GEO_LOGIX

ENVIRONMENTAL DUE DILIGENCE REPORT

5 – 7 Hilton Street and 7 Scott Road
South Tamworth, NSW

Hydrox Nominees Pty Ltd – February 2013

DOCUMENT CONTROL

ENVIRONMENTAL
DUE DILIGENCE REPORT

5 – 7 Hilton Street and 7 Scott Road
South Tamworth, NSW

PREPARED FOR

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Report reference: 1201085Rpt01FinalV01_11Feb13

Date: 11th February 2013

DISTRIBUTION AND REVISION REGISTER

Revision Number	Date	Description	Recipient	Deliverables
1	11/02/2013	Final Report 1201085Rpt01FinalV01_11Feb13	Geo-Logix Pty Ltd	1 electronic copy
1	11/02/2013	Final Report 1201085Rpt01FinalV01_11Feb13	Hydrox Nominees Pty Ltd	1 electronic copy

Issued by: Geo-Logix Pty Ltd

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EXECUTIVE SUMMARY

Geo-Logix Pty Ltd (Geo-Logix) was commissioned by Hydrox Nominees Pty Ltd (Hydrox) to undertake environmental due diligence (DD) on a parcel of land being considered for acquisition and development as a Masters Home Improvement Store. The subject site comprises the properties located at 5 – 7 Hilton Street and 7 Scott Road, South Tamworth, NSW 2340. The site is located within a rural/residential area of Tamworth, is largely rectangular shaped and occupies an area of approximately 46,500m^2. At the time of Geo-Logix investigation the site was largely vacant grassed rural blocks. The objective of the investigation was to assess the presence of gross contamination for the purposes of Hydrox internal due diligence. The investigation works do not comply with minimum standards.

Due diligence included preparation of a Phase 1 Report. Due to timing constraints (Client / Vendor agreements) intrusive investigation of the site had to be undertaken prior to completion of the Phase 1 Report. As such, a sampling analysis plan was developed based upon a site inspection conducted in November 2012 and review of historical aerial photos. Based on that information the following potential contaminating activities were identified;

- Uncontrolled filling;
- Potential cropping over the eastern half of the site based on aerial photograph evidence of soil cultivation;
- Stockpiling of building wastes, car bodies, water tanks, sheet metal and other random objects; and
- Demolition of former building structures potentially containing hazardous building materials.

The objective of the investigation was to assess the presence of gross contamination for the purposes of internal due diligence. The investigation was prepared in consultation with Hydrox given the commercial circumstances and time constraints.

Geo-Logix undertook a soil investigation to investigate potential land contamination on 6th to 7th December 2012. For the purposes of assessment the site was divided into two areas (Area A and B) and assessed in consideration of potential contamination and likely contaminant spatial distribution as defined by the known site history at that time. The sampling plan and rationale for each area is defined below:

- Area A: Covers the western portion of the site (approximately 2.94 hectares) where most historical activities have occurred on the land including filling, waste stockpiling and demolition. The assessment comprised a systematic sampling plan with the collection of shallow soil samples from 19 locations (TP1 – TP19) across Area A on an approximate 38m grid. Soil samples were analysed for typical environmental contaminants including petroleum, polycyclic aromatic hydrocarbons (PAHs), organochlorine pesticides (OCPs) and heavy metals. Locations were visually identified for asbestos. The sampling plan is sufficient to detect a circular contamination hotspot greater than 45m diameter at a 95% statistical degree of confidence; and
- Area B: Covers the eastern portion of the site (approximately 2.32 hectares), including Barnes Gully, which appears to have been Greenfield with the exclusion of possible cropping based on evidence of soil cultivation lines in historical aerial photos. The assessment comprised collection of six broadly spaced surface soil samples (S1 – S6) for analysis of pesticides and heavy metals. Pesticides would have been broadly applied to the surface therefore consequential residues in soil should they exist would be expressed across the

entire land area. Dumping of concrete and asphalt was also observed in the northern section of the drainage channel and minor earth filling observed on the southern portion during investigation works.

The results of the investigation indicate the following for Area A:

- Soils are free of TRH, BTEX, PAHs, OCPs and heavy metal contamination hotspots greater than 45 m diameter at a 95% statistical degree of certainty;
- Frequent ACM fragments were observed within fill on the Tamworth Bridge Club property (TP14, TP15 and TP17). No asbestos fibres were detected in samples analysed; and
- A random ACM fragment was observed in surface material (0.1 mbg) at TP5 and on the ground surface between TP1 and TP2. No asbestos fibres were detected in a sample of fill material from TP5.

The results of the investigation indicate the following for Area B.

- OCPs and heavy metals were not detected at concentrations above commercial industrial land use criteria in shallow soils.

Based on the results of the investigation, Geo-Logix considers the site to be free of gross widespread contamination, with the exception of fill on the Tamworth Bridge Club property which was observed to comprise occasional ACM fragments.

Further investigation of ACM in fill on the Tamworth Bridge Club property is warranted prior to acquisition of that parcel of land given the volumes of potential contaminated fill present (approximately 3000 – 5000m^3) and gate price for asbestos waste disposal ($185p/tonne).

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1. INTRODUCTION

Geo-Logix Pty Ltd (Geo-Logix) was commissioned by Hydrox Nominees Pty Ltd (Hydrox) to undertake environmental due diligence (DD) on a parcel of land being considered for acquisition and development as a Masters Home Improvement Store (Figure 1). The subject site comprises the properties located at 5 – 7 Hilton Street and 7 Scott Road, South Tamworth, NSW 2340. The site is located within a rural/residential area of Tamworth, is largely rectangular shaped and occupies an area of approximately 46,500m^2. At the time of Geo-Logix investigation the site was largely vacant grassed rural blocks. The objective of the investigation was to assess the presence of gross contamination for the purposes of Hydrox internal due diligence. The investigation works do not comply with minimum standards.

At the time of commencement of the investigation Geo-Logix had only undertaken a site visit and reviewed historical aerial photos as part of an agreed Phase 1 Scope of Works. The DD Scope of Works was prepared in consultation with Hydrox given time constraints and was based on the known information at the time of proposal.

2. SITE INFORMATION

2.1 Site Identification

The investigation area comprises the following properties (Figure 2):

Street Address	Lot and Deposited Plan (DP)	Report Reference	Approximate Area (m^2)
5 Hilton Street, South Tamworth NSW 2340	Part Lot C3 DP 160164	Lot C3	46,500
7 Hilton Street, South Tamworth NSW 2340	Part Lot 1 DP 196665	Northern Lot	
7 Scott Road, South Tamworth NSW 2340	Part Lot 1 DP 797999	Southern Lot	

Property information sourced from Title Deed information and Hydrox Nominees Pty Ltd.

2.2 Site Zoning and Land Use

The majority of the site is zoned RU4 Primary Production Small Lots with the north western corner zoned as R1 General Residential and the southwest portion zoned as B4 Mixed Use under the Tamworth Regional Local Environmental Plan 2010. Planning and Development Certificates are provided in Attachment A.

3. SITE DESCRIPTION

The following site descriptions are based on a site inspection conducted by Geo-Logix on the 26th November 2012 and 6th December 2012. A photographic log is presented in Attachment B. Detailed field observations are presented in the tables in the Sections 3.1 and 3.2. A detailed location map is presented in Figure 3.

The site is located within a residential/rural area on the outskirts of South Tamworth NSW. The site is largely rectangular and comprises portions of three separate lots over an area of approximately 46,500m^2. At the time of Geo-Logix investigation the site was largely vacant grassed rural blocks.

A large number of items including steel pieces, old cars, paint and oil tins, tiles and other materials are stored in various places over the western portion of the site. This includes two sheds located on the northwest and southwest corners of the site. The central western portion of the site comprises a grassed backyard associated with the Tamworth Bridge Club.

The eastern portion of the site comprises vacant grassed land. A watercourse Barnes Gully runs from south to north through the eastern portion of the site.

3.1 Site Details

Item Number	Description	Photo Plate
1	A shed constructed with timber frame and corrugated iron sheeting. An old car, various household items, car doors, fridges and scrap material are stored within the shed. A singular small fragment of asbestos containing material (ACM) was observed on the ground surface approx. 40m east of the shed.	1, 12
2	A shed (off-site) constructed with a timber frame and corrugated iron sheeting. A number of items are stored within the shed including various steel items, old cars, timber, small drums and containers of diesel, motor oil, engine coolant, paints and pool chlorine. Drums and containers within the shed were observed on wooden crates, wooden panels and cardboard on unsealed ground. Rusted empty oil drums, and other timber and steel items were observed stored outside the northern wall of the shed (on-site). A sewer access point exists in this area.	2, 3
3	The area was tilled bare soil at the time of the investigation. The owner advised the area had just been planted with pumpkins to reduce weeds growing in the area.	
4	The owner advised sheets of tin were previously stored in piles at Locations 4 and 7. Some sheets were taken off-site and some have been moved and now stored at Location 8 along the western boundary fence.	
5	Rusted metallic item.	
6	Empty metal cylinder, possibly from a small air compressor.	
7	The owner advised sheets of tin were previously stored in piles at Locations 4 and 7. Some sheets were taken off-site and some have been moved and now stored at Location 8 along the western boundary fence.	
8	Corrugated metal sheets and timber lined along the fence.	4
9	Sewer access point.	
10	Four rusted approximately 1000L steel tanks were observed in this area. The tanks were empty. One tank was observed with a water tap attached to the tank and another with “Ampol” written on a valve. Stockpiled timber and a partial truck trailer held up by wooden posts and metal drums were observed in this area.	5
11	Lined trees.	

Item Number	Description	Photo Plate
12	The Tamworth Bridge Club property. The topography in this area suggests filling with thickness increasing from west to east to form a level area. An embankment sloping steeply from the levelled area in the eastern portion of the property (approximately 3m high). The northeast portion of the property appears approximately 1m above natural grade. A retaining wall comprised of concrete beams exists at the northern boundary of the Tamworth Bridge Club levelled backyard and adjacent property. The retaining wall is approximately 3m high at the eastern most point and decreases in height to the west to approximately 1m at the western site boundary. Material observed through the concrete slates comprised large concrete boulders and brick beneath sand and clay. Based on an average thickness of fill of 2m over the majority of the property and 1m in the northeast corner, the volume of fill is estimated at between 4000 and 6000 m^3.	6, 9
13	Sewer access point.	
14	A stockpile of approximately 1000m^3 (estimated based on topography). The stockpile is overgrown with grass and appears as uneven topography. The stockpiled materials appeared to comprise clay, sand and minor pieces of concrete, bricks and ceramic pipe.	7
15	Corrugated metal shed. The owner advised a number of flooring materials are stored within this shed. Roof tiles were stored on wooden crates in the area north of the shed. A small stockpile (<1m^3) of white sand was observed north of this area covered with a black plastic . Other rusted metal items and a patch of burnt materials was observed in this area.	8
16	Various items such as bath tubs, steel pipes and other steel items.	
17	An area that appeared to be filled with brick and concrete rubble.	10
18	Charcoal and disturbed soil noted outside a disused gate at the northeast corner of the site.	
19	Concrete pieces/ slabs and asphalt observed dumped within the drainage line. Geo-Logix was made aware of this material during investigation works on the 6th December 2012, subsequent to the development of the DD Scope of Works.	13
20	Topography in this area suggests it may have been filled. The extent was difficult to ascertain. House hold bricks were observed on the surface of this area.	11,14
21	Sign posts and concrete pieces observed adjacent to the creek bank, appears to have been brought onsite by a flood.	19

3.2 Surrounding Land Use

The surrounding landuse comprised the following:

- **North** – A rural property with a number of old trucks. Scrap material observed discarded across the property;
- **South** – Scott Road with residential properties beyond;
- **West** – Residential properties with Hilton Road beyond; and
- **East** – Locks Lane with a rural property beyond.

3.3 Topography

The site slopes moderately towards the east - northeast. Regional topography slopes gently to the north.

3.4 Surface Water

The nearest surface water is Barnes Gully which flows south to north through the eastern portion of the site.

3.5 Geology

Review of the NSW 1:250,000 Tamworth Geological Map (Geological Survey of NSW, 1971) indicates:

- The western portion of the site is underlain by Upper Devonian age argillite and greywacke of the Baldwin Formation; and
- The eastern portion of the site is underlain by Quaternary age alluvium comprising clay, silt, sand and gravel.

3.6 Hydrogeology

It is expected that groundwater would follow the natural regional topography and generally flow to the east – northeast.

Reference to the NSW Natural Resource Atlas (NSW Government, 2012) indicates there are 18 registered groundwater bores within a 500 m radius of the site. The closest registered bore GW969381 is privately owned and located on a property south of the site, directly across Scott Road. The bore logs recorded water bearing zones were encountered between 12m and 18m. The lithology was logged a 0 – 0.3 m brown topsoil overlying 0.3 – 18 m brown heavily broken shale.

A group of monitoring bores (GW969607, GW969608 and GW969609) are located on a Shell Service Station approximately 280 m upgradient southwest of the site. Bore logs indicate water bearing zones were encountered between 11 m and 13.5 m. Lithology was logged as 0 – 0.8 m fill, overlying 0.8 -10.5m light brown dry sandstone, 10.50 m – 11.50 m fractured sandstone and 11.5 – 13.5 m water-bearing fractured sandstone.

The groundwater bore map and logs are presented in Attachment C.

3.7 Acid Sulphate Soils

The site is not within an area that would contain acid sulphate soils due to its high elevation and inland proximity.

3.8 Underground Utilities

A Dial Before You Dig search was conducted to determine the presence of underground utilities which may act as conduits for contamination migration both onsite and offsite (Attachment D). The plans indicate:

- No gas or Soul Communications utilities exist in the immediate vicinity of the site;

- Electrical utilities within the area are above ground. A short electrical line exists under Scott Road adjacent to the central southern portion of the site; and
- Telstra utilities exist underneath Scott Road along the southern boundary of the site.

4. SITE HISTORY

A site visit and review of aerial photos suggests the following site history:

- The site has been largely rural land;
- Filling activities have occurred on the Tamworth Bridge Club property around the 1960s;
- Possible filling activities have occurred on the northern and southern central portions of the site;
- Stockpiling of building wastes, car bodies, water tanks, sheet metal and other random objects have occurred over the western part of the site;
- The eastern portion of the site with Barnes Gulley appears to have been greenfield, with the exclusion of cultivation activities that appear to have occurred during a limited time period in the mid 1960s.

5. DATA QUALITY OBJECTIVES

The objective of the investigation was to identify gross widespread contamination for the purposes of internal DD only. Given time constraints the DD Scope of Works was developed in consultation with Hydrox based on available site historical data at the time.

For the purposes of assessment the site was divided into two areas, Area A and Area B (Figure 4). Area A is where most activities have occurred on the land including filling, stockpiling of building wastes, car bodies, water tanks, sheet metal and other random objects. Area B appears to have been Greenfield with the exclusion of cultivation activities which appear to have occurred during a very limited time period in the mid 1960s. Subsequent to the proposal of the DD Scope of Works, dumping of concrete and asphalt in the northern section of the drainage channel and minor filling on the southern portion were identified.

To achieve the objective, Geo-Logix has adopted the seven step Data Quality Objective (DQO) process as described in AS 4482.1-2005, US EPA (2000) and DEC (2006).

Step 1: State the problem.

The site is potentially contaminated due to historical land uses. Hydrox intend on acquiring the site and require environmental investigation of potential contamination issues for due diligence purpose.

Step 2: Identify the decision.

The results of soil investigation indicate the land does not contain widespread contamination to an extent that would render the acquisition and development of the site unfeasible.

Step 3: Identify inputs into the decision.

- Identification of issues of potential environmental concern;
- Appropriate identification of COPCs;

- A grid based sampling and analysis program of soils across Area A (approximate 38m grid);
- A broadly spaced sampling and analysis program of shallow soils across Area B; and
- Screening sample analytical results against appropriate assessment criteria for the intended land use (Commercial/Industrial).

Step 4: Define the boundaries of the site.

The project boundary is defined as the area within the site boundary as shown in Figure 2 (Part Lot C3 DP 160164, Part Lot 1 DP 196665 and Part Lot 1 DP 797999) to a vertical depth of up to 1.4 m into natural soils.

Step 5: Develop a decision rule.

Soils across Area A are free of COPC contamination hotspots greater than 45 m diameter at a 95% statistical degree of certainty. There is no visible asbestos containing materials (ACM) on the land or within test pits.

The results of the broad sampling and analysis of COPC in shallow soils across B meet commercial/industrial land use criteria.

Step 6: Specify acceptable limits on decision errors.

The field sampling methodology, sample preservation techniques, and laboratory analytical procedures must be appropriate to provide confidence in data quality so any comparison against assessment criteria can be considered reliable. This is achieved by defining and comparing results against the Data Quality Indicators (DQIs).

Step 7: Optimise the design for obtaining data.

This is achieved by sampling plan design in consideration of the available site history information, area of investigation, contaminant behaviour in the environment, and likely spatial distribution of contamination.

6. CONTAMINANTS OF POTENTIAL CONCERN

Based on the available site history at the time of the investigation, the following COPC were identified:

6.1 Area A

- Total Recoverable Hydrocarbons (TRH);
- Benzene, toluene, ethylbenzene and xylenes (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Organochlorine Pesticides (OCPs);
- Heavy Metals (Mercury, Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Zinc); and
- Asbestos.

6.2 Area B

- OCPs; and

- Heavy Metals.

7. ASSESSMENT CRITERIA

Soil analytical data were assessed against the following assessment criteria:

- National Environmental Protection Measure (NEPM) Health Based Investigation Level F (HIL-F) for commercial/industrial exposure setting, (NEPC, 1999); and
- NSW EPA Guidelines for Assessing Service Station Sites (NSW EPA, 1994).

It should be noted that the NSW EPA (1994) guideline values are for the remediation of former service station sites to residential standards. In the context of the proposed commercial/industrial land-use the guideline values may be conservative.

8. INVESTIGATION METHODOLOGIES

8.1 Sampling Plan

The investigation took place during the period 6th to 7th December 2013. Sample locations are presented in Figure 4.

Area A

The investigation comprised:

- Collection of soil samples from 19 locations (TP1 – TP19) across Area A on an approximate 38m grid for analysis of COPC. The sampling plan does not meet minimum standards but is sufficient to detect a circular contamination hotspot greater than 45m diameter at a 95% statistical degree of confidence;
- Where fill material was encountered, a composite soil sample was collected across the full vertical profile of the fill;
- Where no fill was encountered, soil samples were collected from surface/ shallow soils (0 – 0.4m) Samples collected from TP4 – TP9 and TP11 – TP17 were of the full profile of fill materials encountered. Samples collected from TP1 – 3, TP10 and TP18 – TP19 were of surface soils (0 – 0.4 m);
- Visual inspection of surface soil and fill for ACM at each sample location;
- Where ACM was identified, soil samples were submitted for laboratory analysis of asbestos fibres; and
- Grid locations were amended on the Tamworth Bridge Club site in order to target areas of known filling.

Area B

The investigation comprised:

- Collection of six broadly spaced surface soil samples (S1 – S6) for analysis of COPC. Pesticides would have been broadly applied to the surface therefore consequential residues in soil should they exist would be expressed across the entire land area;

- During site works, Geo-Logix was made aware of dumping of road materials by Council in the northern portion of Barnes Gully. Limited exploratory excavation works were completed to assess the presence of this material. The materials were inert and no samples were analysed.

8.2 Soil Sampling Methodology

Soil testpits were completed using a five tonne excavator. Testpits were completed to depths between 0.5 m and 3.6 m. Boring logs are included as Attachment E. For testpits where a top fill layer was encountered, soil samples were collected from the excavated spoil giving a representative sample of the fill profile. Where a top fill layer was not encountered, surface soils were collected from the excavation wall by hand.

Soil samples were placed in laboratory prepared jars, labelled and placed on ice in an esky for transport. A chain of custody form was prepared to accompany the esky to a NATA Accredited Laboratory for the analysis of the COPC. Where asbestos containing material (ACM) was encountered during test pitting a soil subsample was placed in a zip lock bag for laboratory analysis for asbestos fibres.

8.3 Quality Assurance

Quality control (QC) sampling was undertaken in general accordance with specifications outlined in AS4482.1, *Guide to Sampling and Investigation of Potentially Contaminated Soil.* Field QC samples were collected and included the following:

Sample Identification	Sample Type	Sample Matrix	Rate of Collection
D1	Field duplicate of TP3	Soil	1 in 12 samples
T1	Field triplicate of TP3	Soil	1 in 12 samples
D2	Field duplicate of TP14	Soil	1 in 12 samples
T2	Field triplicate of TP14	Soil	1 in 12 samples

Note – Rate of QC sample collection specified as 1 in 20 samples in AS4482.1

The laboratory internal QC procedures are consistent with NEPM policy on laboratory analysis of contaminated soils.

9. INVESTIGATION RESULTS

9.1 Site Geology

Fill material was encountered in 15 testpits to depths between 0.2 – 3.6 mbg. Three fill types were encountered on the site comprising:

- TP4 – TP9, TP11 – TP13 and S4: Shale gravels, sands and fines. Minor anthropogenic material (plastic, paper and ACM fragment) observed in TP11 and TP5.

- TP14 – TP17 (Tamworth Bridge Club): Gravels, sands and fines with anthropogenic materials including ACM, bricks, glass, metal wires, pipes, concrete footings, steel pipes, charcoal and plastic.
- S6: Reddish brown sandy clay. Some bricks were observed on the ground surface around this area.

Generally, the natural soils across the site comprised a layer of clayey sand/gravel or clay overlying weathered shale to completion depth. The natural soils in testpits located closer to the drainage channel generally comprised clayey sand and lean clay with sand to completion depths.

Concrete pieces, concrete slabs, asphalt and steel were observed damming the northern portion of Barnes Gully. Approximate areas of fill are roughly mapped out based on investigation works and observations and are presented in Figure 5.

9.2 Asbestos in Soil

ACM fragments were encountered in fill material on the Tamworth Bridge Club property (TP14, TP15 and TP17). Samples of the fill material were collected for the analysis of asbestos fibres from these testpits.

A random ACM fragment was observed in the top 10cm of fill on the central portion of the site (TP5). A sample of the fill material was collected for the analysis of asbestos fibres. No other fragments were observed within this fill material.

A random ACM fragment was observed on the ground surface between testpits TP1 and TP2.

