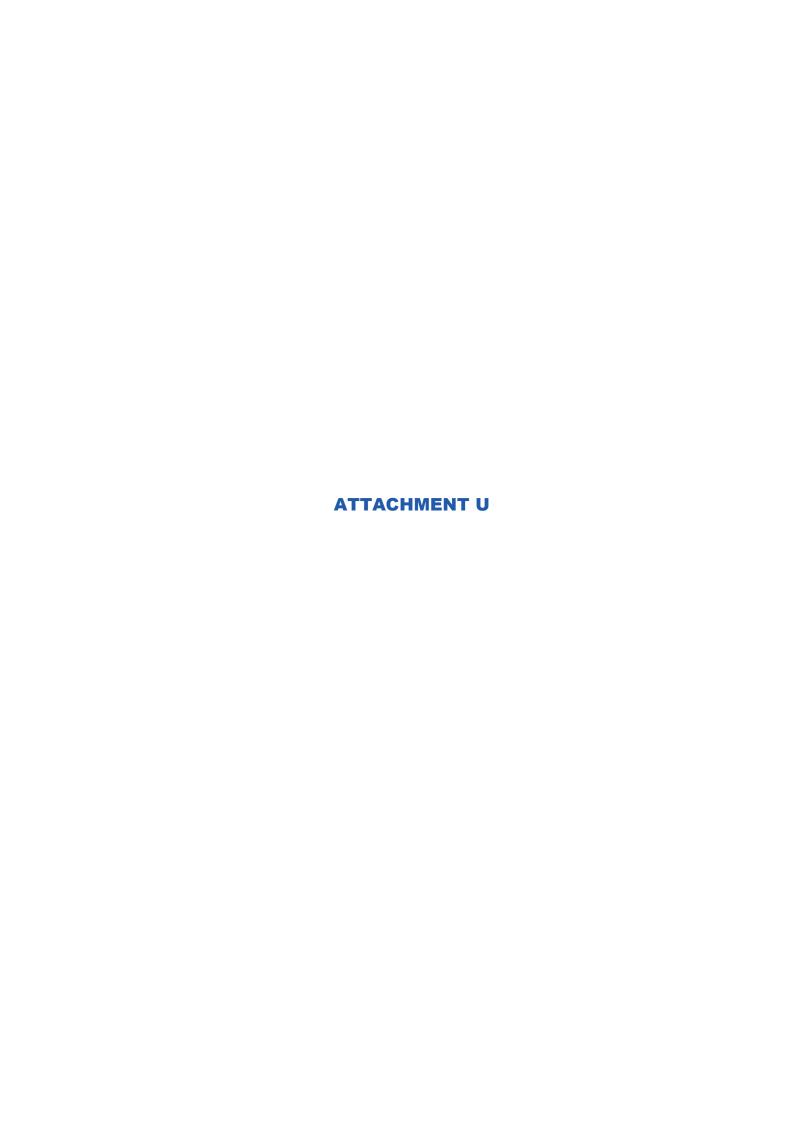
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CC This

Telephone: +61-2-8784 8555





Microbial Insights (Australia) Pty Ltd ABN 35 168 643 570 Suite 173 / 358 Clarendon Street South Melbourne Vic 3205

Client: Ben Pearce **Phone:** 02 9979 1722

Geo-Logix

Unit 2309/4 Daydream St Warriewood, NSW 2102

Australia

Identifier: 702AQH Date Received: 29/08/2019 Report Date: 18/09/2019

Fax:

Client Project #: 1901048 Client Project Name: Auburn

Purchase Order #: 3320

Analysis Requested: Cancelled, CSIA

Reviewed By:

NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

Microbial Insights (Australia) Pty Ltd

Geo-Logix

Auburn

Suite 173/358 Clarendon Street, South Melbourne 3205 Australia

Fax. (865) 573-8133

Client:

Project:

MI Project Number: 70

Date Received:

702AQH 08/29/2019

CSIA

Sample Information

Client Sample ID: MW102 MW104 MW111 GW4

Sample Date: 08/26/2019 08/26/2019 08/26/2019 08/26/2019

Analyst: KH KH KH KH

Carbon Units

 13 C/ 12 C TCE (%) 8^{13} C, VPDB (%) $^{-18.8}$ NA $^{-4.1}$ -7.5

Legend:

NA= Not Analyzed NS=Not Sampled J= Estimated concentration below PQL but above LQL ND= Not Detected

Quality Assurance/Quality Control Data

Samples Received 8/29/2019

Component	Date Prepared Date Analyzed		Arrival Temperature	Positive Control (‰ Std. Dev.)*	Blank			
¹³ C/ ¹² C TCE (‰)	08/29/2019	09/17/2019	4 °C	0.2	Pass			

 $^{^{\}star}$ $\,$ $\,^{13}{\rm C}$ $\,$ positive control values are within +- 0.5% of true value.