9.3 Road Materials in Barnes Gully

Exploratory work confirmed anecdotal information that Council dumped road materials in the northern portion of Barnes Gully. The road materials were observed to comprise concrete, asphalt and steel.

9.4 Soil Analytical Results

Soil analytical results are summarised in Tables 1 through 5. Laboratory reports are presented in Attachment F.

TRH and BTEX

Petroleum hydrocarbons were not detected in soil at concentrations above laboratory reporting limits in all samples analysed (Table 1).

Metals

Arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc were not detected at concentrations greater than the assessment criteria in all soil samples analysed (Table 2).

PAHs

PAHs were not detected in soil at concentrations above laboratory reporting limits in all samples analysed (Table 3).

OCPs

OCPs were not detected in soil at concentrations above laboratory reporting limits in all samples analysed (Table 4).

Asbestos

Asbestos fibres were not detected in soil samples analysed (Table 5).

9.5 QA/QC Results

Soil duplicate/triplicate results are within the adopted acceptance criteria of 30-50% (AS4482.1) with the exception of the following:

- Chromium in duplicate pair TP14 and D2; and
- Zinc in triplicate pairs TP3 and T1, and TP14 and T2.

The RPD outliers are attributed to the low levels of the contaminants (<5 time LOR) and sample heterogeneity.

A summary of Laboratory QA/QC data is presented on the following table.

Report #	Analysis Within Holding Time	Surrogate Recovery	Lab. Duplicate RPD %	Lab Matrix Spike Recovery	Lab. Control Sample	Lab Method Blank
362423-S-V3	√	√	√	√	√	√
362642-S	√	√	√	√	√	√

√ = Pass X = Fail -- = not required * = refer to report text

Quality Assurance Criteria

Holding Times

VOCs 14 days soil/water

SVOCs 7 days water, 14 days soil

Pesticides 7 days water, 14 days soil

Metals 6 months

Mercury 28 days

Quality Control Criteria

Accuracy
Surrogate, matrix spike, control sample 70-130% and 30-130% for Phenols. Surrogate recovery 50-150% and 20-130% for Phenols.

Precision

Method Blank Not detected
Duplicate - No limit (<10xEQL), 0-50% (10-20xEQL), 0-200% (>20xEQL)

10. CONCLUSIONS

With respect to the decision rules Geo-Logix concludes the following for Area A:

- Soils are free of TRH, BTEX, PAHs, OCPs and heavy metal contamination hotspots greater than 45 m diameter at a 95% statistical degree of certainty;
- Frequent ACM fragments were observed within fill on the Tamworth Bridge Club property (TP14, TP15 and TP17). No asbestos fibres were detected in samples analysed; and
- A random ACM fragment was observed in surface material (0.1 mbg) at TP5 and on the ground surface between TP1 and TP2. No asbestos fibres were detected in a sample of fill material from TP5.

With respect to the decision rules Geo-Logix concludes the following for Area B:

- COPC were not detected at concentrations above commercial industrial land use criteria in shallow soils.

Based on the results of the investigation, Geo-Logix considers the site to be free of gross widespread contamination, with the exception of fill on the Tamworth Bridge Club property which was observed to comprise occasional ACM fragments.

Further investigation of ACM in fill on the Tamworth Bridge Club property is warranted prior to acquisition of that parcel of land given the volumes of potential contaminated fill present (approximately 3000 – 5000m^3) and gate price for asbestos waste disposal ($185p/tonne).

11. LIMITATIONS

This report should be read in full, and no executive summary, conclusion or other section of the report may be used or relied on in isolation, or taken as representative of the report as a whole. No responsibility is accepted by Geo-Logix, and any duty of care that may arise but for this statement is excluded, in relation to any use of any part of this report other than on this basis.

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The works undertaken by Geo-Logix are based solely on the scope of works, as agreed by the Client (Fabcot Pty Ltd). No other investigations, sampling, monitoring works or reporting will be carried out other than as expressly provided in the Scope of Works. **A COPY OF THE SCOPE OF WORKS IS AVAILABLE ON REQUEST.**

To the extent permitted by law, Geo-Logix makes no warranties or representations as to the:

a. suitability of the Site for any specific use, or category of use, or

b. potential statutory requirements for remediation, if any, of the Site,

c. approvals, if any, that may be needed in respect of any use or category of use, or

d. level of remediation, if any, that is warranted to render the Site suitable for any specific use, or category of use, or

e. level of ongoing monitoring of Site conditions, if any, that is required in respect of any specific use, or category of use, or

f. presence, extent or absence of any substance in, on or under the Site, other than as expressly stated in this report.

The conclusions stated in this report are based solely on the information, Scope of Works, analysis and data that are stated or expressly referred to in this report.

To the extent that the information and data relied upon to prepare this report has been conveyed to Geo-Logix by the Client or third parties orally or in the form of documents, Geo-Logix has assumed that the information and data are completely accurate and has not sought independently to verify the accuracy of the information or data. Geo-Logix assumes no responsibility or duty of care in respect of any errors or omissions in the information or data provided to it.

Without limiting the paragraph above, where laboratory tests have been carried out by others on Geo-Logix's behalf, the tests are reproduced in this report on the assumption that the tests are accurate. Geo-Logix has not sought independently to verify the accuracy of those tests and assumes no responsibility in respect of them.

Geo-Logix assumes no responsibility in respect of any changes in the condition of the Site which have occurred since the time when Geo-Logix gathered data and/or took samples from the Site on its site inspections dated **26 November 2012, 6 and 7 December 2012**.

Given the nature of asbestos, and the difficulties involved in identifying asbestos fibres, despite the exercise of all reasonable due care and diligence, thorough investigations may not always reveal its presence in either buildings or fill. Even if asbestos has been tested for and those tests' results do not reveal the presence of asbestos at those specific points of sampling, asbestos or asbestos containing materials may still be present at the Site, particularly if fill has been imported at any time, buildings constructed prior to 1980 have been demolished on the Site or materials from such buildings have been disposed of on the Site.

Where the Scope of Works does not include offsite investigations, Geo-Logix provides no warranty as to offsite conditions, including the extent if any to which substances in the Site may be emanating off site, and if so whether any adjoining sites have been or may be impacted by contamination originating from the Site.

Where the Scope of Works does not include the investigation, sampling, monitoring or other testing of groundwater in, on or under the Site, Geo-Logix provides no warranty or representation as to the quality of groundwater on the Site or the actual or potential migration of contamination in groundwater across or off the Site.

Subsurface site conditions are typically heterogeneous, and may change with time. Samples taken from different points on the Site may not enable inferences to be drawn about the condition of areas of the Site significantly removed from the sample points, or about the condition of any part of the Site whatsoever, in particular where the proposed inferences are to be drawn a long time after the date of the report.

Geo-Logix has prepared this report with the diligence, care and skill which a reasonable person would expect from a reputable environmental consultancy and in accordance with environmental regulatory authority and industry standards, guidelines and assessment criteria applicable as at the date of this report. Industry standards and environmental criteria change frequently, and may change at any time after the date of this report.

12. REFERENCES

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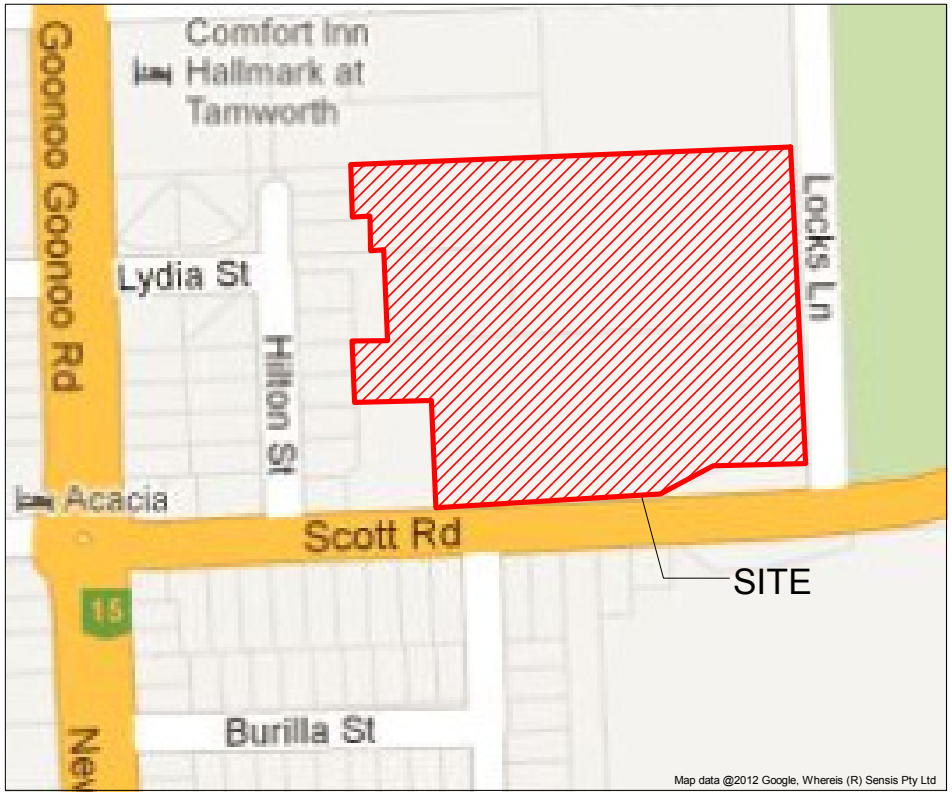
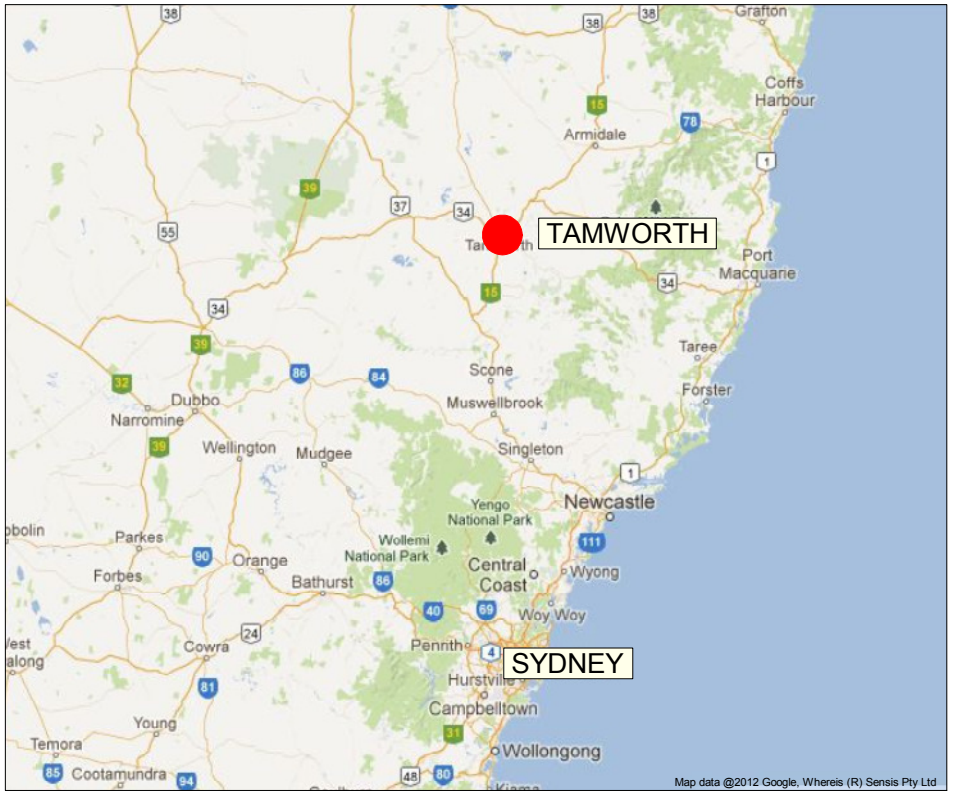
FIGURES



PART MAP SOUTH TAMWORTH



PART MAP NSW

ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET,
WARRIEWOOD NSW 22102
Ph: (02) 9979 1722
Fax: (02) 9979 1222

DRAWN:	CHECKED:
M G	J S
APPROVED:	D G
DATE:	08/01/2013

SITE LOCATION MAP
ENVIRONMENTAL DUE DILIGENCE REPORT
5 - 7 Hilton Street and 7 Scott Road STH TAMWORTH NSW 2340

SHEET SIZE:	PROJECT NO:	REV:	
A4	1201085	01	FIGURE 1

Imagery date 29/03/2004

31° 06' 38" S / 150° 55' 33" E

N

Lot Boundary

Site Boundary

0m 50m 100m

ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED

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M G	J S

APPROVED: D G

DATE: 08/01/2013

SHEET SIZE: A4

PROJECT NO: 1201085

REV: 01

SITE MAP
ENVIRONMENTAL DUE DILIGENCE REPORT
5 - 7 Hilton Street and 7 Scott Road SOUTH TAMWORTH NSW 2340

FIGURE 2

N

#

1. Shed
2. Shed (off-site)
3. Tilled Bare Soil
4. Previous Tin Sheet Storage Area
5. Rusted Metalic Item
6. Empty Metal Cylinder
7. Previous Tin Sheet Storage Area
8. Tin Sheet Storage Area
9. Sewer Access Point
10. 4 x Rusted Empty Tanks
11. Lined Trees
12. Tamworth Bridge Club Property
13. Sewer Access Point
14. Stockpile
15. Shed
16. Scrap Metal Items
17. Brick/Concrete Fill
18. Charcoal & Disturbed Soil
19. Asphalt & Concrete
20. Possible Filled Area
21. Sign Posts & Concrete Pieces

ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED

GEO-LOGIX PTY LTD
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Ph: (02) 9979 1722
Fax: (02) 9979 1222

DRAWN:	CHECKED:
M G	J S

APPROVED: D G

DATE: 31/01/2013

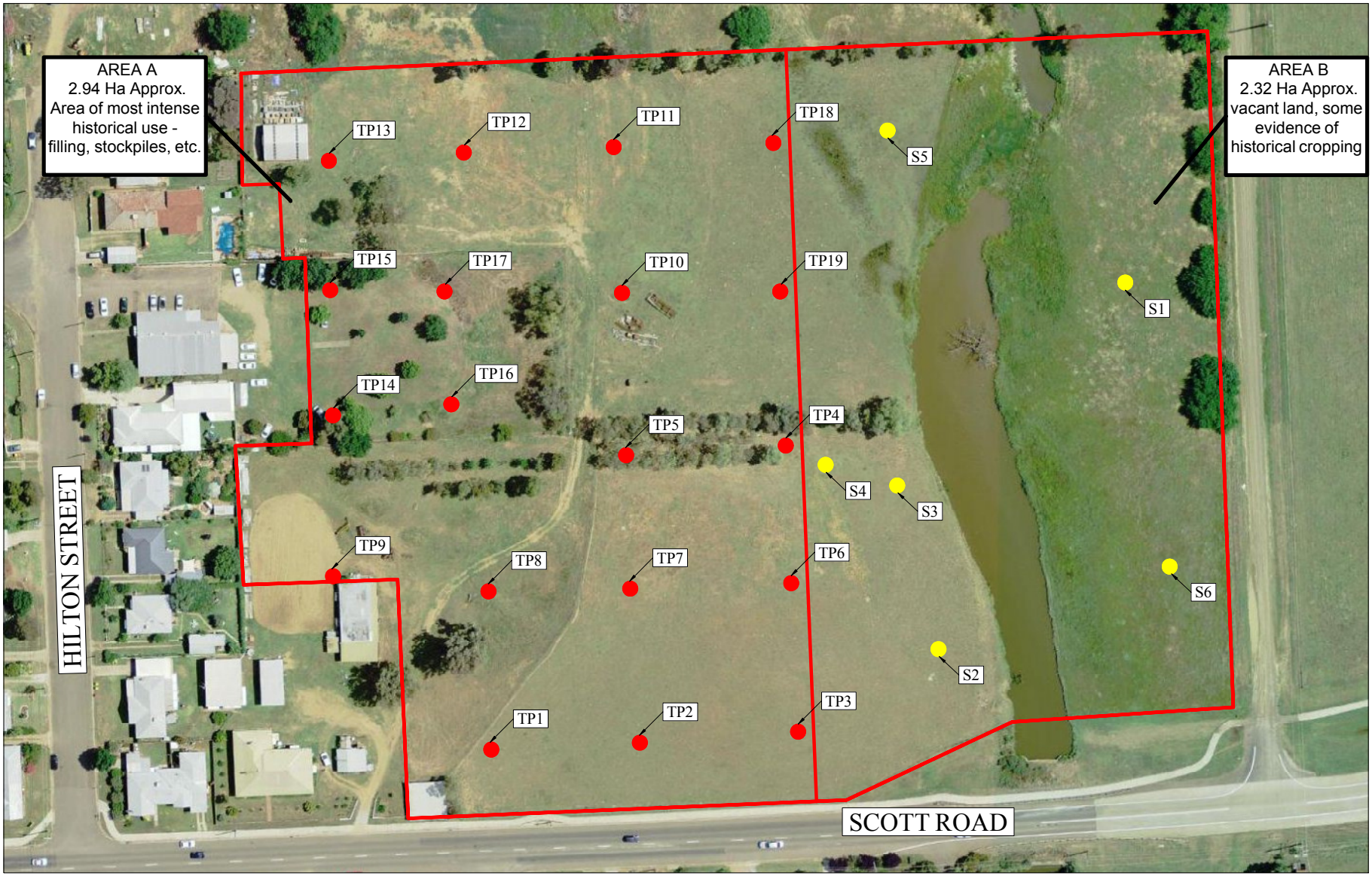
SHEET SIZE: A4

PROJECT NO: 1201085

REV: 01

SITE DETAILS MAP
ENVIRONMENTAL DUE DILIGENCE REPORT
5 - 7 Hilton Street and 7 Scott Road SOUTH TAMWORTH NSW 2340

FIGURE 3



ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED

GEO-LOGIX PTY LTD
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WARRIEWOOD NSW 22102
Ph: (02) 9979 1722
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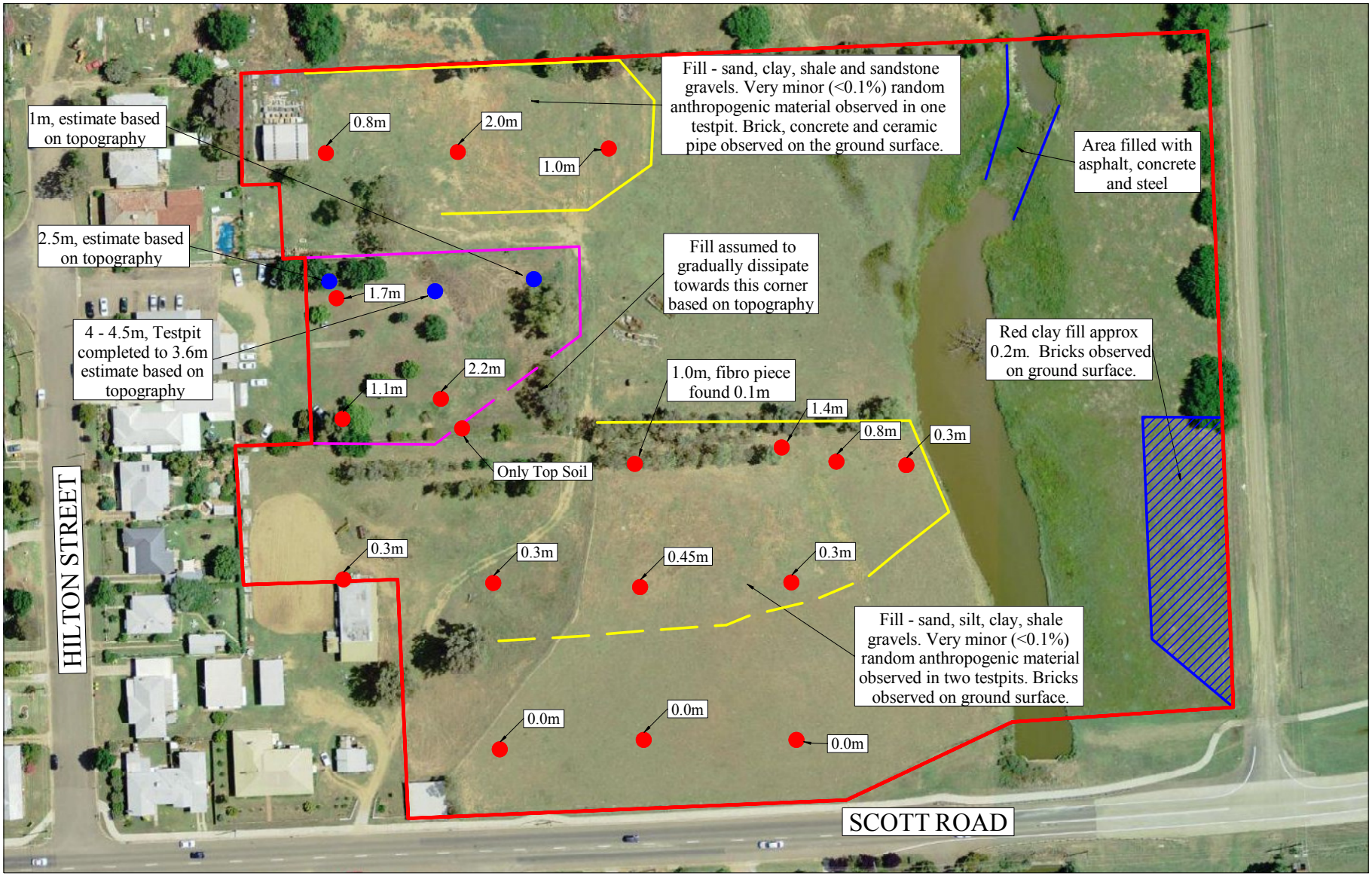
DRAWN:	CHECKED:
M G	J S
APPROVED:	D G
DATE:	08/01/2013
SHEET SIZE:	A4
PROJECT NO:	1201085
REV:	01

SAMPLE LOCATION MAP
ENVIRONMENTAL DUE DILIGENCE REPORT
5 - 7 Hilton Street and 7 Scott Road SOUTH TAMWORTH NSW 2340

FIGURE 4



ISSUE	DATE	AMENDMENTS	DRAWN	CHECKED

GEO-LOGIX PTY LTD
UNIT 2309, 4 DAYDREAM STREET,
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Ph: (02) 9979 1722
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DRAWN:	CHECKED:
M G	J S
APPROVED:	D G
DATE:	31/01/2013
SHEET SIZE:	A4
PROJECT NO:	1201085
REV:	01

AREAS OF FILLING
ENVIRONMENTAL DUE DILIGENCE REPORT
5 - 7 Hilton Street and 7 Scott Road SOUTH TAMWORTH NSW 2340

FIGURE 5

TABLES

TABLE 1
Summary of Soil Analytical Data
TRH and BTEX
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

TRH and BTEX	Assessment Criteria	Sample ID	TP1	TP2	TP3	D1	*RPD**	T1	*RPD***
		Depth (m)	0 - 0.3 m	0 - 0.4 m	0 - 0.4 m	-	-	-	-
		Date	6/12/2012	6/12/2012	6/12/2012	6/12/2012	%		%
Total Recoverable Hydrocarbons									
C_6-C_9	65		<10	<10	<10	<10	*nc*	<20	*nc*
C_{10}-C_{14}	n/a		<50	<50	<50	<50	*nc*	<20	*nc*
C_{15}-C_{28}	n/a		<100	<100	<100	<100	*nc*	<50	*nc*
C_{29}-C_{36}	n/a		<100	<100	<100	<100	*nc*	<50	*nc*
Sum of TRH (C_{10}-C_{36})	1000		<100	<100	<100	<100	*nc*	<50	*nc*
BTEX									
Benzene	1		<0.5	<0.5	<0.5	<0.5	*nc*	<0.5	*nc*
Toluene	1.4		<0.5	<0.5	<0.5	<0.5	*nc*	<0.5	*nc*
Ethylbenzene	3.1		<0.5	<0.5	<0.5	<0.5	*nc*	<0.5	*nc*
m & p xylenes	n/a		<1	<1	<1	<1	*nc*	<1	*nc*
o xylene	n/a		<0.5	<0.5	<0.5	<0.5	*nc*	<0.5	*nc*
Xylenes	14		<1.5	<1.5	<1.5	<1.5	*nc*	<1.5	*nc*

Notes:
Assessment Criteria = NSW EPA (1994) Threshold Concentrations for Sensitive Landuse
Concentrations in milligrams/kilogram (mg/kg)
n/a = Assessment criteria not available
<# = analyte not detected at concentration in excess of laboratory reporting limits
TP# = Testpit location in Area A
D1 = field duplicate of TP3
T1 = field triplicate of TP3
D2 = field duplicate of TP14
T2 = field triplicate of TP14
nc = RPD not calcuated, one or both samples below laboratory reporting limits
RPD* = Relative Percent Difference between primary sample and field duplicate sample
RPD** = Relative Percent Difference between primary sample and field triplicate sample
Bold indicates exceedance of Assessment Criteria
-- = not applicable

TABLE 1
Summary of Soil Analytical Data
TRH and BTEX
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

TRH and BTEX	Assessment Criteria	Sample ID	TP4	TP5	TP6	TP7	TP8	TP9	TP10
		Depth (m)	0 - 1.4 m	0 - 0.8 m	0 - 0.3 m	0 - 0.45 m	0 - 0.3 m	0 - 0.3 m	0.1 m
		Date	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012
Total Recoverable Hydrocarbons									
C_6-C_9	65		<10	<10	<10	<10	<10	<10	<10
C_{10}-C_{14}	n/a		<50	<50	<50	<50	<50	<50	<50
C_{15}-C_{28}	n/a		<100	<100	<100	<100	<100	<100	<100
C_{29}-C_{36}	n/a		<100	<100	<100	<100	<100	<100	<100
Sum of TRH (C_{10}-C_{36})	1000		<100	<100	<100	<100	<100	<100	<100
BTEX									
Benzene	1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	1.4		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	3.1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m & p xylenes	n/a		<1	<1	<1	<1	<1	<1	<1
o xylene	n/a		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenes	14		<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5

Notes:
Assessment Criteria = NSW EPA (1994) Threshold Concentrations for Sensitive Landuse
Concentrations in milligrams/kilogram (mg/kg)
n/a = Assessment criteria not available
<# = analyte not detected at concentration in excess of laboratory reporting limits
TP# = Testpit location in Area A
D1 = field duplicate of TP3
T1 = field triplicate of TP3
D2 = field duplicate of TP14
T2 = field triplicate of TP14
nc = RPD not calcuated, one or both samples below laboratory reporting limits
RPD* = Relative Percent Difference between primary sample and field duplicate sample
RPD** = Relative Percent Difference between primary sample and field triplicate sample
Bold indicates exceedance of Assessment Criteria
-- = not applicable

TABLE 1
Summary of Soil Analytical Data
TRH and BTEX
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

TRH and BTEX	Assessment Criteria	Sample ID	TP11	TP12	TP13	TP14	D2	*RPD**	T2
		Depth (m)	0 - 1.0 m	0 - 2.0 m	0 - 0.8 m	0 - 1.1 m	-	-	-
		Date	6/12/2012	6/12/2012	6/12/2012	7/12/2012	7/12/2012	%	7/12/2012
Total Recoverable Hydrocarbons									
C_6-C_9	65		<10	<10	<10	<10	<10	*nc*	<20
C_{10}-C_{14}	n/a		<50	<50	<50	<50	<50	*nc*	<20
C_{15}-C_{28}	n/a		<100	<100	<100	<100	<100	*nc*	<50
C_{29}-C_{36}	n/a		<100	<100	<100	<100	<100	*nc*	<50
Sum of TRH (C_{10}-C_{36})	1000		<100	<100	<100	<100	<100	*nc*	<50
BTEX									
Benzene	1		<0.5	<0.5	<0.5	<0.5	<0.5	*nc*	<0.5
Toluene	1.4		<0.5	<0.5	<0.5	<0.5	<0.5	*nc*	<0.5
Ethylbenzene	3.1		<0.5	<0.5	<0.5	<0.5	<0.5	*nc*	<0.5
m & p xylenes	n/a		<1	<1	<1	<1	<1	*nc*	<1
o xylene	n/a		<0.5	<0.5	<0.5	<0.5	<0.5	*nc*	<0.5
Xylenes	14		<1.5	<1.5	<1.5	<1.5	<1.5	*nc*	<1.5

Notes:
Assessment Criteria = NSW EPA (1994) Threshold Concentrations for Sensitive Landuse
Concentrations in milligrams/kilogram (mg/kg)
n/a = Assessment criteria not available
<# = analyte not detected at concentration in excess of laboratory reporting limits
TP# = Testpit location in Area A
D1 = field duplicate of TP3
T1 = field triplicate of TP3
D2 = field duplicate of TP14
T2 = field triplicate of TP14
nc = RPD not calcuated, one or both samples below laboratory reporting limits
RPD* = Relative Percent Difference between primary sample and field duplicate sample
RPD** = Relative Percent Difference between primary sample and field triplicate sample
Bold indicates exceedance of Assessment Criteria
-- = not applicable

TABLE 1
Summary of Soil Analytical Data
TRH and BTEX
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

TRH and BTEX	Assessment Criteria	Sample ID	*RPD***	TP15	TP16	TP17	TP18	TP19
		Depth (m)	-	0 - 1.7 m	0 - 2.2 m	0 - 3.6 m	0 - 0.4 m	0 - 0.2 m
		Date	*%*	7/12/2012	7/12/2012	7/12/2012	7/12/2012	7/12/2012
Total Recoverable Hydrocarbons								
C_6-C_9	65		*nc*	<10	<10	<10	<10	<10
C_{10}-C_{14}	n/a		*nc*	<50	<50	<50	<50	<50
C_{15}-C_{28}	n/a		*nc*	<100	<100	<100	<100	<100
C_{29}-C_{36}	n/a		*nc*	<100	<100	<100	<100	<100
Sum of TRH (C_{10}-C_{36})	1000		*nc*	<100	<100	<100	<100	<100
BTEX								
Benzene	1		*nc*	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	1.4		*nc*	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	3.1		*nc*	<0.5	<0.5	<0.5	<0.5	<0.5
m & p xylenes	n/a		*nc*	<1	<1	<1	<1	<1
o xylene	n/a		*nc*	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenes	14		*nc*	<1.5	<1.5	<1.5	<1.5	<1.5

Notes:

Assessment Criteria = NSW EPA (1994) Threshold Concentrations for Sensitive Landuse

Concentrations in milligrams/kilogram (mg/kg)

n/a = Assessment criteria not available

<# = analyte not detected at concentration in excess of laboratory reporting limits

TP# = Testpit location in Area A

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below laboratory reporting limits

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 2:
Summary of Soil Analytical Data
Metals
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

Metals	Assessment Criteria (F)	Sample ID	TP1	TP2	TP3	D1	RPD*	T1	RPD**
		Depth (m)	0 - 0.3 m	0 - 0.4 m	0 - 0.4 m	-	-	-	-
		Date	6/12/2012	6/12/2012	6/12/2012	6/12/2012	%	6/12/2012	%
Arsenic	500		< 2	< 2	26	36	*32*	28	*7*
Cadmium	100		< 0.4	< 0.4	< 0.4	< 0.4	*nc*	< 0.4	*nc*
Chromium	60%		5.3	5	28	23	*20*	32	*13*
Copper	5000		47	37	36	33	*9*	27	*29*
Lead	1500		31	12	17	17	*0*	12	*34*
Mercury	75		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.1	*nc*
Nickel	3000		8.4	10	15	13	*14*	13	*14*
Zinc	35000		110	58	41	40	*2*	20	*69*

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Total concentrations in milligrams per kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

- = sample not analysed

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 2:
Summary of Soil Analytical Data
Metals
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

Metals	Assessment Criteria (F)	Sample ID	TP4	TP5	TP6	TP7	TP8	TP9	TP10
		Depth (m)	0 - 1.4 m	0 - 0.8 m	0 - 0.3 m	0 - 0.45 m	0 - 0.3 m	0 - 0.3 m	0.1 m
		Date	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012
Arsenic	500		< 2	3.1	2.9	< 2	5.1	4	< 2
Cadmium	100		< 0.4	< 0.4	< 0.4	< 0.4	0.5	0.9	< 0.4
Chromium	60%		9.5	32	6.9	11	6.4	< 5	13
Copper	5000		77	51	49	30	47	120	35
Lead	1500		13	23	26	13	81	38	20
Mercury	75		< 0.05	< 0.05	< 0.05	< 0.05	0.05	0.06	0.07
Nickel	3000		14	21	11	13	11	13	15
Zinc	35000		96	120	130	78	830	280	90

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Total concentrations in milligrams per kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

- = sample not analysed

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 2:
Summary of Soil Analytical Data
Metals
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

Metals	Assessment Criteria (F)	Sample ID	TP11	TP12	TP13	TP14	D2	RPD*	T2
		Depth (m)	0 - 1.0 m	0 - 2.0 m	0 - 0.8 m	0 - 1.1 m	-	-	-
		Date	6/12/2012	6/12/2012	6/12/2012	7/12/2012	7/12/2012	%	7/12/2012
Arsenic	500		8.4	< 2	2	5.7	5.1	*11*	5.5
Cadmium	100		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	*nc*	< 0.4
Chromium	60%		6.5	8.3	16	7.5	14	*60*	12
Copper	5000		47	32	39	47	48	*2*	33
Lead	1500		17	29	18	39	58	*39*	35
Mercury	75		< 0.05	< 0.05	< 0.05	0.06	0.06	*nc*	< 0.1
Nickel	3000		17	13	19	15	19	*24*	9.6
Zinc	35000		100	150	60	140	160	*13*	82

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Total concentrations in milligrams per kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

- = sample not analysed

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 2:
Summary of Soil Analytical Data
Metals
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

Metals	Assessment Criteria (F)	Sample ID	RPD**	TP15	TP16	TP17	TP18	TP19	S1
		Depth (m)	-	0 - 1.7 m	0 - 2.2 m	0 - 3.6 m	0 - 0.4 m	0 - 0.2 m	0 - 0.2 m
		Date	%	7/12/2012	7/12/2012	7/12/2012	7/12/2012	7/12/2012	7/12/2012
Arsenic	500		*4*	4	4.1	3.2	6.6	3.2	5.1
Cadmium	100		*nc*	< 0.4	0.5	1	< 0.4	< 0.4	< 0.4
Chromium	60%		*46*	5.1	7.6	6.1	31	20	19
Copper	5000		*35*	31	98	120	52	46	42
Lead	1500		*11*	71	66	160	17	12	12
Mercury	75		*nc*	0.08	0.06	0.08	< 0.05	< 0.05	< 0.05
Nickel	3000		*44*	9.9	14	14	23	24	30
Zinc	35000		*52*	170	1000	750	77	79	94

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Total concentrations in milligrams per kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

- = sample not analysed

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 2:
Summary of Soil Analytical Data
Metals
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

Metals	Assessment Criteria (F)	Sample ID	S2	S4	S5	S6
		Depth (m)	0 - 0.4 m	0 - 0.8 m	0 - 0.3 m	0 - 0.2 m
		Date	6/12/2012	6/12/2012	7/12/2012	7/12/2012
Arsenic	500		7.7	< 2	4.4	3.2
Cadmium	100		0.4	< 0.4	< 0.4	< 0.4
Chromium	60%		18	< 5	23	18
Copper	5000		45	43	44	45
Lead	1500		84	14	14	13
Mercury	75		0.12	< 0.05	< 0.05	< 0.05
Nickel	3000		15	10	29	15
Zinc	35000		400	100	80	61

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Total concentrations in milligrams per kilogram (mg/kg)

<# = analyte not detected at concentration in excess of laboratory reporting limits

- = sample not analysed

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 3:
Summary of Soil Analytical Data
Polycyclic Aromatic Hydrocarbons
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

PAHs	Assessment Criteria	Sample ID Depth (m) Date	TP1 0 - 0.3 m 6/12/2012	TP2 0 - 0.4 m 6/12/2012	TP3 0 - 0.4 m 6/12/2012	D1 - 6/12/2012	RPD* - %	T1 - 6/12/2012	RPD** - %
Acenaphthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Acenaphthylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Benz(a)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Benzo(a) pyrene	5		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Benzo(b)&(k)fluoranthene	n/a		< 1	< 1	< 1	< 1	*nc*	< 1	*nc*
Benzo(g,h,i)perylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Chrysene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Dibenz(a,h)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Fluoranthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Fluorene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Indeno(1,2,3-c,d)pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Naphthalene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Phenanthrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5	*nc*
Sum of reported PAHs	100		< 1	< 1	< 1	< 1	*nc*	<0.5	*nc*

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in milligrams/kilogram (mg/kg)

n/a = Assessment criteria not available

<# = analyte not detected at concentration in excess of laboratory reporting limits

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 3:
Summary of Soil Analytical Data
Polycyclic Aromatic Hydrocarbons
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

PAHs	Assessment Criteria	Sample ID Depth (m) Date	TP4 0 - 1.4 m 6/12/2012	TP5 0 - 0.8 m 6/12/2012	TP6 0 - 0.3 m 6/12/2012	TP7 0 - 0.45 m 6/12/2012	TP8 0 - 0.3 m 6/12/2012	TP9 0 - 0.3 m 6/12/2012	TP10 0.1 m 6/12/2012
Acenaphthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a) pyrene	5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b)&(k)fluoranthene	n/a		< 1	< 1	< 1	< 1	< 1	< 1	< 1
Benzo(g,h,i)perylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-c,d)pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Sum of reported PAHs	100		< 1	< 1	< 1	< 1	< 1	< 1	< 1

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in milligrams/kilogram (mg/kg)

n/a = Assessment criteria not available

<# = analyte not detected at concentration in excess of laboratory reporting limits

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 3:
Summary of Soil Analytical Data
Polycyclic Aromatic Hydrocarbons
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

PAHs	Assessment Criteria	Sample ID Depth (m) Date	TP11 0 - 1.0 m 6/12/2012	TP12 0 - 2.0 m 6/12/2012	TP13 0 - 0.8 m 6/12/2012	TP14 0 - 1.1 m 7/12/2012	D2 - 7/12/2012	RPD* - %	T2 - 7/12/2012
Acenaphthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Acenaphthylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benz(a)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benzo(a) pyrene	5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Benzo(b)&(k)fluoranthene	n/a		< 1	< 1	< 1	< 1	< 1	*nc*	<1
Benzo(g,h,i)perylene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Chrysene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Dibenz(a,h)anthracene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Fluoranthene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Fluorene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Indeno(1,2,3-c,d)pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Naphthalene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Phenanthrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Pyrene	n/a		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	*nc*	< 0.5
Sum of reported PAHs	100		< 1	< 1	< 1	< 1	< 1	*nc*	< 0.5

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in milligrams/kilogram (mg/kg)

n/a = Assessment criteria not available

<# = analyte not detected at concentration in excess of laboratory reporting limits

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 3:
Summary of Soil Analytical Data
Polycyclic Aromatic Hydrocarbons
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

PAHs	Assessment Criteria	Sample ID Depth (m) Date	RPD** - %	TP15 0 - 1.7 m 7/12/2012	TP16 0 - 2.2 m 7/12/2012	TP17 0 - 3.6 m 7/12/2012	TP18 0 - 0.4 m 7/12/2012	TP19 0 - 0.2 m 7/12/2012
Acenaphthene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a) pyrene	5		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b)&(k)fluoranthene	n/a		*nc*	< 1	< 1	< 1	< 1	< 1
Benzo(g,h,i)perylene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-c,d)pyrene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	n/a		*nc*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Sum of reported PAHs	100		*nc*	< 1	< 1	< 1	< 1	< 1

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in milligrams/kilogram (mg/kg)

n/a = Assessment criteria not available

<# = analyte not detected at concentration in excess of laboratory reporting limits

TP# = Testpit location in Area A

S# = Testpit loctaion in Area B

D1 = field duplicate of TP3

T1 = field triplicate of TP3

D2 = field duplicate of TP14

T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

Bold indicates exceedance of Assessment Criteria

-- = not applicable

TABLE 4:
Summary of Soil Analytical Data
Organochlorine Pesticides
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

OCP	Assessment Criteria	Sample ID	TP1	TP2	TP3	D1	RPD*	T1	RPD**	TP4
		Depth	0 - 0.3 m	0 - 0.4 m	0 - 0.4 m	-	-	-	-	0 - 1.4 m
		Date	6/12/2012	6/12/2012	6/12/2012	6/12/2012	%	6/12/2012	%	6/12/2012
4.4'-DDD	1000***		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
4.4'-DDE	1000***		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
4.4'-DDT	1000***		< 0.2	< 0.2	< 0.2	< 0.2	*nc*	< 0.05	*nc*	< 0.2
a-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
a-Chlordane	250**		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Aldrin	50*		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
b-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	<0.05	*nc*	< 0.05
d-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Dieldrin	50*		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Endosulfan I	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Endosulfan II	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Endosulfan sulphate	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Endrin	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Endrin aldehyde	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Endrin ketone	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
g-BHC (Lindane)	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
g-Chlordane	250**		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Heptachlor epoxide	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Hexachlorobenzene	n/a		< 0.05	< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05
Methoxychlor	n/a		< 0.2	< 0.2	< 0.2	<0.2	*nc*	< 0.05	*nc*	< 0.2

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in miligrams per kilogram (mg/kg)

* = combine Aldrin + Dieldrin concentration, ** = combined cis and trans chlordane concentration

*** = combined DDD, DDE and DDT concentration

n/a = Assessment criteria not available

TP# = Testpit location in Area A, 'S# = Testpit loctaion in Area B

D1 = field duplicate of TP3, T1 = field triplicate of TP3

D2 = field duplicate of TP14, T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

<# = analyte not detected at concentration in excess of laboratory reporting limits

Bold indicates exceedance of Assessment Criteria

TABLE 4:
Summary of Soil Analytical Data
Organochlorine Pesticides
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

OCP	Assessment Criteria	Sample ID	TP5	TP6	TP7	TP8	TP9	TP10	TP11	TP12
		Depth	0 - 0.8 m	0 - 0.3 m	0 - 0.45 m	0 - 0.3 m	0 - 0.3 m	0.1 m	0 - 1.0 m	0 - 2.0 m
		Date	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012	6/12/2012
4.4'-DDD	1000***		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	1000***		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	1000***		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
a-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
a-Chlordane	250**		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	50*		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	50*		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-Chlordane	250**		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	n/a		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in miligrams per kilogram (mg/kg)

* = combine Aldrin + Dieldrin concentration, ** = combined cis and trans chlordane concentration

*** = combined DDD, DDE and DDT concentration

n/a = Assessment criteria not available

TP# = Testpit location in Area A, 'S# = Testpit loctaion in Area B

D1 = field duplicate of TP3, T1 = field triplicate of TP3

D2 = field duplicate of TP14, T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

<# = analyte not detected at concentration in excess of laboratory reporting limits

Bold indicates exceedance of Assessment Criteria

TABLE 4:
Summary of Soil Analytical Data
Organochlorine Pesticides
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

OCP	Assessment Criteria	Sample ID	TP13	TP14	D2	RPD*	T2	RPD**	TP15	TP16
		Depth	0 - 0.8 m	0 - 1.1 m	-	-	-	-	0 - 1.7 m	0 - 2.2 m
		Date	6/12/2012	7/12/2012	7/12/2012	%	7/12/2012	%	7/12/2012	7/12/2012
4.4'-DDD	1000***		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
4.4'-DDE	1000***		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
4.4'-DDT	1000***		< 0.2	< 0.2	< 0.2	*nc*	< 0.05	*nc*	< 0.2	< 0.2
a-BHC	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
a-Chlordane	250**		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Aldrin	50*		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
b-BHC	n/a		< 0.05	< 0.05	< 0.05	*nc*	<0.05	*nc*	< 0.05	< 0.05
d-BHC	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Dieldrin	50*		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Endosulfan I	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Endosulfan II	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Endosulfan sulphate	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Endrin	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Endrin aldehyde	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Endrin ketone	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
g-BHC (Lindane)	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
g-Chlordane	250**		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Heptachlor	50		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Heptachlor epoxide	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Hexachlorobenzene	n/a		< 0.05	< 0.05	< 0.05	*nc*	< 0.05	*nc*	< 0.05	< 0.05
Methoxychlor	n/a		< 0.2	< 0.2	<0.2	*nc*	< 0.05	*nc*	< 0.2	< 0.2

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in miligrams per kilogram (mg/kg)

* = combine Aldrin + Dieldrin concentration, ** = combined cis and trans chlordane concentration

*** = combined DDD, DDE and DDT concentration

n/a = Assessment criteria not available

TP# = Testpit location in Area A, 'S# = Testpit loctaion in Area B

D1 = field duplicate of TP3, T1 = field triplicate of TP3

D2 = field duplicate of TP14, T2 = field triplicate of TP14

nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

<# = analyte not detected at concentration in excess of laboratory reporting limits

Bold indicates exceedance of Assessment Criteria

TABLE 4:
Summary of Soil Analytical Data
Organochlorine Pesticides
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

OCP	Assessment Criteria	Sample ID	TP17	TP18	TP19	S1	S2	S4	S5	S6
		Depth	0 - 3.6 m	0 - 0.4 m	0 - 0.2 m	0 - 0.2 m	0 - 0.4 m	0 - 0.8 m	0 - 0.3 m	0 - 0.2 m
		Date	7/12/2012	7/12/2012	7/12/2012	7/12/2012	6/12/2012	6/12/2012	7/12/2012	7/12/2012
4.4'-DDD	1000***		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	1000***		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	1000***		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
a-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
a-Chlordane	250**		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	50*		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	50*		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
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Endosulfan sulphate	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
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Heptachlor	50		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	n/a		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	n/a		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2

Notes:

Assessment Criteria = NEPM (1999) HIL 'F' Commercial/Industrial criteria

Concentrations in miligrams per kilogram (mg/kg)

* = combine Aldrin + Dieldrin concentration, ** = combined cis and trans chlordane concentration

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TP# = Testpit location in Area A, 'S# = Testpit loctaion in Area B

D1 = field duplicate of TP3, T1 = field triplicate of TP3

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nc = RPD not calcuated, one or both samples below EQL

RPD* = Relative Percent Difference between primary sample and field duplicate sample

RPD** = Relative Percent Difference between primary sample and field triplicate sample

<# = analyte not detected at concentration in excess of laboratory reporting limits

Bold indicates exceedance of Assessment Criteria

TABLE 5:
Summary of Analytical Data
Asbestos
5 - 7 Hilton Street and 7 Scott Road,
South Tamworth, NSW

Asbestos	Sample ID	TP5/0.1	TP14	TP15	TP16	TP17
	Depth	0.1	0 - 1.1	0 - 1.7	0 - 2.2	0 - 3.6
	Date	6/12/2012	7/12/2012	7/12/2012	7/12/2012	7/12/2012
Asbestos		ND	ND	ND	ND	ND

Notes:
ND = No Asbestos Detected
TP# = Testpit location in Area A

ATTACHMENT A

Certificate No: *PC0810/2013*
Receipt No:
Date: *21 November 2012*
Applicants Ref: *1201085*

PLANNING CERTIFICATE
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Applicant:

Ms J Todd
Unit 2309
4 Daydream Street
WARRIEWOOD NSW 2102

Owner (as recorded by Council):

Mr RE Ambrose, Mrs MJ Ambrose
7 Scott Road
SOUTH TAMWORTH NSW 2340

Land: 7 Scott Road SOUTH TAMWORTH NSW 2340
Lot 1 DP 797999

This certificate is provided pursuant to Section 149(2) of the Act. At the date of this certificate, the subject land is affected by the following matters.