Microbial Insights (Australia) Pty Ltd ABN 35 168 643 570 Suite 173 / 358 Clarendon Street South Melbourne Vic 3205

Client Project #: 1901048 Client Project Name: Auburn

Purchase Order #: 3320

Comments: Please note that TCE concentration for MW104 was below the detection limit and therefore

this sample was not analyzed (NA).

Company: Address: email: Phone:	Ben Pear Geo Zogix 2309/4 Da Warriewood 2102 blearce @ g 02 9979	ydream , NSW eo-log		,au		INVOI Name: Compa Addres email: Phone:	ny: s:	J. (r	-						ge					o/n	au		10515 (noxy) 865-57	Res lle, 1	earch IN 37	Dr 1932	ali	ns	igl	hts	
Fax: Project Manager: Project Name: Project No.:	Auburn 1901048					Fax: Purcha Subcor MI Quo	tract I			3	32	20												ore	san	One: iples onal S					
Report Type: EDD type: Please contact us wit	Standard (default) Microbial Insights thany questions about the ar	Standard (def alyses or filling		□ All d	other a	avaitab 8 (9:00 a	le ED	Ds (5	% su	rchar , M-F	ge) S). Aft	Speci er hou	fy ED	D Ty	pe:	_	e@mi	robe	.com		e Inte	erpre	etive	15%	1)		istor	ical I	nterp	32L	(30%)
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	DGGE+3ID	DGGE+5ID	QuantArray Chlor	QuantArray Petro	HC (Dehalococcoides)	1	Detrafobacter)	restalfiliobacterium)	(Total)	Reducing Bacteria-APS)	Methanogensy	(Methanotropins)		entintiens-rivtS and ristK)	a addizing bacteria)	'BE aerotsic)	Nuene Monocaygensse)	obiene Menocrygofiaso)	nenoi rydroxylase)	Napthalene-aerobic)	e/Xylene-Anaurobs;	CR.	«PCR:	ssion Option)*	CSIA (136/130	
france many many and					0	Õ	5	nai	na	HC (C	of the	HBtiDet	SBA	BAC	RB	NBM	80	MMO	0 da	DE DE	MI GAT	10 (Te	DEG	100	AH	SSA	de de	dd. qi	Apre	2	2 1 2 1
702AQH1	MWIOZ	26/08	-	2	a.	۵	DG	Quar	Quar	DHC (I	bat. 28	DHBti	DSB	EBAC	SRB	MGM	MOB (SMMO	DNP (D	AOB (ammon	PM1 (M)	RMO (To	RDEG	1) TILL (L.	NAH	Tolog	add of	add, qi	RWA	X Other	Othe
702AQH1 2 3	MWIOZ MWIOY MWIII	26/08 20/08 20/08	-	2	d.	a	DG	Quar	Quar	DHC (I	bec. 28	DHBIT.	DISBAC	EBAC	SRB	MGM	MOB	SMMO	DINF (D	AOB	PM1 (M7	RMO (To	ADEG (1	FTE (F	NAH	BSSA	add of	add, qi	RNA	XX	offic of the state
702AQH1 2 3 4	MWI04 MWIII MWI16	26/08 20/08 20/08 26/08	-	2	d.	0	DO	Quar	Quar	D) OHO	but, 2s	DHBT	D. BSB. CI	EBAC	SRB	MGM	MOB	SMMO	DNF(D)	DUMUN	PM1 (M)	RIAO (Te	RDEG	4) 311.4	NAH	BSSA	add of	add. qi	RNA	X X	Diffe
702AQH1 2 3	MWIOY	26/08 20/08 20/08	-	2	a.	٥	DO	Quar	Quar	DHC (I	Dec. 28	THE CHERT	Disect Company	EBAC	SRB	MGN	MOB	SWWO	DWF (D	ACB	PM) (M)	RIAD (TO	ADEG(T	- LILE (F	NAH	BSSA	add of	add, qi	RNA	X	100
702AQH1 2 3 4	MWI04 MWIII MWI16	26/08 20/08 20/08 26/08	-	2	d.	٥	DO	Quar	Quar	D) DHQ	buc 2a	DHB1	D. BSC	EBAC	SRB	WSW	NOB	SPAMO	DMF (D	HOMING!	PM10M	RMO (To	ADEG (1	7) 311.4	NAH B	BSSA	add of	800, 0	RNA	X X	070

3:30pm 1 4°C

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