Names of relevant planning instruments and development control plans

Note: Current environmental planning instruments (State environmental planning policies, regional environmental plans and local environmental plans) may be viewed at the NSW Government legislation web-site – www.legislation.nsw.gov.au.

Names of relevant State Environmental Planning Policies

1. State Environmental Planning Policy No. 4 – Development Without Consent and Miscellaneous Exempt and Complying Development
2. State Environmental Planning Policy No. 6 – Number of Storeys in a Building
3. State Environmental Planning Policy No. 15 – Rural Landsharing Communities
4. State Environmental Planning Policy No. 21 – Caravan Parks
5. State Environmental Planning Policy No. 22 – Shops and Commercial Premises
6. State Environmental Planning Policy No. 30 – Intensive Agriculture
7. State Environmental Planning Policy No. 32 – Urban Consolidation (Redevelopment of Urban Land)
8. State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
9. State Environmental Planning Policy No. 36 – Manufactured Home Estates
10. State Environmental Planning Policy No. 44 – Koala Habitat Protection
11. State Environmental Planning Policy No. 50 – Canal Estate Development
12. State Environmental Planning Policy No. 55 – Remediation of Land
13. State Environmental Planning Policy No. 62 – Sustainable Aquaculture
14. State Environmental Planning Policy No. 64 – Advertising and Signage
15. State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
16. State Environmental Planning Policy (Affordable Rental Housing) 2009
17. State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
18. State Environmental Planning Policy (Exempt and Complying Development) 2008
19. State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
20. State Environmental Planning Policy (Infrastructure) 2007
21. State Environmental Planning Policy (Major Development) 2005
22. State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

23. State Environmental Planning Policy (Rural Lands) 2008
24. State Environmental Planning Policy (Temporary Structures) 2007
25. State Environmental Planning Policy (State and Regional Development) 2011

Development Control Plans

26. Tamworth Regional Development Control Plan 2010.

Zoning and land use under relevant LEPs

27. The subject land is affected by the Tamworth Regional Local Environmental Plan 2010. Under this plan, the land is zoned -

B4 Mixed Use

1. Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2. Permitted without consent

Roads

3. Permitted with consent

Attached dwellings; Boarding houses; Business premises; Child care centres; Community facilities; Educational establishments; Entertainment facilities; Function centres; Home industries; Hostels; Hotel or motel accommodation; Information and education facilities; Multi dwelling housing; Office premises; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Retail premises; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Animal boarding or training establishments; Cemeteries; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Industrial training facilities; Industries; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Rural industries; Sex services premises; Storage premises; Vehicle body repair workshops; Waste or resource management facilities; Wharf or boating facilities

RU4 Primary Production Small Lots

1. Objectives of zone

- To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

2. Permitted without consent

Environmental protection works; Extensive agriculture; Home-based child care; Home occupations; Moorings; Roads

3. **Permitted with consent**

Agricultural produce industries; Cellar door premises; Dual occupancies (attached); Dwelling houses; Farm buildings; Intensive plant agriculture; Kiosks; Landscaping material supplies; Light industries; Markets; Plant nurseries; Roadside stalls; Rural workers' dwellings; Any other development not specified in item 2 or 4

4. **Prohibited**

Amusement centres; Backpackers' accommodation; Cemeteries; Child care centres; Commercial premises; Crematoria; Eco-tourist facilities; Entertainment facilities; Exhibition villages; Heavy industrial storage establishments; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Intensive livestock agriculture; Mortuaries; Recreation facilities (major); Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Rural industries; Service stations; Serviced apartments; Sex services premises; Storage premises; Vehicle body repair workshops; Vehicle repair stations; Wharf or boating facilities; Wholesale supplies

28. The Tamworth Regional Local Environmental Plan 2010 provides a development standard requiring a minimum of 40 hectares in relation to the erection of a dwelling-house on that part of the land zoned RU4. For further information, see clause 4.2B of the Plan.

Complying Development

General Housing Code

29. Development specified as Complying Development for the General Housing Code in Part 3 of the State Environmental Planning Policy (Exempt and Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Rural Housing Code

30. Development specified as Complying Development for the Rural Housing Code in Part 3A of the State Environmental Planning Policy (Exempt and Complying Development Code) 2008 Rural Housing Code is not prevented by a land exemption specified in clause 1.19.

Housing Alterations Code

31. Development specified as Complying Development for the Housing Alterations Code in Part 4 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

General Development Code

32. Development specified as Complying Development for the General Development Code in Part 4A of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

General Commercial and Industrial Code

33. Development specified as Complying Development for the General Commercial and Industrial Code in Part 5 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Subdivisions Code

34. Development specified as Complying Development for the Subdivisions Code in Part 6 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Demolition Code

35. Development specified as Complying Development for the Demolition Code in Part 7 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Coastal Protection

36. The land is not affected by the operation of Section 38 or 39 of the Coastal Protection Act.

Mine subsidence

37. The land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the Mine Subsidence Compensation Act 1961.

Road widening and road realignment

38. The land is not affected by any road widening or road realignment proposal under:-
(1) section 262 of the Local Government Act, 1919;
(2) an environmental planning instrument; or
(3) any resolution of Council.

Council and other public authority policies on hazard risk restrictions

39. The land is not affected by a policy adopted by any other public authority that has been notified to Council that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

40. The land is not affected by a policy adopted by Council that restricts the development of the land because of the likelihood of landslip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

Flood related development control information

41. Development on the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls set out in the Tamworth Regional Local Environmental Plan 2010 and the Tamworth Regional Development Control Plan 2010.

42. Development on the land or part of the land for any other purpose is subject to flood related development controls set out in the Tamworth Regional Local Environmental Plan 2010 and the Tamworth Regional Development Control Plan 2010.

Land reserved for acquisition

43. There are no environmental planning instruments applying to the land which provide for the acquisition of the land by a public authority, as referred to in Section 27 of the Act.

Contributions plans

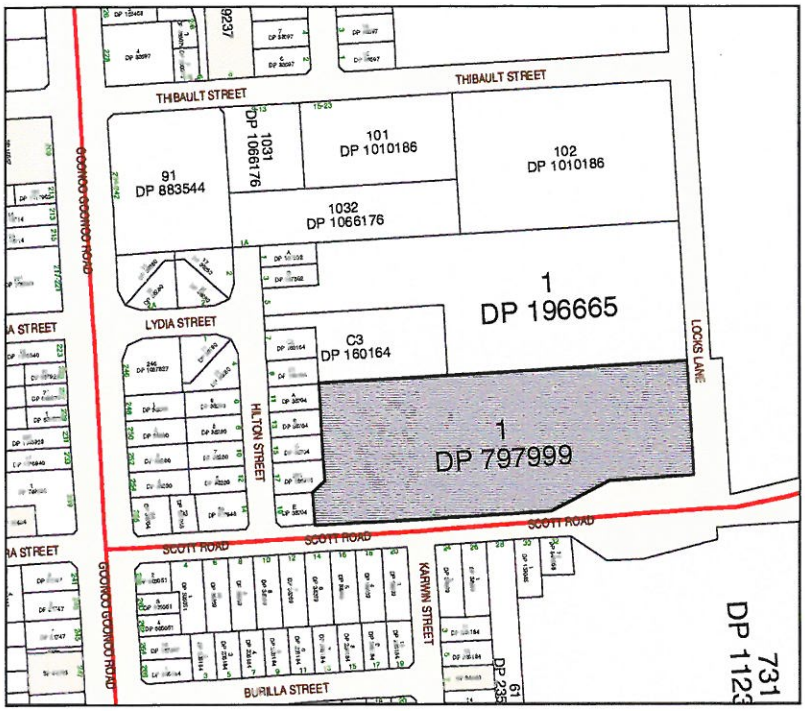
44. The Tamworth Urban Section 94 Contributions Plan came into force on 1 August 2005. This Plan seeks contributions toward a range of public facilities to cater for the demand generated from the projected increase in population associated with development.

Bushfire Prone Land

45. The subject land is not identified as being "bushfire prone land" on the Bushfire Prone Land Map, certified by the NSW Rural Fire Service.

Additional information provided pursuant to Section 149(5)

46. For information regarding buildings and structures on the land, please obtain a Building Certificate under Section 149A of the Environmental Planning and Assessment Act 1979.



Lucy Walker
Team Leader Development Assessment

Tamworth Regional Local Environmental Plan 2010

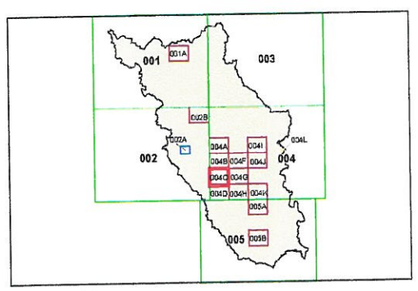
Land Zoning Map - Sheet LZN_004C

Zone

- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- B5 Business Development
- B7 Business Park
- E1 National Parks and Nature Reserves
- E2 Environmental Conservation
- E3 Environmental Management
- IN1 General Industrial
- IN3 Heavy Industrial
- R1 General Residential
- R2 Low Density Residential
- R5 Large Lot Residential
- RE1 Public Recreation
- RE2 Private Recreation
- RU1 Primary Production
- RU3 Forestry
- RU4 Rural Small Holdings
- RU5 Village
- RU6 Transition
- SP1 Special Activities
- SP2 Infrastructure
- SP3 Tourist

Cadastre

Cadastre 01/06/2010 © NSW LPMA



N

0 0.5 1 Km

Scale 1:40,000 @ A3

Projection: GDA 1994
Zone 56

Map Identification Number
7310_COM_LZN_004C_040_20101105

Certificate No: *PC0809/2013*
Receipt No:
Date: *21 November 2012*
Applicants Ref: *1201085*

PLANNING CERTIFICATE
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Applicant:

Ms J Todd
Unit 2309
4 Daydream Street
WARRIEWOOD NSW 2102

Owner (as recorded by Council):

Tamworth Bridge Club Inc
7 Hilton Street
SOUTH TAMWORTH NSW 2340

Land: 7 Hilton Street SOUTH TAMWORTH NSW 2340
Lot C3 DP 160164
Lot C2 DP 160164

This certificate is provided pursuant to Section 149(2) of the Act. At the date of this certificate, the subject land is affected by the following matters.

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   Roads

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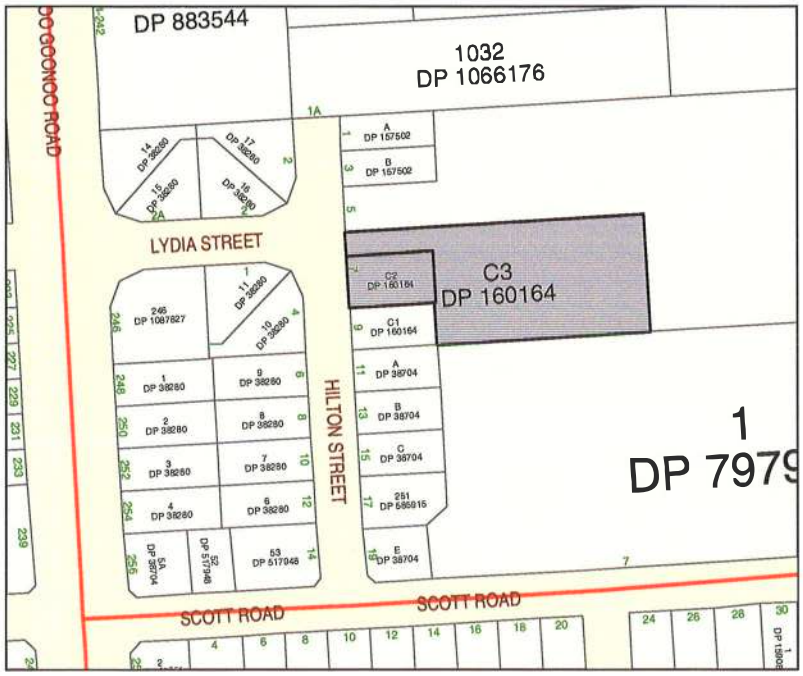


Lucy Walker
Team Leader Development Assessment

REGIONAL COUNCIL
Tamworth

ABN: 52 631 074 450

More than just a city. More than just one place

Certificate No: *PC0808/2013*
Receipt No:
Date: *21 November 2012*
Applicants Ref: *1201085*

PLANNING CERTIFICATE
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Applicant:

Ms J Todd
Unit 2309
4 Daydream Street
WARRIEWOOD NSW 2102

Owner (as recorded by Council):

Mr DM Ambrose, Mrs TJ Ambrose
5 Hilton Street
SOUTH TAMWORTH NSW 2340

Land: 5 Hilton Street SOUTH TAMWORTH NSW 2340
Lot 1 DP 196665

This certificate is provided pursuant to Section 149(2) of the Act. At the date of this certificate, the subject land is affected by the following matters.

Names of relevant planning instruments and development control plans

Note: Current environmental planning instruments (State environmental planning policies, regional environmental plans and local environmental plans) may be viewed at the NSW Government legislation web-site – www.legislation.nsw.gov.au.

Names of relevant State Environmental Planning Policies

1. State Environmental Planning Policy No. 4 – Development Without Consent and Miscellaneous Exempt and Complying Development
2. State Environmental Planning Policy No. 6 – Number of Storeys in a Building
3. State Environmental Planning Policy No. 15 – Rural Landsharing Communities
4. State Environmental Planning Policy No. 21 – Caravan Parks
5. State Environmental Planning Policy No. 22 – Shops and Commercial Premises
6. State Environmental Planning Policy No. 30 – Intensive Agriculture
7. State Environmental Planning Policy No. 32 – Urban Consolidation (Redevelopment of Urban Land)
8. State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
9. State Environmental Planning Policy No. 36 – Manufactured Home Estates
10. State Environmental Planning Policy No. 44 – Koala Habitat Protection
11. State Environmental Planning Policy No. 50 – Canal Estate Development
12. State Environmental Planning Policy No. 55 – Remediation of Land
13. State Environmental Planning Policy No. 62 – Sustainable Aquaculture
14. State Environmental Planning Policy No. 64 – Advertising and Signage
15. State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development
16. State Environmental Planning Policy (Affordable Rental Housing) 2009
17. State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
18. State Environmental Planning Policy (Exempt and Complying Development) 2008
19. State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004
20. State Environmental Planning Policy (Infrastructure) 2007
21. State Environmental Planning Policy (Major Development) 2005
22. State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

23. State Environmental Planning Policy (Rural Lands) 2008
24. State Environmental Planning Policy (Temporary Structures) 2007
25. State Environmental Planning Policy (State and Regional Development) 2011

Development Control Plans

26. Tamworth Regional Development Control Plan 2010.

Zoning and land use under relevant LEPs

27. The subject land is affected by the Tamworth Regional Local Environmental Plan 2010. Under this plan, the land is zoned -

B4 Mixed Use

1. Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

2. Permitted without consent

Roads

3. Permitted with consent

Attached dwellings; Boarding houses; Business premises; Child care centres; Community facilities; Educational establishments; Entertainment facilities; Function centres; Home industries; Hostels; Hotel or motel accommodation; Information and education facilities; Multi dwelling housing; Office premises; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Residential flat buildings; Retail premises; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4. Prohibited

Agriculture; Air transport facilities; Animal boarding or training establishments; Cemeteries; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Industrial training facilities; Industries; Open cut mining; Recreation facilities (major); Recreation facilities (outdoor); Residential accommodation; Rural industries; Sex services premises; Storage premises; Vehicle body repair workshops; Waste or resource management facilities; Wharf or boating facilities

R1 General Residential

1. Objectives of zone

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities;
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.

2. Permitted without consent

Home-based child care; Home occupations; Moorings; Roads

3. Permitted with consent

Attached dwellings; Boarding houses; Child care centres; Community facilities; Food and drink premises; Group homes; Home industries; Hostels; Kiosks; Markets; Multi dwelling housing; Neighbourhood shops; Places of public worship; Residential flat buildings; Semi-detached dwellings; Seniors housing; Shop top housing; Any other development not specified in item 2 or 4

4. Prohibited

Advertising structures; Agriculture; Air transport facilities; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Marinas; Mooring pens; Mortuaries; Open cut mining; Passenger transport facilities; Pubs; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Restricted premises; Rural industries; Rural workers' dwellings; Service stations; Sex services premises; Storage premises; Transport depots; Vehicle body repair workshops; Vehicles repair stations; Waste or resource management facilities; Wharf or boating facilities; Wholesale supplies

RU4 Primary Production Small Lots

1. Objectives of zone

- To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

2. Permitted without consent

Environmental protection works; Extensive agriculture; Home-based child care; Home occupations; Moorings; Roads

3. Permitted with consent

Agricultural produce industries; Cellar door premises; Dual occupancies (attached); Dwelling houses; Farm buildings; Intensive plant agriculture; Kiosks; Landscaping material supplies; Light industries; Markets; Plant nurseries; Roadside stalls; Rural workers' dwellings; Any other development not specified in item 2 or 4

4. Prohibited

Amusement centres; Backpackers' accommodation; Cemeteries; Child care centres; Commercial premises; Crematoria; Eco-tourist facilities; Entertainment facilities; Exhibition villages; Heavy industrial storage establishments; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Intensive livestock agriculture; Mortuaries; Recreation facilities (major); Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Rural industries; Service stations; Serviced apartments; Sex services premises; Storage premises; Vehicle body repair workshops; Vehicle repair stations; Wharf or boating facilities; Wholesale supplies

28. The Tamworth Regional Local Environmental Plan 2010 provides a development standard requiring a minimum of 40 hectares in relation to the erection of a dwelling-house on that part of the land zoned RU4. For further information, see clause 4.2B of the Plan.

Complying Development

General Housing Code

29. Development specified as Complying Development for the General Housing Code in Part 3 of the State Environmental Planning Policy (Exempt and Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Rural Housing Code

30. Development specified as Complying Development for the Rural Housing Code in Part 3A of the State Environmental Planning Policy (Exempt and Complying Development Code) 2008 Rural Housing Code is not prevented by a land exemption specified in clause 1.19.

Housing Alterations Code

31. Development specified as Complying Development for the Housing Alterations Code in Part 4 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

General Development Code

32. Development specified as Complying Development for the General Development Code in Part 4A of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

General Commercial and Industrial Code

33. Development specified as Complying Development for the General Commercial and Industrial Code in Part 5 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Subdivisions Code

34. Development specified as Complying Development for the Subdivisions Code in Part 6 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Demolition Code

35. Development specified as Complying Development for the Demolition Code in Part 7 of the State Environmental Planning Policy (Exempt & Complying Development Code) 2008 is not prevented by a land exemption specified in clause 1.19.

Coastal Protection

36. The land is not affected by the operation of Section 38 or 39 of the Coastal Protection Act.

Mine subsidence

37. The land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the Mine Subsidence Compensation Act 1961.

Road widening and road realignment

38. The land is not affected by any road widening or road realignment proposal under:-
    (1) section 262 of the Local Government Act, 1919;
    (2) an environmental planning instrument; or
    (3) any resolution of Council.

Council and other public authority policies on hazard risk restrictions

39. The land is not affected by a policy adopted by any other public authority that has been notified to Council that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

40. The land is not affected by a policy adopted by Council that restricts the development of the land because of the likelihood of landslip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

Flood related development control information

41. Development on the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is subject to flood related development controls set out in the Tamworth Regional Local Environmental Plan 2010 and the Tamworth Regional Development Control Plan 2010.

42. Development on the land or part of the land for any other purpose is subject to flood related development controls set out in the Tamworth Regional Local Environmental Plan 2010 and the Tamworth Regional Development Control Plan 2010.

Land reserved for acquisition

43. There are no environmental planning instruments applying to the land which provide for the acquisition of the land by a public authority, as referred to in Section 27 of the Act.

Contributions plans

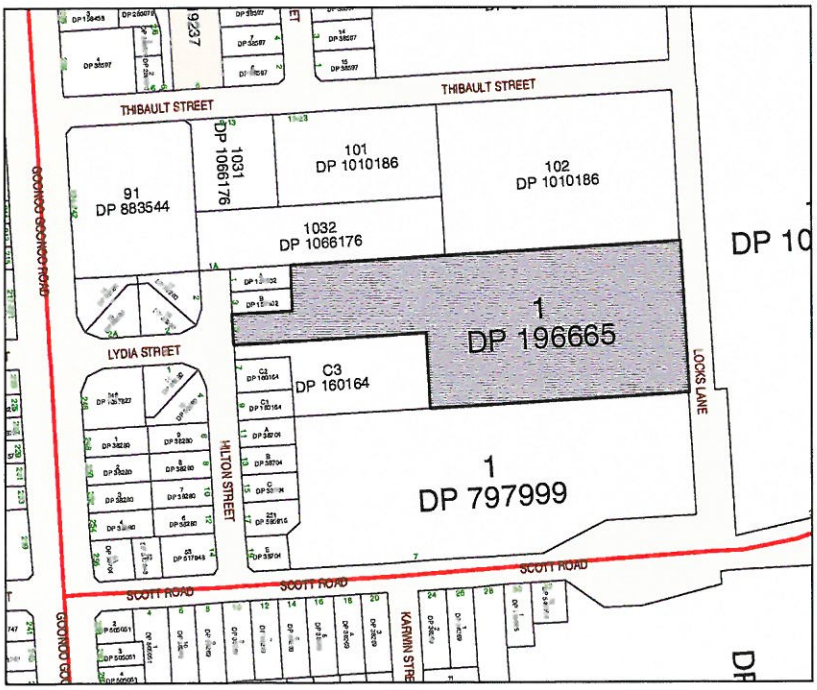
44. The Tamworth Urban Section 94 Contributions Plan came into force on 1 August 2005. This Plan seeks contributions toward a range of public facilities to cater for the demand generated from the projected increase in population associated with development.

Bushfire Prone Land

45. The subject land is not identified as being "bushfire prone land" on the Bushfire Prone Land Map, certified by the NSW Rural Fire Service.

Additional information provided pursuant to Section 149(5)

46. For information regarding buildings and structures on the land, please obtain a Building Certificate under Section 149A of the Environmental Planning and Assessment Act 1979.



Lucy Walker
Team Leader Development Assessment

Tamworth Regional Local Environmental Plan 2010

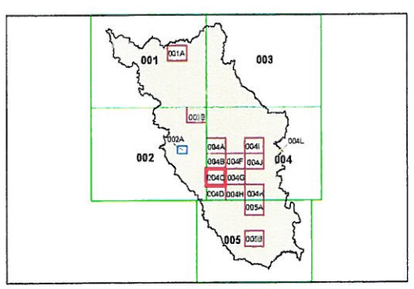
Land Zoning Map - Sheet LZN_004C

Zone

- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- B5 Business Development
- B7 Business Park
- E1 National Parks and Nature Reserves
- E2 Environmental Conservation
- E3 Environmental Management
- IN1 General Industrial
- IN3 Heavy Industrial
- R1 General Residential
- R2 Low Density Residential
- R5 Large Lot Residential
- RE1 Public Recreation
- RE2 Private Recreation
- RU1 Primary Production
- RU3 Forestry
- RU4 Rural Small Holdings
- RU5 Village
- RU6 Transition
- SP1 Special Activities
- SP2 Infrastructure
- SP3 Tourist

Cadastre

Cadastre 01/06/2010 © NSW LPMA



N

0 0.5 1 Km

Scale 1:40,000 @ A3

Projection: GDA 1994 Zone 56

Map Identification Number
7310_COM_LZN_004C_040_20101105

ATTACHMENT B

Plate 1 – Location 1, metal and timber shed storing various items on southwest corner of site.

Plate 2 – Items stored within shed at Location 2 (off-site).

Plate 3 – Items stored along outside northern wall of shed at Location 2.

Plate 4 – Corrugated metal and timber pieces lined along the western site fence in southern portion of the site.

Plate 5 – Rusted approximately 1000L empty tanks observed at Location 10.

Plate 6 – The southern boundary of the Tamworth Bridge Property with fill stockpile (Location 12) beyond.

Plate 7 – Stockpile on the northern portion of the property at Location 14.

Plate 8 – Corrugated metal shed at Location 15.

Plate 9 – Retaining wall along the northern boundary of the Tamworth Bridge Club property.

Plate 10 – Location 18, rubble filled in area.

Plate 11 – Uneven topography on the southern portion of the site.

Plate 12 – ACM fragment observed on the ground surface approximately 40m east of Location 1.

Plate 13 – Concrete dumped within Barnes Gulley at the northeast corner of the site.

Plate 14 – Bricks on the ground surface of the southern portion of the site, Location 20.

Plate 15 – The central portion of the site from the eastern edge of the northern filled area .

Plate 16 – ACM fragment observed in the top 0.1m of testpit TP5.

Plate 17 – Rubbish materials observed in fill material on the Tamworth Bridge Club.

Plate 18 – Excavating fill materials on the northern portion of the Tamworth Bridge Club.

Plate 19 – Location 21.

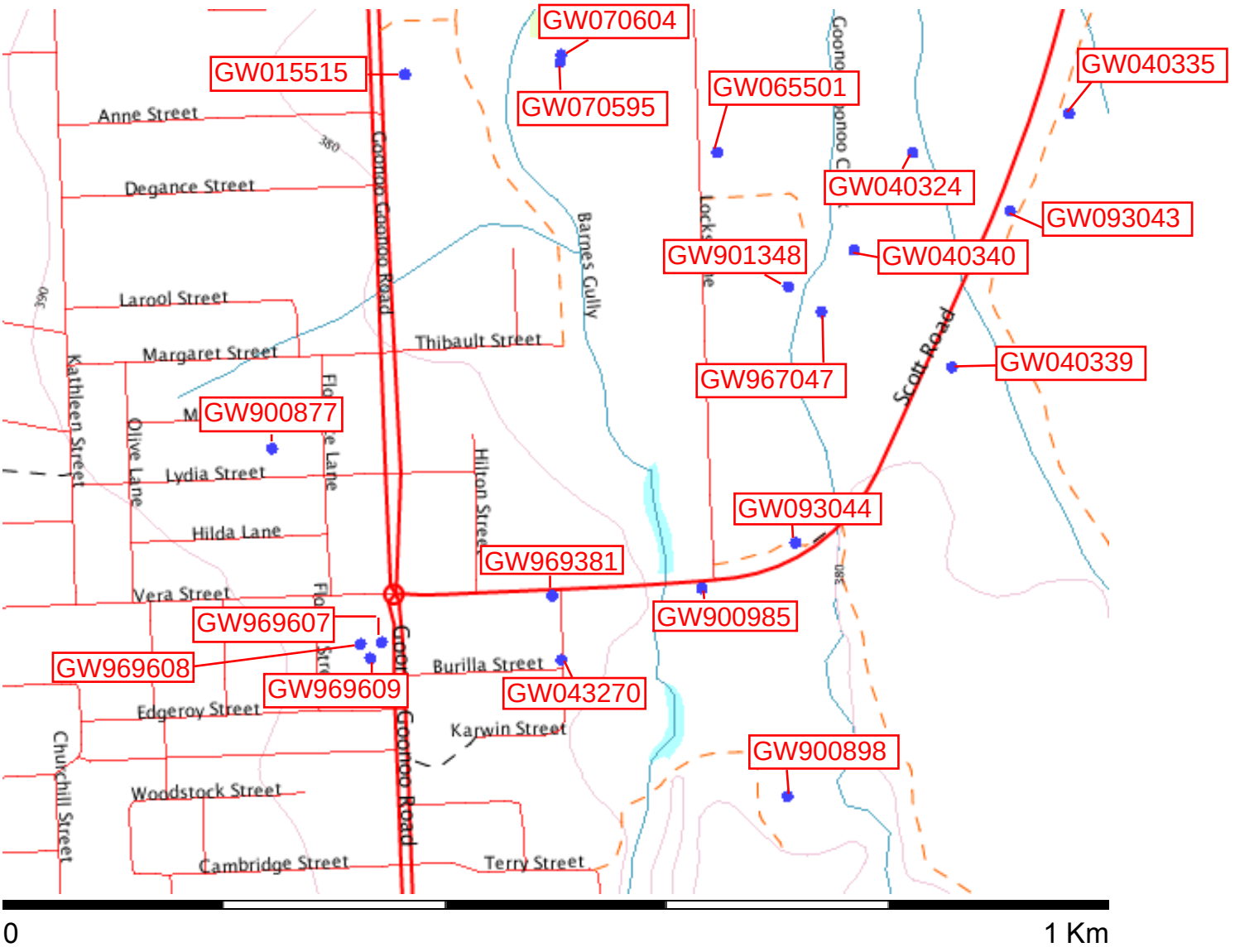
Plate 20 – Concrete and asphalt observed dumped in Barnes Gulley in the northeast portion of the site.

Plate 21 – Concrete and asphalt observed dumped in Barnes Gulley in the northeast portion of the site.

ATTACHMENT C

Bore search

Map created w ith NSW Natural Resource Atlas - http://w w w .nratlas.nsw .gov.au
Thursday, November 15, 2012



Legend

Symbol	Layer	Custodian
	Cities and large towns renderImage: Cannot build image from features	
Cowra	Populated places renderImage: Cannot build image from features	
	Towns	
	Groundwater Bores	
	Catchment Management Authority boundaries	
	Major rivers	

Topographic base map

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Friday, November 16, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW969609

Works Details (top)

GROUNDWATER NUMBER	GW969609
LIC-NUM	90BL255602
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	Equipped - bore used for obs
CONSTRUCTION-METHOD	Down Hole Hammer
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-04-08
FINAL-DEPTH (metres)	13.50
DRILLED-DEPTH (metres)	13.50
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	252-253 GOONOO GOONOO ROAD
GWMA	005 - PEEL VALLEY
GW-ZONE	002 - PEEL CATCHMENT MISCELLANEOUS FRACTURED ROCK
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556129.00
EASTING	301915.00
LATITUDE	31 6' 43"

LONGITUDE	150 55' 22"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	GIS - Geographic Information System
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	11/A/22316

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	11 22316

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	13.50	125			Down Hole Hammer
1	1	Casing	PVC Class 18	0.00	10.50	60	50		Other; Seated on Bottom; End cap
1	1	Opening	Slots - Horizontal	10.50	13.50	60			PVC Class 18; Mechanically Slotted; SL: 40mm; A: 3.8mm; Other
1		Annulus	Bentonite/Grout	9.00	10.00	125	60		
1		Annulus	Waterworn/Rounded	10.00	13.50	125	60		Graded; GS: 2-4mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
11.50	13.50	2.00							

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT

0.00	0.80	0.80	Fill
0.80	10.50	9.70	Sandstone, light brown, very dry & dusty
10.50	11.50	1.00	Sandstone, fractured
11.50	13.50	2.00	Sandstone, fractured, water bearing

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Friday, November 16, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW969608

Works Details (top)

GROUNDWATER NUMBER	GW969608
LIC-NUM	90BL255602
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	Equipped - bore used for obs
CONSTRUCTION-METHOD	Down Hole Hammer
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-04-08
FINAL-DEPTH (metres)	13.50
DRILLED-DEPTH (metres)	13.50
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	252-253 GOONOO GOONOO ROAD
GWMA	005 - PEEL VALLEY
GW-ZONE	002 - PEEL CATCHMENT MISCELLANEOUS FRACTURED ROCK
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556151.00
EASTING	301901.00
LATITUDE	31 6' 43"

LONGITUDE	150 55' 22"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	GIS - Geographic Information System
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	11/A/22316

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	11 22316

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	13.50	125			Down Hole Hammer
1	1	Casing	PVC Class 18	0.00	10.50	60	50		Other; Seated on Bottom; End cap
1	1	Opening	Slots - Horizontal	10.50	13.50	60			PVC Class 18; Mechanically Slotted; SL: 40mm; A: 3.8mm; Other
1		Annulus	Bentonite/Grout	9.00	10.00	125	60		
1		Annulus	Waterworn/Rounded	10.00	13.50	125	60		Graded; GS: 2-4mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
11.50	13.50	2.00							

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT

0.00	0.80	0.80	Fill
0.80	10.50	9.70	Sandstone, light brown, very dry & dusty
10.50	11.50	1.00	Sandstone, fractured
11.50	13.50	2.00	Sandstone, fractured, water bearing

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Thursday, November 15, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW969607

Works Details (top)

GROUNDWATER NUMBER	GW969607
LIC-NUM	90BL255602
AUTHORISED-PURPOSES	MONITORING BORE
INTENDED-PURPOSES	
WORK-TYPE	Bore
WORK-STATUS	Equipped - bore used for obs
CONSTRUCTION-METHOD	Down Hole Hammer
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-11-08
FINAL-DEPTH (metres)	13.50
DRILLED-DEPTH (metres)	13.50
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	252-253 GOONOO GOONOO ROAD
GWMA	005 - PEEL VALLEY
GW-ZONE	002 - PEEL CATCHMENT MISCELLANEOUS FRACTURED ROCK
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556154.00
EASTING	301930.00
LATITUDE	31 6' 42"

LONGITUDE	150 55' 23"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	GIS - Geographic Information System
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	11/A/22316

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	11 22316

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	13.50	125			Down Hole Hammer
1	1	Casing	PVC Class 18	0.00	10.50	60	50		Other; Seated on Bottom; End cap
1	1	Opening	Slots - Horizontal	10.50	13.50	60			PVC Class 18; Mechanically Slotted; SL: 40mm; A: 3.8mm; Other
1		Annulus	Bentonite/Grout	9.00	10.00	125	60		
1		Annulus	Waterworn/Rounded	10.00	13.50	125	60		Graded; GS: 2-4mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
11.00	13.50	2.50							

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT

0.00	0.80	0.80	Fill
0.80	10.50	9.70	Sandstone, ligth brown, very dry & dusty
10.50	11.50	1.00	Sandstone, fractured
11.50	13.50	2.00	Sandstone, fractured, water bearing

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Thursday, November 15, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW969381

Works Details (top)

GROUNDWATER NUMBER	GW969381
LIC-NUM	90WA818408
AUTHORISED-PURPOSES	DOMESTIC
INTENDED-PURPOSES	DOMESTIC
WORK-TYPE	Bore
WORK-STATUS	Supply Obtained
CONSTRUCTION-METHOD	Down Hole Hammer
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	2010-03-01
FINAL-DEPTH (metres)	18.00
DRILLED-DEPTH (metres)	18.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	LOT 3 DP 38269
GWMA	005 - PEEL VALLEY
GW-ZONE	002 - PEEL CATCHMENT MISCELLANEOUS FRACTURED ROCK
STANDING-WATER-LEVEL	3.00
SALINITY	
YIELD	1.00

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556232.00
EASTING	302160.00
LATITUDE	31 6' 40"

LONGITUDE	150 55' 32"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	GPS - Global Positioning System
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	3//38269

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	3 38269

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	18.00	170			Down Hole Hammer
1	1	Casing	PVC Class 9	-0.60	18.00	140	129		Riveted and Glued; Seated on Bottom; Open End
1	1	Opening	Slots - Vertical	12.00	18.00	140			PVC Class 9; Casing - Hand Sawn Slot; SL: 300mm; A: 4mm; Riveted and Glued

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
12.00	18.00	6.00		3.00		1.00		1.00	

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.30	0.30	Topsoil, brown		
0.30	18.00	17.70	Shale, brown, heavily broken		

Warning To Clients: This raw data has been supplied to the Department of Infrastructure, Planning and Natural Resources (DIPNR) by drillers, licensees and other sources. The DIPNR does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Tuesday, December 4, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW967047

Works Details (top)

GROUNDWATER NUMBER	GW967047
LIC-NUM	90CA814998
AUTHORISED-PURPOSES	DOMESTIC IRRIGATION STOCK
INTENDED-PURPOSES	DOMESTIC IRRIGATION STOCK
WORK-TYPE	Bore
WORK-STATUS	Supply Obtained
CONSTRUCTION-METHOD	(Unknown)
OWNER-TYPE	Local Govt
COMMENCE-DATE	
COMPLETION-DATE	
FINAL-DEPTH (metres)	3.00
DRILLED-DEPTH (metres)	3.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	GLEN WARREN
GWMA	005 - PEEL VALLEY
GW-ZONE	001 - PEEL ALLUVIUM
STANDING-WATER-LEVEL	3.00
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556687.00
EASTING	302517.00
LATITUDE	31 6' 25"

LONGITUDE	150 55' 45"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	Map Interpretation
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	10 1043823

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	10 1043823

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW901348

Works Details (top)

GROUNDWATER NUMBER	GW901348
LIC-NUM	90WA814295
AUTHORISED-PURPOSES	DOMESTIC STOCK
INTENDED-PURPOSES	DOMESTIC STOCK
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Hand Drilled
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	
FINAL-DEPTH (metres)	9.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	LOT 41
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	5.00
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556725.00
EASTING	302471.00
LATITUDE	31 6' 24"

LONGITUDE	150 55' 44"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	LOT 41 DP719840

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	41 719840

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	9.00				Hand Drilled

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW900985

Works Details (top)

GROUNDWATER NUMBER	GW900985
LIC-NUM	90CA814688
AUTHORISED-PURPOSES	DOMESTIC IRRIGATION STOCK
INTENDED-PURPOSES	DOMESTIC IRRIGATION STOCK
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Hand Drilled
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	1994-02-01
FINAL-DEPTH (metres)	4.50
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	N/A
GWMA	005 - PEEL VALLEY
GW-ZONE	001 - PEEL ALLUVIUM
STANDING-WATER-LEVEL	3.00
SALINITY	
YIELD	7.00

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556248.00
EASTING	302363.00
LATITUDE	31 6' 40"

LONGITUDE	150 55' 39"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	INGLIS
PARISH	TAMWORTH
PORTION-LOT-DP	LOT 73 DP 546058

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	731 1123640

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW900898

Works Details (top)

GROUNDWATER NUMBER	GW900898
LIC-NUM	90CA814952
AUTHORISED-PURPOSES	DOMESTIC IRRIGATION STOCK
INTENDED-PURPOSES	DOMESTIC IRRIGATION STOCK
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Hand Drilled
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	1948-01-01
FINAL-DEPTH (metres)	9.00
DRILLED-DEPTH (metres)	
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	JAMWOOD
GWMA	005 - PEEL VALLEY
GW-ZONE	-
STANDING-WATER-LEVEL	5.00
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6555921.00
EASTING	302485.00
LATITUDE	31 6' 50"

LONGITUDE	150 55' 44"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	LT 7 DP 825955

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	7 825955

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Thursday, November 15, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW900877

Works Details (top)

GROUNDWATER NUMBER	GW900877
LIC-NUM	90WA818918
AUTHORISED-PURPOSES	RECREATION (GROUNDWATER)
INTENDED-PURPOSES	DOMESTIC
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	(Unknown)
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	1995-08-05
FINAL-DEPTH (metres)	30.50
DRILLED-DEPTH (metres)	30.50
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	NA
GWMA	005 - PEEL VALLEY
GW-ZONE	002 - PEEL CATCHMENT MISCELLANEOUS FRACTURED ROCK
STANDING-WATER-LEVEL	11.00
SALINITY	
YIELD	0.48

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556457.00
EASTING	301775.00
LATITUDE	31 6' 32"

LONGITUDE	150 55' 17"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

no details

Licensed (top)

COUNTY	INGLIS
PARISH	TAMWORTH
PORTION-LOT-DP	48 15714

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	30.50	152			Rotary
1	1	Casing	PVC Class 9	-0.30	30.50	152			Glued; Seated on Bottom
1	1	Opening	Slots - Vertical	15.00	17.00	152			PVC Class 9; Sawn; SL: 200mm; A: .3mm
1	1	Opening	Slots - Vertical	25.00	27.00	152			PVC Class 9; Sawn; SL: 200mm; A: .3mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
15.20	15.50	0.30		11.00	25.90	0.45	30.50	2.00	
25.80	26.10	0.30		11.00	25.90	0.45	30.50	2.00	

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	0.60	0.60	soil		
0.60	3.90	3.30	clay		

3.90	15.20	11.30	brown shale
15.20	15.50	0.30	w.b. shale
15.50	25.20	9.70	brown shale
25.20	25.80	0.60	blue basalt
25.80	26.10	0.30	w.b. blue basalt
26.10	30.50	4.40	blue basalt

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW093044

Works Details (top)

GROUNDWATER NUMBER	GW093044
LIC-NUM	
AUTHORISED-PURPOSES	
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Rotary Mud
OWNER-TYPE	NSW Office of Water
COMMENCE-DATE	
COMPLETION-DATE	2000-02-23
FINAL-DEPTH (metres)	7.50
DRILLED-DEPTH (metres)	7.50
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	
GWMA	
GW-ZONE	
STANDING-WATER-LEVEL	
SALINITY	
YIELD	1.00

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556322.00
EASTING	302488.00
LATITUDE	31 6' 37"

LONGITUDE	150 55' 44"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	

Licensed (top)

no details

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	7.50	170			Rotary
1	1	Casing	Steel	-1.47	0.50	100	92		C: 0-.5m; Welded; Cemented; Driven into Hole; Seated on Bottom; Cap
1	1	Casing	P.V.C.	0.00	7.50	50	45		Glued; Seated on Bottom; Cap
1	1	Opening	Slots - Horizontal	4.00	7.00	50			PVC Class 12; Sawn; SL: 20mm; A: 2mm
1		Annulus	Waterworn/Rounded	3.00	7.50				Graded; GS: 3-5mm; Q: .4m³

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
4.00	7.00	3.00				1.00	7.50	1.00	

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	4.00	4.00	Black Clay		
4.00	7.00	3.00	River Gravel		

7.00	7.50	0.50	Shale Yellow

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW093043

Works Details (top)

GROUNDWATER NUMBER	GW093043
LIC-NUM	
AUTHORISED-PURPOSES	
INTENDED-PURPOSES	MONITORING BORE
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Rotary Mud
OWNER-TYPE	NSW Office of Water
COMMENCE-DATE	
COMPLETION-DATE	2000-02-24
FINAL-DEPTH (metres)	7.50
DRILLED-DEPTH (metres)	7.50
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	
GWMA	
GW-ZONE	
STANDING-WATER-LEVEL	
SALINITY	
YIELD	1.20

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556851.00
EASTING	302770.00
LATITUDE	31 6' 20"

LONGITUDE	150 55' 55"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	

Licensed (top)

no details

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	7.50	170			Rotary
1	1	Casing	Steel	-1.56	0.50	100	92		C: 0-.5m; Welded; Cemented; Driven into Hole; Cap
1	1	Casing	P.V.C.	0.00	7.50	50	45		Glued; Seated on Bottom; Cap
1	1	Opening	Slots - Horizontal	4.00	7.00	50			PVC Class 12; Sawn; SL: 20mm; A: 2mm
1		Annulus	Waterworn/Rounded	3.00	7.50				Graded; GS: 3-5mm; Q: .4m³

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
4.00	7.00	3.00				1.20	7.50	1.00	

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	3.50	3.50	Black Clay		Tikiri Tennakoon, 2/11/2010: Assigned code.
3.50	4.00	0.50	Sandy Clay		Tikiri Tennakoon, 2/11/2010: Assigned code.

4.00	7.00	3.00	River Gravels
7.00	7.50	0.50	Shale Yellow

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW070604

Works Details (top)

GROUNDWATER NUMBER	GW070604
LIC-NUM	90CA814656
AUTHORISED-PURPOSES	IRRIGATION
INTENDED-PURPOSES	IRRIGATION STOCK
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Percussion
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	1992-12-04
FINAL-DEPTH (metres)	12.40
DRILLED-DEPTH (metres)	12.40
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	172 GOONOO GOONOO RD
GWMA	005 - PEEL VALLEY
GW-ZONE	001 - PEEL ALLUVIUM
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	Est. Contour 8-15M.
NORTHING	6557086.00
EASTING	302156.00
LATITUDE	31 6' 12"

LONGITUDE	150 55' 32"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	GD.,ACC.MAP
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	LOT 12 DP975065

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	62 1011819

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.01	12.40	300			Percussion
1	1	Casing	Steel	-2.00	9.00	200	188		Suspended in Clamps
1	1	Casing	Steel	9.00	12.40	155			Seated on Bottom
1	1	Opening	Slots - Horizontal	9.00	12.40	155		1	Steel; Sawn; SL: .08mm; A: 3mm
1	1	Annulus	Crushed Aggregate	0.50	12.00	300			(Unknown); GS: 6-12mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
9.00	12.00	3.00	Unconsolidated	5.10		12.50			invalid code

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT

0.00	2.60	2.60	Alluvial Top Soil
2.60	4.50	1.90	Sandy Clay
4.50	5.80	1.30	Dry Gravel
5.80	9.70	3.90	Mud Stone
9.70	11.80	2.10	River Gravel
11.80	12.40	0.60	Compacted Gravel and Clay (hard)

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW070595

Works Details (top)

GROUNDWATER NUMBER	GW070595
LIC-NUM	90BL152270
AUTHORISED-PURPOSES	STOCK
INTENDED-PURPOSES	STOCK
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Other
OWNER-TYPE	
COMMENCE-DATE	
COMPLETION-DATE	1992-12-04
FINAL-DEPTH (metres)	12.40
DRILLED-DEPTH (metres)	12.40
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	N/A
GWMA	-
GW-ZONE	-
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	
AREA-DISTRICT	
CMA-MAP	
GRID-ZONE	
SCALE	
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6557074.00
EASTING	302155.00
LATITUDE	31 6' 13"

LONGITUDE	150 55' 32"
GS-MAP	
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

no details

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	LOT 11 DP 975065

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1		Hole	Hole	0.00	12.40	300			Other
1	1	Casing	Steel	-2.00	9.00	200	188		Suspended in Clamps
1	1	Casing	Steel	9.00	12.40				Seated on Bottom
1	1	Opening	Slots - Horizontal	9.00	12.40	155			Steel; Sawn; SL: 75mm
1		Annulus	Crushed Aggregate	0.50	12.00				(Unknown); GS: 6-12mm; Q: 1.5m³

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
9.00	12.00	3.00		5.10	9.00	12.50	12.40	16.00	

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	2.60	2.60	ALLUVIAL SOIL		
2.60	4.50	1.90	SANDY CLAY		
4.50	5.80	1.30	DRY GRAVEL		
5.80	9.70	3.90	MUD STONE		
9.70	11.80	2.10	RIVER GRAVEL		

11.80	12.40	0.60	COMPACTED GRAVEL AND CLAY (HARD)

Groundwater Works Summary

For information on the meaning of fields please see Glossary
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Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW065501

Works Details (top)

GROUNDWATER NUMBER	GW065501
LIC-NUM	90CA814718
AUTHORISED-PURPOSES	IRRIGATION
INTENDED-PURPOSES	IRRIGATION
WORK-TYPE	Well
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Hand Dug
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	1966-01-01
FINAL-DEPTH (metres)	9.00
DRILLED-DEPTH (metres)	0.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	N/A
GWMA	005 - PEEL VALLEY
GW-ZONE	001 - PEEL ALLUVIUM
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	
NORTHING	6556936.00
EASTING	302371.00
LATITUDE	31 6' 17"

LONGITUDE	150 55' 40"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	LT1 DP162235

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	2 162235

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL DETAIL
1	1	Casing	Concrete	0.00	1.00	1200		

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Thursday, November 15, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW043270

Works Details (top)

GROUNDWATER NUMBER	GW043270
LIC-NUM	90WA814123
AUTHORISED-PURPOSES	DOMESTIC
INTENDED-PURPOSES	GENERAL USE
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Cable Tool
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	1974-11-01
FINAL-DEPTH (metres)	13.10
DRILLED-DEPTH (metres)	13.10
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	N/A
GWMA	005 - PEEL VALLEY
GW-ZONE	002 - PEEL CATCHMENT MISCELLANEOUS FRACTURED ROCK
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	(Unknown)
NORTHING	6556131.00
EASTING	302174.00
LATITUDE	31 6' 43"

LONGITUDE	150 55' 32"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	GD.,PR. MAP
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	AACO 15

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	16 236184

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1	1	Casing	P.V.C.	-0.60	13.10	152			Seated on Bottom
1	1	Opening	Slots	7.00	13.00	152		1	Plastic; SL: 0mm; A: 3.17mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
7.00	7.00	0.00	Fractured	6.00		0.51			(Unknown)

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	1.21	1.21	Clay Black		
1.21	4.26	3.05	Clay Gravel		
4.26	10.05	5.79	Shale Water Supply		
10.05	12.19	2.14	Gravel		
12.19	13.10	0.91	Rock		

Warning To Clients: This raw data has been supplied to the Department of Infrastructure, Planning and Natural Resources (DIPNR) by drillers, licensees and other sources. The DIPNR does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Tuesday, December 4, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW040340

Works Details (top)

GROUNDWATER NUMBER	GW040340
LIC-NUM	
AUTHORISED-PURPOSES	
INTENDED-PURPOSES	PUBLIC/MUNICIPL
WORK-TYPE	Well
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	(Unknown)
OWNER-TYPE	Local Govt
COMMENCE-DATE	
COMPLETION-DATE	1931-01-01
FINAL-DEPTH (metres)	7.00
DRILLED-DEPTH (metres)	0.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	
GWMA	
GW-ZONE	
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	(Unknown)
NORTHING	6556785.00
EASTING	302559.00
LATITUDE	31 6' 22"

LONGITUDE	150 55' 47"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	GD.,ACC.MAP
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	AACO 4

Licensed (top)

no details

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1	1	Casing	Concrete Cylnder	0.00	0.00	4000			(Unknown)

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Tuesday, December 4, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW040339

Works Details (top)

GROUNDWATER NUMBER	GW040339
LIC-NUM	
AUTHORISED-PURPOSES	
INTENDED-PURPOSES	PUBLIC/MUNICIPL
WORK-TYPE	Well
WORK-STATUS	Supply Obtained
CONSTRUCTION-METHOD	(Unknown)
OWNER-TYPE	Local Govt
COMMENCE-DATE	
COMPLETION-DATE	1931-01-01
FINAL-DEPTH (metres)	11.00
DRILLED-DEPTH (metres)	0.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	
GWMA	
GW-ZONE	
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	(Unknown)
NORTHING	6556603.00
EASTING	302695.00
LATITUDE	31 6' 28"

LONGITUDE	150 55' 52"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	GD.,ACC.MAP
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	AACO 11

Licensed (top)

no details

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1	1	Casing	Concrete Cylinder/Timber	0.00	0.00	4000			(Unknown)

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Tuesday, December 4, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW040335

Works Details (top)

GROUNDWATER NUMBER	GW040335
LIC-NUM	
AUTHORISED-PURPOSES	
INTENDED-PURPOSES	PUBLIC/MUNICIPL
WORK-TYPE	Well
WORK-STATUS	Supply Obtained
CONSTRUCTION-METHOD	(Unknown)
OWNER-TYPE	Local Govt
COMMENCE-DATE	
COMPLETION-DATE	1931-01-01
FINAL-DEPTH (metres)	11.00
DRILLED-DEPTH (metres)	0.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	
GWMA	
GW-ZONE	
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	(Unknown)
NORTHING	6557006.00
EASTING	302847.00
LATITUDE	31 6' 15"

LONGITUDE	150 55' 58"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	GD.,ACC.MAP
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	AACO 10

Licensed (top)

no details

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1	1	Casing	Concrete Cylinder/Timber	0.00	0.00	4000			(Unknown)

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Tuesday, December 4, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW040324

Works Details (top)

GROUNDWATER NUMBER	GW040324
LIC-NUM	
AUTHORISED-PURPOSES	
INTENDED-PURPOSES	PUBLIC/MUNICIPL
WORK-TYPE	Well
WORK-STATUS	Supply Obtained
CONSTRUCTION-METHOD	(Unknown)
OWNER-TYPE	Local Govt
COMMENCE-DATE	
COMPLETION-DATE	1945-01-01
FINAL-DEPTH (metres)	7.00
DRILLED-DEPTH (metres)	0.00
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	
GWMA	
GW-ZONE	
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	(Unknown)
NORTHING	6556941.00
EASTING	302636.00
LATITUDE	31 6' 17"

LONGITUDE	150 55' 50"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	GD.,ACC.MAP
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	AACO 2

Licensed (top)

no details

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1	1	Casing	Concrete Cylnder	0.00	0.00	1100			(Unknown)

Water Bearing Zones (top)

no details

Drillers Log (top)

no details

Groundwater Works Summary

For information on the meaning of fields please see Glossary
Document Generated on Tuesday, December 4, 2012

Print Report

Works Details Site Details Form A Licensed Construction Water Bearing Zones Drillers Log

Work Requested -- GW015515

Works Details (top)

GROUNDWATER NUMBER	GW015515
LIC-NUM	90WA813994
AUTHORISED-PURPOSES	DOMESTIC
INTENDED-PURPOSES	GENERAL USE
WORK-TYPE	Bore
WORK-STATUS	(Unknown)
CONSTRUCTION-METHOD	Cable Tool
OWNER-TYPE	Private
COMMENCE-DATE	
COMPLETION-DATE	1958-01-01
FINAL-DEPTH (metres)	7.90
DRILLED-DEPTH (metres)	7.90
CONTRACTOR-NAME	
DRILLER-NAME	
PROPERTY	N/A
GWMA	005 - PEEL VALLEY
GW-ZONE	002 - PEEL CATCHMENT MISCELLANEOUS FRACTURED ROCK
STANDING-WATER-LEVEL	
SALINITY	
YIELD	

Site Details (top)

REGION	90 - BARWON
RIVER-BASIN	419 - NAMOI RIVER
AREA-DISTRICT	
CMA-MAP	9035-1N
GRID-ZONE	56/1
SCALE	1:25,000
ELEVATION	
ELEVATION-SOURCE	(Unknown)
NORTHING	6557051.00
EASTING	301945.00
LATITUDE	31 6' 13"

LONGITUDE	150 55' 24"
GS-MAP	0033D1
AMG-ZONE	56
COORD-SOURCE	
REMARK	

Form-A (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	9

Licensed (top)

COUNTY	PARRY
PARISH	CALALA
PORTION-LOT-DP	PT 12

Construction (top)

Negative depths indicate Above Ground Level;H-Hole;P-Pipe;OD-Outside Diameter;
ID-Inside Diameter;C-Cemented;SL-Slot Length;A-Aperture;GS-Grain Size;Q-Quantity

HOLE-NO	PIPE-NO	COMPONENT-CODE	COMPONENT-TYPE	DEPTH-FROM (metres)	DEPTH-TO (metres)	OD (mm)	ID (mm)	INTERVAL	DETAIL
1	1	Casing	Threaded Steel	-0.20	7.80	76			Suspended in Clamps
1	1	Opening	Slots		0.90	76		1	SL: 0mm; A: 0mm

Water Bearing Zones (top)

FROM-DEPTH (metres)	TO-DEPTH (metres)	THICKNESS (metres)	ROCK-CAT-DESC	S-W-L	D-D-L	YIELD	TEST-HOLE-DEPTH (metres)	DURATION	SALINITY
7.60	7.60	0.00	Unconsolidated	6.40		0.13			Hard

Drillers Log (top)

FROM	TO	THICKNESS	DESC	GEO-MATERIAL	COMMENT
0.00	2.13	2.13	Soil Black		
2.13	4.88	2.75	Loam Sandy		
4.88	7.01	2.13	Clay Sandy		
7.01	7.92	0.91	Gravel Fine River		

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ATTACHMENT D

Job No 5908577

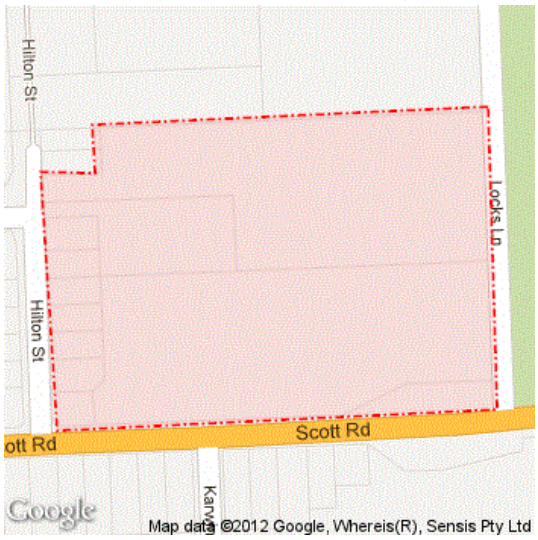
Phone: 1100
www.1100.com.au

Caller Details

Contact:	Miss Jenna Seymour	**Caller Id:**	926297	**Phone:**	0299791722
Company:	Geo-Logix Pty Ltd	**Mobile:**	Not Supplied	**Fax:**	0299791222
Address:	Unit 2309 4 Daydream St WARRIEWOOD NSW 2102	**Email:**	jseymour@geo-logix.com.au		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.



User Reference: Not Supplied
Working on Behalf of:
Private

Enquiry Date:	Start Date:	End Date:
15/11/2012	20/11/2012	22/11/2012

Address:
Hilton St
South Tamworth NSW 2340

Job Purpose: Excavation
Onsite Activity: Vertical Boring
Location of Workplace: Private Property
Location in Road: Not Supplied

- Check that the location of the dig site is correct. If not you must submit a new enquiry.
- Should the scope of works change, or plan validity dates expire, you must submit a new enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:
Not Supplied

Your Responsibilities and Duty of Care

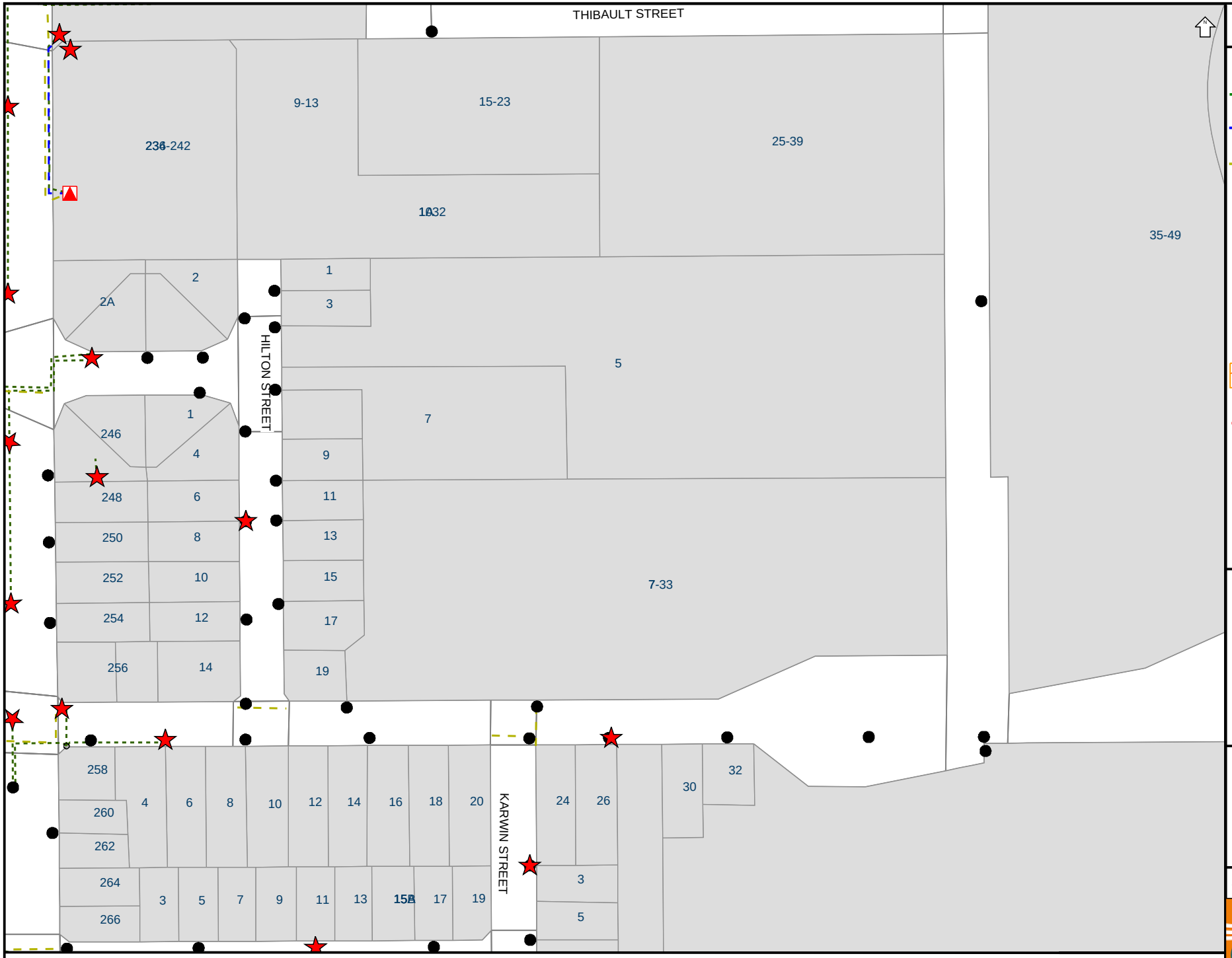
- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at **www.1100.com.au**
- **For more information on safe excavation practices, visit www.1100.com.au**

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days. Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Dial Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
# Asset owners highlighted with a hash require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
27071929	Essential Energy (formerly Country Energy)	132391	NOTIFIED
27071931	Jemena Gas Central Ranges	0402059814	NOTIFIED
27071932	Soul Australia Communication	0249273525	NOTIFIED
27071930	Telstra NSW, North	1800653935	NOTIFIED

END OF UTILITIES LIST



Overhead wires not shown LOOK UP & LIVE!

LEGEND

- LV Underground Cable
- HV Underground Cable
- Underground Pipe
- Underground Earth or Wires
- Ground Substation
- Pole
- Cubicle
- Pit
- Proposed Construction
- Critical* Underground Cable
- Critical* Zone Substation

* Critical Assets: Contact Essential Energy on 13 23 91

THE INFORMATION ON THIS MAP MAY NOT BE ACCURATE.
If details are incorrect, please notify Essential Energy on 13 23 91 (or fax 1800 354 636)

ISSUE DATE: 15/11/2012

You must resubmit your request if you have not started work within 4 weeks of the 'Issue Date' above

A4 | SCALE: 1:2261

Job Number: 5908577 Sequence number: 27071929 Job location: Hilton St, South Tamworth

Map Centre: 150° 55' 33.6", -31° 6' 34.9"

essential energy

ELECTRICAL HAZARD AWARENESS

When excavating near electrical infrastructure

For Dial Before You Dig customers

A vital source of energy

Electricity is a vital source of energy used daily by thousands of Australian households, businesses and work sites. While the Australian electricity network is one of the safest and most reliable in the world, it is not without its hazards.

Every year in Australia, workers are hurt from coming into contact with live powerlines, above and below the ground. Workers who know about the dangers of working near electricity still find themselves in hazardous situations because they do not adopt safe work practices

Do not let electricity be a risk to your life or your work mates.

Keeping SAFE

To keep safe, follow these easy steps before commencing work (and remember that if you're an employer, you have a legal obligation to ensure that these steps are followed):

1. **Spot the hazards** – consider the work to be done.
2. **Assess** the risks from these hazards. What are the possible outcomes?
3. **Fix** the problem so it is safe to commence work.
4. **Evaluate** the effectiveness of the solutions you have put in place – do they work and how well?

Spot the hazards

Look for and find all electricity

Electrical injuries can be avoided if potential hazards are identified before work commences on a property or site.

- Look around and identify the location of overhead powerlines
- Talk to the person in control of the work location about any work areas which may be hazardous

To help keep you safe when working near underground cables, remember to:

- Contact **Dial Before You Dig** (1100) BEFORE you start any excavation. Severe penalties apply if you do not. Even if no incident occurs.

DIAL BEFORE YOU DIG www.1100.com.au

- Check the map that Essential Energy has provided for the location of any underground cables
- Check the work area for other forms of electrical equipment, including street lights, ground substations, phone boxes or traffic lights – all good indicators that underground cables will be present
- While excavating look out for sand, plastic strips or specially marked bricks when excavating, which signal the presence of underground cables.
- Only use air/vacuum equipment to pot hole that operates at or less than 13,790Kpa (2000psi)

Contact details

Essential Energy General Enquiries	**13 23 91**
Essential Energy Supply Interruptions	**13 20 80**
WorkCover NSW	**13 10 50**
Department of Infrastructure and Investment Energy division.	**02 8281 7777**

essential energy

Assess the risks

Work out what could go wrong

Once any electrical Hazards have been identified, the potential risks of working close to them need to be assessed.

When excavating near underground cables, always remember:

- Plans and maps identifying the location of underground cables can date quickly, and underground depths can alter after road upgrades, developments or just simple erosion.
- Evaluate the risk of the reference point of the measurements has been moved. For example, if a road has been widened then measurements from the gutter may no longer be correct.
- The depth of underground cables can vary from site to site, or even on the same property
- Underground cables should never be moved or relocated unless under the express authority of the organisation or person responsible for the powerlines
- Other service lines (for example gas pipes and communication cables) can also be present on a dig
- New electrical cables are sometimes laid using old conduits
- Various methods of protecting underground cables may be utilised (for example electrical bricks, conduits or flat PVC barriers).
- Earth cables are an important part of all electrical installations and can have potentially dangerous electrical current flowing through them. They usually have a green and yellow covering but could be a bare cable buried directly in the ground. Even if the map provided does not show underground cables, earth cables may be present. If an earth cable has been damaged, maintain a clearance of 3 meters and contact Essential Energy on **13 23 91**.

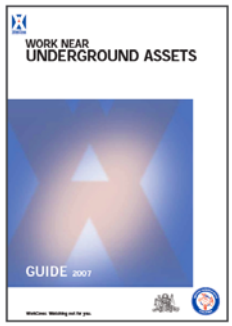
Fix the problem

Make sure it can't go wrong

You should ensure that people at work, their equipment (tools and plant) or materials do not come within close proximity to overhead powerlines unless:

- A written risk assessment has been completed and a safe system of work implemented

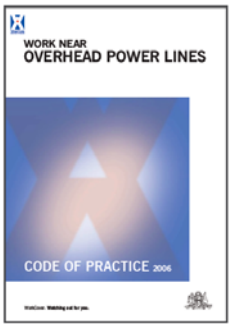
- The relevant safety precautions and worker training requirements, including WorkCover Codes of Practice and Essential Energy's requirements, have been implemented and complied with.



If Excavating in close proximity to overhead and underground cables is unavoidable then you must comply with the requirements of the WorkCover Code of Practice for work near overhead power

Have the power switched off by Essential Energy. Consider all conductors as live unless it is positively known they have been de-energised.

Where appropriate, provide ground barriers to warn workers of the presence of powerlines.



Where the hazard cannot be removed or reduced, establishing work rules or safe work procedures and practices may be the only option. All workers should be involved in developing these rules to protect their own health, safety and welfare. It is important that all workers be trained in the rules, prior to work commencing.

These safe practices may include:

- Nominating a trained powerline 'observer' or 'spotter', who is not to perform any other tasks while they are observing the work being carried out, to ensure safe distances are maintained
- Workers and their equipment should not approach overhead powerlines any closer than the following:

Powerlines with voltages up to 132,000 volts	e.g. low voltage and high voltage distribution and subtransmission lines, usually on poles	3m
Between 132,000 and 330,000 volts	e.g. subtransmission and transmission lines on either poles or towers	6m
More than 330,000 volts	e.g. transmission lines usually on towers	8m

essential energy

Evaluate the effectiveness of controls

The last step is to monitor and review the changes to determine the effectiveness of the control measures implemented. To do this you may:

Determine whether the chosen control measures have been implemented as planned

- Are chosen control measures in place?
- Are the measures being used?
- Are the measures being used correctly?

Determine whether chosen control measures are working

- Have the changes made to control exposure to the assessed risk(s) resulted in what was intended?
- Has exposure to the assessed risk(s) been eliminated or adequately reduced?

Determine whether there are any new hazards

- Have the implemented control measures resulted in the introduction of any new hazards or in the worsening of any existing hazards?

If contact with a power cable does occur

By following the steps mentioned in this fact sheet, work sites and properties should be free of electrical hazards before work commences. In the event that contact with a power cable still occurs, remembering the following points could help save a life:

- An attempt should be made to break the machinery's contact with the powerline by using the controls to move the machine away
- If it is not possible to break the contact with the powerline, operators of machinery should make no attempt to leave their cabin until the power has been switched off and the 'all clear' has been given
- **Essential Energy should be called immediately on 13 20 80 to switch off the power**
- **If you cannot get through to Essential Energy call 000 (triple Zero) and ask for the police.**
- Bystanders should be kept at least eight metres away from the machinery and damaged powerlines
- If immediate evacuation of the cabin is essential, in the case of fire for example, drivers should jump well clear, ensuring they do not touch the machinery and the ground at the same time, and then hop or shuffle away from the machine, keeping both legs together at all times. It is recommended that operators of high machinery practise this technique on a regular basis
- Untrained, unequipped persons should not attempt to rescue a person receiving an electric shock. All too often secondary deaths occur because others get electrocuted trying to help earlier victims.

Emergency situations

In the situation where emergency excavation work is necessary and immediate action is required;

Or

In the event that electricity cables, powerlines, poles or equipment connected to poles are damaged;

Contact Essential Energy immediately on our 24 hour Supply Interruptions line - 13 20 80.

If you cannot get through to Essential Energy and there is an immediate risk to life call 000 (triple Zero) and ask for the police.

Electricity and powerlines are a necessary part of working life

Electricity and powerlines are an essential part of working life – but are a potential workplace hazard.

While every situation is different, being aware of the hazards posed by powerlines and taking the necessary safety precautions can help save lives, including your own.

For more information on how to keep your workplace or property 'power safe', contact Essential Energy on 13 23 91

essential energy

CABLE/PIPE LOCATION

No assets were found in the search area

COMPANY NAME:	Geo-Logix Pty Ltd
ATTENTION:	Miss Jenna Seymour
EMAIL:	jseymour@geo-logix.com.au
SEARCH LOCATION:	Hilton St South Tamworth NSW 2340
SEQUENCE NO:	27071929
DATE:	Thursday, 15 November 2012

Provision of Plans:
Please find enclosed plans depicting approximate locations of **Essential Energy** assets in the search location***. The excavator must not assume that there may not be assets owned by other network operators in the search location.***

Underground assets searched for	Underground assets found
Essential Energy Electrical	☑
Essential Energy Water & Sewerage	☐

Plans are updated from time to time to record changes to underground assets. In the event that excavation does not commence within 28 days of receipt of a plan, a new plan should be obtained.

The excavator must retain the plans on site for the duration of the works.

The excavator shall report all damage made to Essential Energy assets immediately. Note that damage includes gouges, dents, holes and gas escapes.

IN CASE OF EMERGENCY OR TO REPORT DAMAGE:
PHONE 13 20 80

DISCLAIMER

Please be aware that plans may **not** reflect alterations to surface levels or the position of roads, buildings, fences etc. **Cable and pipe locations are approximate** and the plans are **not** suitable for scaling purposes. *Essential Energy does not retain plans for underground electrical or water & sewerage assets located on private property. Underground electrical assets located on private property are the responsibility of the owner*.

The plans have been prepared for Essential Energy's own use. **Essential Energy cannot and does not warrant the accuracy or completeness of the plans**. Essential Energy supplies them at no cost with the object of reducing the serious risk of unintentional damage being caused to its cables and pipes. **Essential Energy does not accept any liability for inaccuracies or any lack of information on the plans.**

Continued on page 2

www.essentialenergy.com.au
ABN 37 428 185 226
PO Box 718 Queanbeyan NSW 2620
Telephone: 13 23 91 Facsimile: 1800 354 636

Location of Assets on Site:
The plans indicate only that cables and pipes may exist in the general vicinity – they do not pinpoint the exact location of the cables and pipes. .

All individuals have a duty of care they must observe when working in the vicinity of underground cables and pipes. It is the **excavator's responsibility to visually expose the underground cables and pipes manually**, **ie. by using hand-held tools and non-destructive pot-holing techniques**. The excavator will be held responsible for all damage caused to the Essential Energy network or cables and pipes, and for the costs associated with the repair of any such damage. The excavator will also be held responsible for all damage caused to any persons.

When digging in the vicinity of underground assets, persons should observe the requirements of the **Work Near Underground Assets Guideline** published by the Work Cover Authority. (This is available at:
http://www.workcover.nsw.gov.au/formspublications/publications/pages/WC01419_WorkNearUndergroundAssets.aspx

or you may request a copy by calling Essential Energy on 13 23 91).

In addition:

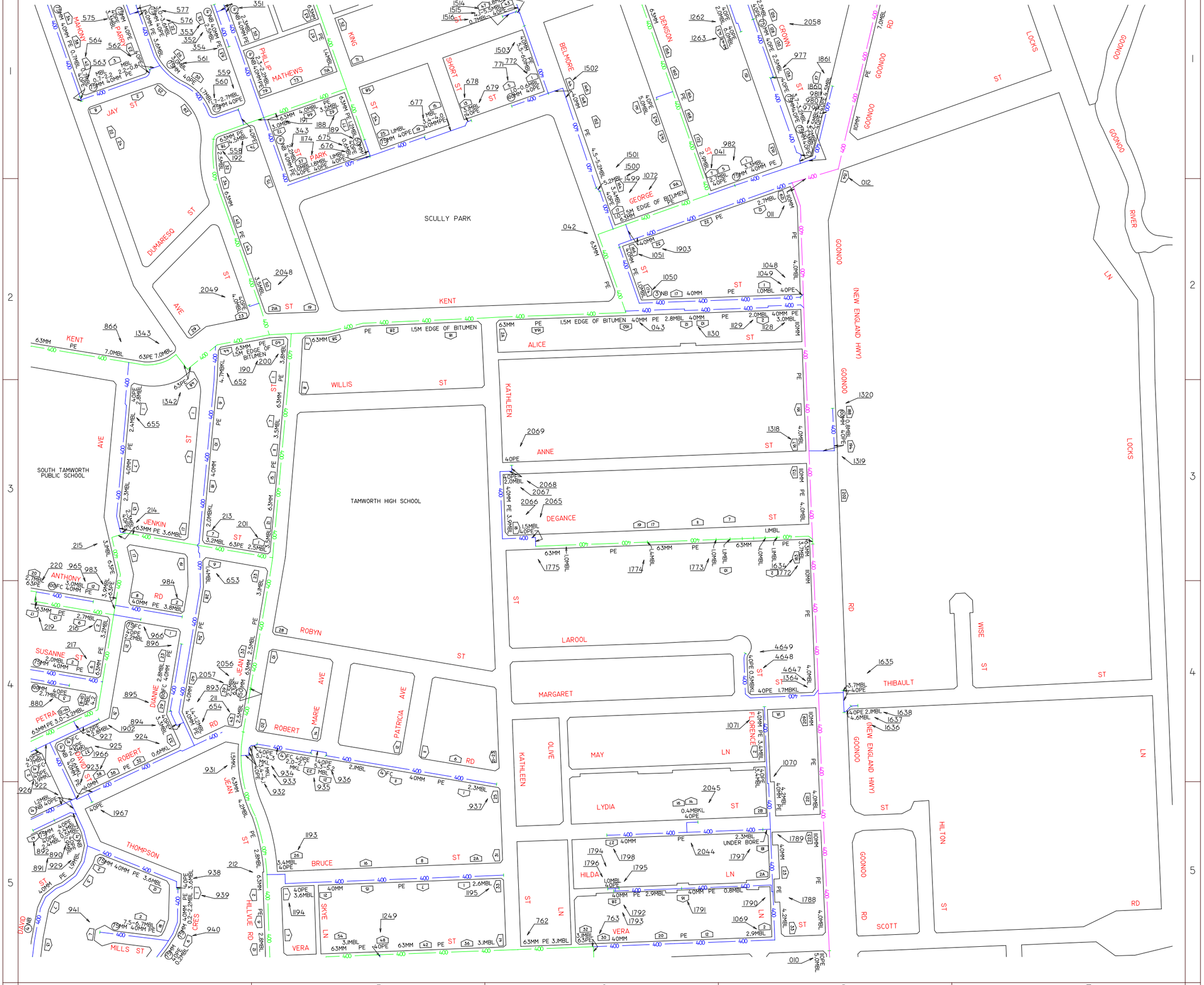
When digging in the vicinity of **electrical assets** persons should observe the requirements of the **Electricity Supply Act 1995.**
Persons excavating near live underground electrical reticulation and/or earthing cables **must exercise extreme caution at all times and adhere to the requirements of Essential Energy's Electrical Safety Rules**. (These are available on our website: http://www.essentialenergy.com.au/contestableworks). In some situations these procedures call for work to be performed by authorised staff.
Should there be any doubt as to the exact location of any underground electrical assets, and the potential for conflict with live underground cables caused by excavation at your work site is possible, you should contact **13 23 91** to arrange for an on-site location**.** No construction or excavation work is to commence prior to this on-site location and approval being obtained.

When digging in the vicinity of **water or sewer assets** persons should observe the requirements of the **Water Management Act 2000.**
Should there be any doubt as to the exact location of any underground water and sewer assets, and the potential for conflict with underground water and sewer pipes caused by excavation at your work site is possible, you should contact **13 23 91** to arrange for an on-site location**.** No construction or excavation work is to commence prior to this on-site location and approval being obtained.

Prior Notification:
Please note that you should allow for a **minimum of five (5) working days advance notice** in your construction program to permit Essential Energy time to allocate the necessary field resources to carry out the inspection at the site if required. This service may incur a fee and this can be negotiated with the local Area Coordinator at the time of making the appointment. Failure to give reasonable notice to the local Area Coordinator may result in disruption to Essential Energy's planned works program in the district and could incur an extra charge over and above the normal rate for this service.

For further information please call 13 23 91.

www.essentialenergy.com.au
ABN 37 428 185 226
PO Box 718 Queanbeyan NSW 2620
Telephone: 13 23 91 Facsimile: 1800 354 636



TAMWORTH 4B

SCALE 1:2000

50 0 50 100 150 200

THIS MAP UPDATED ON 30/10/2012
THIS PLAN IS DIAGRAMATIC ONLY. DISTANCES SCALED FROM THIS PLAN MAY NOT BE ACCURATE.

DATE ALTERED:..... BY:.....

TAMIC	TAMID	TAM2C
TAM4A	TAM4B	TAM5A
TAM4C	TAM4D	TAM5C

ADJOINING MAPS

III	TAMWORTH
NETWORK AREA	MUNICIPALITY AREA

Jemena

KEY

MAX ALLOWABLE OPERATING PRESSURE

T	TRUNK MAIN	7000 kPa
P	PRIMARY MAIN	3500 kPa
S	SECONDARY MAIN	1050 kPa
		300 kPa
		210 kPa
		7 kPa
400		400 kPa
100		100 kPa
		2 kPa
	PROPOSED MAINS	
PR II-2 3	STEEL MAIN PROJECT NUMBER	
P	PRESSURE MONITORING STATION	
	VALVE	
	SYSTEM PRESSURE REGULATOR	
S	SIPHON	
123	NETWORK NODES	
123S	ITEM DETAIL SKETCH AVAILABLE	
298	VALVE NUMBER (OLD NUMBERING)	
6NB	6 INCH CAST IRON MAIN	
150MM	150MM STEEL MAIN	
110MM PE/NY	110MM POLYETHYLENE/NYLON MAIN	
6NB 50MM NY	50MM NYLON INSERTED INTO 6NB MAIN CAST IRON MAIN	
1.2MBL	DISTANCE IN METRES OF MAIN FROM BUILDING LINE (TOLERANCE OF 0.4M)	
1957	YEAR LAID	
	MUNICIPALITY BOUNDARY	
	NETWORK BOUNDARY	
123	HOUSE NUMBER	

TAMWORTH 4B

Network Protection

Assets Affected

In reply to your enquiry, there are gas mains at the location of your intended work as per the attached map. For an explanation of the map, please see the key below. The following excavation guidelines apply.

Excavation Guidelines:

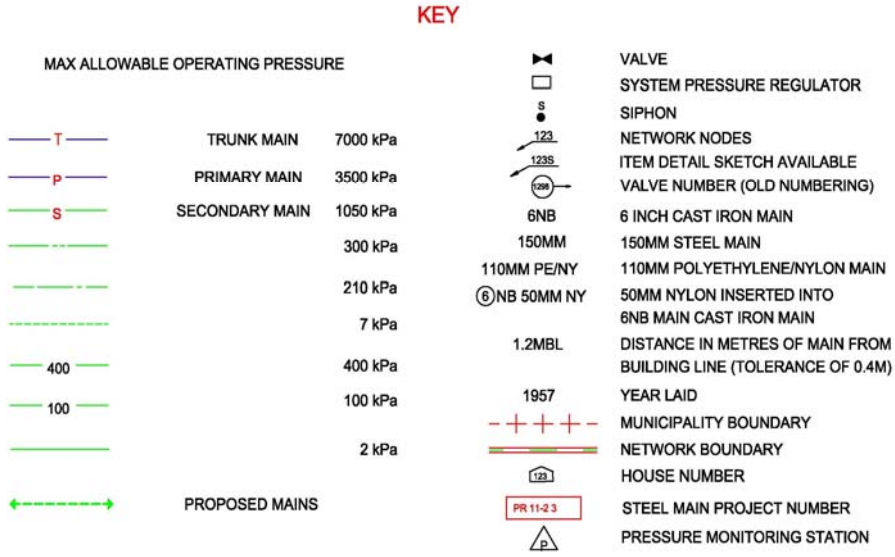
It is essential the location of gas pipe/s are confirmed by carefully pot-holing by hand excavation prior to proceeding with mechanical excavation in the vicinity of gas pipes. If you cannot locate the gas main, contact the local depot.

In accordance with clause 34D(1) of the Gas Supply (Safety and Network Management) Regulation 2008 (NSW), you should be informed that all excavation, (including pot-holing by hand to confirm the location of pipes) should be performed in accordance with "***Work Near Underground Assets Guideline"*** *published in 2007 by the Work Cover Authority.*

A copy of this Guideline is available at: www.workcover.nsw.gov.au

DBYD Administration 1300 880 906

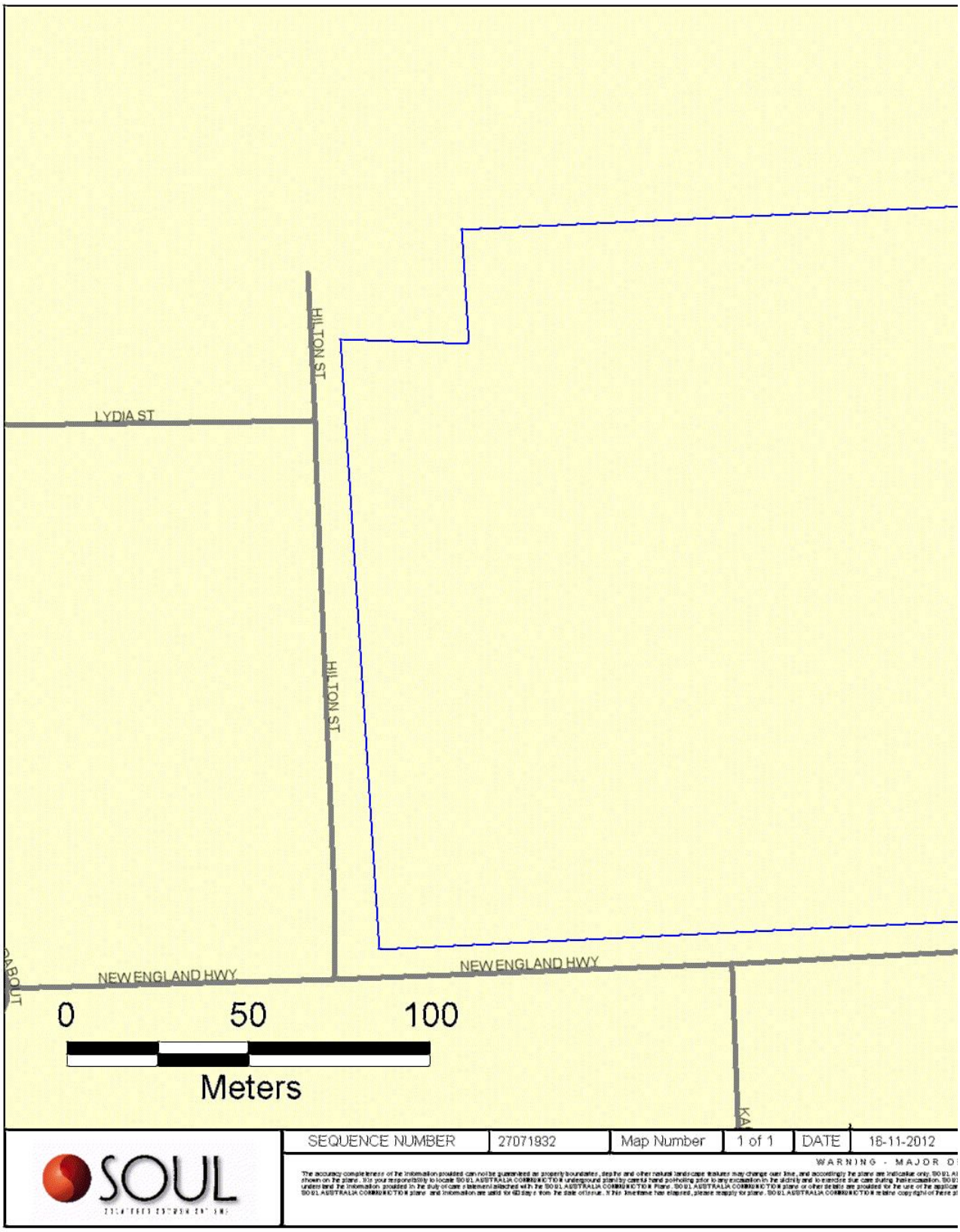
KEY



Warning: The enclosed plans show the position of Jemena Gas Networks (NSW) Ltd's underground gas mains and installations in public gazetted roads only. **Individual customers' services and services belonging to other third parties are not included** on these plans. These plans have been prepared solely for the use of Jemena Gas Networks (NSW) Ltd and Jemena Asset Management Pty Ltd (together "**Jemena**") and any reliance placed on these plans by you is entirely at your own risk. The plans may show the position of underground mains and installations relative to fences, buildings etc., as they existed at the time the mains etc were installed. The plans may not have been updated to take account of any subsequent change in the location or style of those features since the time at which the plans were initially prepared. Jemena makes no warranty as to the accuracy or completeness of the enclosed plans and does not assume any duty of care to you nor any responsibility for the accuracy, adequacy, suitability or completeness of the plans or for any error, omission, lack of detail, transmission failure or corruption in the information provided. Jemena does not accept any responsibility for any loss that you or anyone else may suffer in connection with the provision of these plans, however that loss may arise (including whether or not arising from the negligence of Jemena, its employees, agents, officers or contractors). The recipient of these plans must use their own care and diligence in carrying out their works and must carry out further surveys to locate services at their work site. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to Jemena's underground mains and equipment. In accordance with the Work Near Underground Assets Guideline published in 2007 by Work Cover Authority, Jemena recommends that you carry out potholing by hand to accurately confirm the location of gas mains and installation prior to commencing excavations.

In case of Emergency Phone 131 909 (24 hours)

Trent
02 9397 9281


HILTON ST
LYDIA ST
HILTON ST
NEW ENGLAND HWY
NEW ENGLAND HWY
0
50
100
Meters
SEQUENCE NUMBER
27071932
Map Number
1 of 1
DATE
16-11-2012
SOUL

Telstra Corporation Limited

DUTY OF CARE

IMPORTANT:

Please read and understand all the information and disclaimers provided below.
Sketches and Plans provided by Telstra are circuit diagrams only and indicate the presence of telecommunications plant in the general vicinity of the geographical area shown; exact ground cover and alignments cannot be given with any certainty and cover may alter over time. Telecommunications plant seldom follow straight lines and careful on site investigation is essential to uncover and reveal its exact position.
Due to the nature of Telstra plant and the age of some cables and records, it is impossible to ascertain the location of all Telstra plant. The accuracy and/or completeness of the information can not be guaranteed and, accordingly Telstra plans are intended to be indicative only.

"DUTY OF CARE"

When working in the vicinity of telecommunications plant you have a legal "Duty of Care" that must be observed.

It is the responsibility of the owner and any consultant engaged by the owner, including an architect, consulting engineer, developer, and head contractor to design for minimal impact and protection of Telstra plant. Telstra will provide plans and sketches showing the presence of its network to assist at this design stage.

It is the owner's (or constructor's) responsibility to:-

a) request plans of Telstra plant for a particular location at a reasonable time before construction begins. If you have any doubts as to the exact location of Telstra Plant, we strongly recommend that you engage an Accredited plant Locator in your area;

b) visually locate Telstra plant by hand digging or using non destructive water jet method (pot holing) where construction activities may damage or interfere with Telstra plant (see "Essential Precautions and Approach Distances" section for more information); and

c) contact Telstra's **Plan Services** (see below for details) if Telstra plant is wholly or partly located near planned construction activities.

DAMAGE:

ANY DAMAGE TO TELSTRA'S NETWORK MUST BE REPORTED TO 132203 IMMEDIATELY.

The owner is responsible for all plant damage when works commence prior to obtaining Telstra plans, or failure to follow agreed instructions.

Telstra reserves all rights to recover compensation for loss or damage to its cable network or other property including consequential losses.

EMERGENCY SITUATIONS

Emergency situations are unplanned and include (amongst other things):

- damaged or faulty underground or aerial power cables / poles
- burst/leaking water mains
- burst/leaking sewer mains.
- burst/leaking gas pipes
- any other emergency situation that may impact Telstra network.

NOTE: failure to lodge requests in time for normal maintenance work is not deemed as an emergency.

During working hours - in emergency situations, urgent requests for plans or information relating to the location of Telstra network are to be made direct to the Dial Before You Dig Service.
Note that a fast response can be provided if a request is made on line with a supplied return email address between 5am-10pm AEST 7days a week.

Outside Normal Business hours or outside hours of automated responses - in emergency situations , urgent requests for plans or information relating to the location of Telstra network are to be made direct to Telstra on phone **1800 801 801**

NATURAL DISASTERS

Natural Disasters include (amongst other things):

- Earthquakes
- Cyclones
- Floods; and
- Tsunami

In the case of such events, urgent requests for plans or information relating to the location of Telstra network can be made directly to Telstra Network Integrity Team Managers as follows:

NSW - Joe Palucci 0419 496 015

QLD - Glenn Swift 0419 660 147

VIC/TAS - David Povazan 0417 300 947

SA/NT/WA - Dave Ballard 0419 807 901

PLAN SERVICES

For all Telstra DBYD (Dial Before You Dig) map enquiries please contact Telstra Plan Services

email - **Telstra.Plans@team.telstra.com**

fax - **(02) 4961 3714**

phone - **1800 653 935** (for urgent, onsite or optic fibre enquiries)

Please note - to make an enquiry the plans must be current (within 60 days of issue). If your plans have expired you will need to submit a new request via DBYD.

ASSET RELOCATIONS

You are not permitted to relocate or alter any Telstra assets or network under any circumstance.

For all enquiries relating to the relocation of Telstra assets please phone **1800 810 443** or email **F1102490@team.telstra.com**

CONCERNING TELSTRA PLANS:

Please note the following:

- For plans of Telstra locations contact **Dial Before You Dig** at least 2 business days prior to digging. (**www.1100.com.au** or phone **1100**)
- Fast response can be provided by Telstra if an email address is supplied. (if posted, this may take up to one week or longer to receive plans)
- Telstra plans and information provided are **valid for 60 days** from the date of issue.
- Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose. The plans and details should be disposed of by shredding or any other secure disposal method after use.
- Telstra plans or other details are provided only for the use of the applicant, its servants, or agents. **The applicant may not give the plans or details to other parties, and may not generate profit from commercialising the plans or details.**
- Please contact Telstra **Plan Services** (see above for details) immediately should you locate Telstra assets not indicated on these plans.
- Telstra, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.
- Please ensure Telstra plans and information provided remains on-site at all times throughout your construction phase.

ESSENTIAL PRECAUTIONS and APPROACH DISTANCES:

NOTE: If the following clearances cannot be maintained, please contact Telstra Plan Services (see above for details) for advice on how best to resolve this situation.

1. On receipt of plans and sketches and before commencing excavation work or similar activities near Telstra's plant, **carefully locate this plant first** to avoid damage. Undertake prior manual exposure such as potholing when intending to excavate or work **closer** to Telstra plant than the following approach distances.

Where Telstra's plant is in an area where road and footpaths are well defined by kerbs or other features a minimum clear distance of 600mm must be maintained from where it could be reasonably presumed that plant would reside.

In non established or unformed reserves and terrain, this approach distance must be at least 1.5 metres.

In country/rural areas which may have wider variations in reasonably presumed plant presence, the following minimum approach distances apply:

a) Parallel to major plant: 10 metres (for IEN, optic fibre and copper cable over 300 pairs)
b) Parallel to other plant: 5 metres

NOTE: Even manual pot-holing needs to be undertaken with extreme care, commonsense and employing techniques least likely to damage cables. For example, orientate shovel blades and trowels parallel to the cable rather than digging across the cable.

If construction work is parallel to Telstra plant, then careful hand digging or using non destructive water jet method (pot-holing) at least every 5m is required to establish the location of all plant, hence confirming nominal locations before work can commence.

2. Maintain the following minimum clearance between construction activity and **actual location** of Telstra Plant.

Jackhammers/Pneumatic Breakers	*Not within 1.0m of **actual location.***
Vibrating Plate or Wacker Packer Compactor	*Not within 0.5m of Telstra ducts.* *300mm compact clearance cover before compactor can be used across Telstra ducts.*
Boring Equipment **(in-line, horizontal and vertical)**	*Not within 2.0m of **actual location**.* *Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.*
Heavy Vehicle Traffic (over 3 tonnes)	*Not to be driven across Telstra ducts (or plant)* *with less than 600mm cover.* *Constructor to check depth via hand digging.*
Mechanical Excavators, Farm ploughing and Tree Removal	*Not within 1.0m of **actual location.*** *Constructor to hand dig or use non-destructive water jet method (pot-hole) and expose plant.*

All Telstra pits and manholes should be a minimum of 1.2m in from the back of kerb after the completion of your work.

All Telstra conduit should have the following minimum depth of cover **after the completion of your work**:-

- **Footway 450mm**
- **Roadway 450mm at drain invert and 600mm at road centre crown**

For clearance distances relating to Telstra pillars, cabinets and RIMs/RCMs please contact Telstra Plan Services (see above for details).

FURTHER ASSISTANCE:

Assistance can be obtained by contacting Telstra **Plan Services**

Where on-site location is provided, the owner is responsible for all hand digging or use non-destructive water jet method (pot-holing) to visually locate and expose Telstra plant.

If plant location plans or visual location of Telstra plant by digging reveals that the location of Telstra plant is situated wholly or partly where the owner plans to work, then **Telstra's Network Integrity Group** must be contacted through Telstra **Plan Services** to discuss possible engineering solutions.

NOTE:

If Telstra relocation or protection works are part of the agreed solution, then payment to Telstra for the cost of this work shall be the responsibility of the principal developer or constructor. The principal developer or constructor will be required to provide Telstra with the details of their proposed work showing how Telstra's plant is to be accommodated and these details must be approved by the Regional Network Integrity Manager prior to the commencement of site works.

RURAL LANDOWNERS - IMPORTANT INFORMATION

Where Telstra owned cable crosses agricultural land, Telstra may provide a once off free on-site electronic cable location. The Telstra Plan Services operator will provide assistance in determining whether a free on-site location is required.

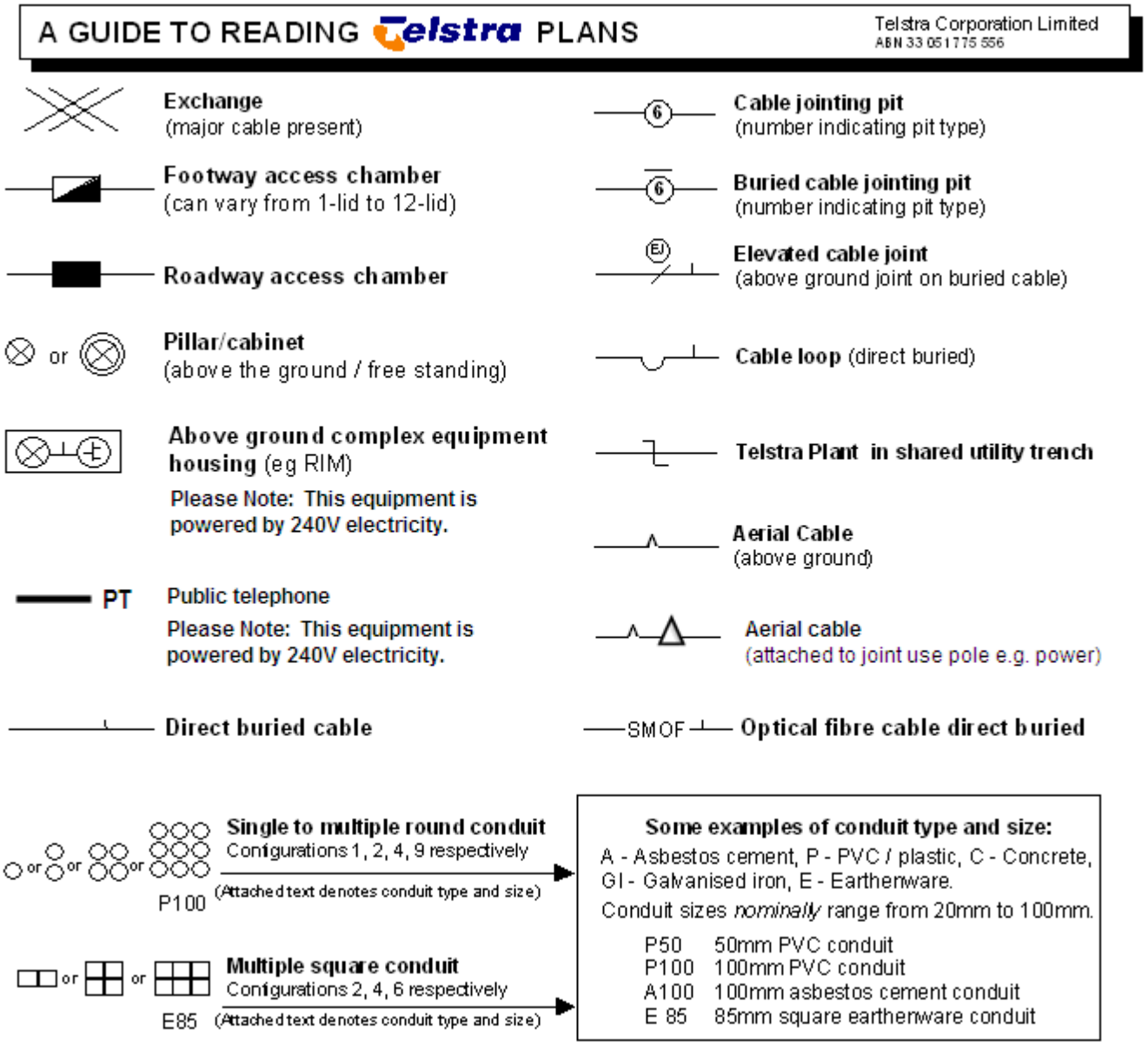
Please note:

- The exact location, including depth of cables can only be verified by pot holing, which is not covered by this service.
- This service is only available to assist private rural land owners.
- This service covers one hour on-site only. Additional time can be purchased directly from the Accredited Plant Locator.

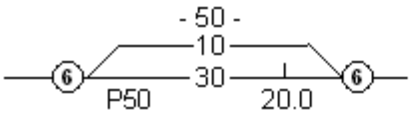
For further information including terms and conditions, please contact Telstra Plan Services on phone **1800 653 935**.

PRIVACY NOTE

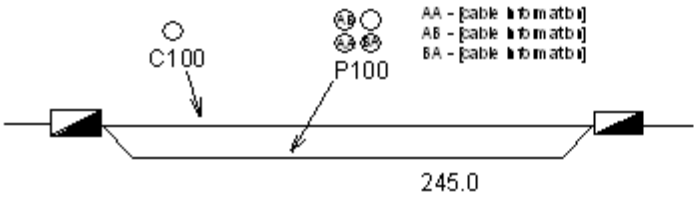
Your information has been provided to Telstra by DBYD to enable Telstra to respond to your DBYD request. Telstra keeps your information in accordance with its privacy statement entitled "Protecting Your Privacy" which can be obtained from Telstra either by calling 1800 039 059 or visiting our website at www.telstra.com.au/privacy



Some examples of how to read Telstra plans:



One 50mm PVC conduit (P50) containing a 50-pair and a 10-pair cable between two 6-pits, 20.0m apart, with a direct buried 30-pair cable along the same route.



Two separate conduit runs between two footway access chambers (manholes) 245m apart. A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along the same route.

WARNING: Telstra's plans show only the presence of cables and plant. They only show their position relative to road boundaries, property fences etc. at the time of installation and Telstra does not warrant or hold out that such plans are accurate thereafter due to changes that may occur over time.
DO NOT ASSUME DEPTH OR ALIGNMENT of cables or plant as these vary significantly.
The customer has a DUTY OF CARE when excavating near Telstra cables and plant. Before using machine excavators TELSTRA PLANT MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG (potholing) to identify its location.
Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

Electronic plans - PDF and DWF maps

If you have received Telstra maps via email you will have received the maps as either a PDF file (for smaller areas) or DWF file (for larger area requests). If you are unable to launch any one of the softcopy files for viewing and printing, you may need to download and install one or more of the free viewing and printing products such as Adobe Acrobat Reader (for PDF files) or Autodesk Design Review 2010 (for DWF files) available from the internet.

PDF files

PDF is the default softcopy format for all requests that range in size from 0 metres (eg point requests) to requests up to approx *500m in length. (*depends on geographic location of request). The PDF file is formatted to A3 portrait sheet however it can be printed on any size sheet including from A4 to AO, either as the full sheet or selected areas to suit needs and legibility. (to print a selected area zoom up and print "current view"). If there are multiple layers of Telstra network you may receive up to 2 sheets in the single PDF file attachment supplied. There are three types or layers of network normally recorded - local network, mains cables or a combined layer of local and mains (usually displayed in rural or semi rural areas). If mains cable network is present in addition to local cables (ie as separate layer in a particular area), the mains will be shown on a separate sheet. The mains cable information should be read in conjunction with the local cable information.

DWF files

This is the default softcopy format for all requests that are over 500m in length. Maximum length for a DWF automated response is approx 2500m - depending on geographic location of request (non automated longer). The DWF files differ from PDF in that DWF are vector files made up of layers that can be turned on or off and are not formatted to a specific sheet size. This makes them ideal for larger areas and for transmitting over email etc.

How to view Telstra DWF files -

Telstra DWF files come with all layers turned on. You may need to turn individual layers on or off for viewing and printing clarity. Individual layer names are CC (main cable/conduit), DA (distribution or local area network) and sometimes a combined layer - CAC. Layer details can be viewed by either picking off the side menu or by selecting 'window' then 'layers' off the top menu bar. Use 'layers' to turn individual layers off or on. (double click or right click on layer icon.)

How to print Telstra DWF files -

DWF files can be printed on any size sheet. They can be printed in their entirety or by selected areas of interest. Some DWF coverage areas are large and are not suited to printing legibly on a single A4 sheet - you may need several prints if you only have an A4 printer. Alternately an A3, A1 or larger printer should be used. To print, zoom in or out and then by changing the 'print range' settings you can print what is displayed on your screen to suit your paper size. If you only have a small printer eg A4 you may need to zoom until the text legible on your screen for it to be legible on the print. (which is why you may need several prints). To print what is displayed on your screen the 'view' setting should be changed from 'full page' to 'current view'. The 'current sheet' setting should also be selected. You may need to print layers separately for clarity and legibility. (details above on how to turn layers on or off)

How to change the background colour from white to black (when viewing) Telstra DWF files -

If using Autodesk Design Review the background colour can be changed by selecting "Tools" then "options" then "sheet". Tick the box "override published paper colors" and select the colour required using the tab provided.

Further information

If you require further assistance with supplied PDF or DWF plans eg with legibility or you believe there maybe missing information please contact Telstra Plan Services. (contact details above - you will need to supply the Telstra sequence number of the plan request.)

Telstra automated plan service

Telstra provides an automated plan response for the majority of DBYD requests received (currently around 80%). Requestors must supply a current email address on their request to DBYD and must also be able to accept a standard format ie PDF or DWF. An automated response can be provided a lot faster than the alternative which is a mailed hardcopy. This can avoid unnecessary

delays in waiting for plans to arrive. Being softcopy it can easily be sent directly to a worksite and can be available 7 days a week. The automated system can be configured for individual requestors to receive either PDF/DWF (where small requests are PDF and larger requests are DWF) or alternately all in DWF (both small and large requests). Please contact Plan Services for further details or to be configured. Please note all requests over *500m (approx) in size can only be supplied in DWF format and there are size limits on what can be provided. (* actual size depends on geographic location of requested area)

Data Extraction Fees

In some instances a data extraction fee may be applicable for the supply of Telstra information. Typically a data extraction fee may apply to - large projects, requests to be supplied in non standard formats, excessive hardcopy printing or requests for non digging purposes. Further details can be obtained by contacting Telstra Plan Services.

ACCREDITED PLANT LOCATORS (For your area)

On-site assistance should be sought from an **Accredited Plant Locator** if the telecommunications plant cannot be located within 2.5 metres of the locations indicated on the drawings provided.

On-site advice should be obtained from a Telstra accredited Asset Plant Locator who is highly skilled in locating Telstra plant. In the case where Telstra plant is outside a recognised road reserve Telstra recommends that Telstra Plan Services are contacted for assistance prior to engaging an accredited Asset Plant Locator.

Telstra does not permit external parties (non-Telstra) to conduct work on our network. Only Telstra staff or Telstra contractors are allowed to enter our manholes, open our pits, ducts, etc.

Please note it is a criminal offence under the *Criminal Code Act 1995*(Cth) to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by Telstra as a result of any such unauthorised works may be claimed against you.

Should your projects require cable location, you MUST engage an accredited Asset Plant Locator (a list of which is provided with the Dial Before You Dig plans). Alternatively you may seek your own accreditation through our registered training partner Coates Hire Training which is the only approved training provider for Asset Plant Location accreditation for Telstra's network. You may contact Coates Hire Training on

1300 657 867or visit ***www.coateshire.com.au***

For the assistance of customers an accredited Asset Plant Locator can perform any of the following activities if requested to do so by the owner:

- review Telstra's plans to assess the approximate location of Telstra plant;
- advise owners of the approximate location of Telstra plant according to the plans;
- advise owners of the best method for locating Telstra plant;
- advise owners of the hazards of unqualified persons attempting to find the exact location of Telstra plant and working in the vicinity of Telstra plant without first locating its exact position; and
- perform trial hole explorations by hand digging (pot-holing) to expose Telstra plant with a high degree of skill, competence and efficiency and utilising all necessary safety equipment.

A list of Accredited Plant Locators operating in your area is attached. Accredited Plant Locators are certified by Telstra to perform the tasks listed above. Owners may engage Accredited Plant Locators to perform these services, however Telstra does not give any warranty in relation to these services that Accredited Plant Locators are competent or experienced to perform any other services.

The attached list provides the names and contact details for Accredited Plant Locators who service your area and can provide you with assistance in locating Telstra plant on site. These organisations have been able to satisfy Telstra that they have a sound knowledge of telecommunications plant and its sensitivity to disturbance; appropriate equipment for locating telecommunications plant and competent personnel who are able to interpret telecommunications plans and sketches and understand safety issues relevant to working around telecommunications plant. They are also able to advise you on the actions which should be taken if the work you propose will/could result in a relocation of the telecommunications plant and/or its means of support.

We recommend that you engage the assistance of one of these Accredited Plant Locators as a step towards discharging your Duty of Care obligations when seeking the location of Telstra's telecommunications plant.

Please Note:

- Each Accredited Plant Locator is NOT permitted to provide depth of communications plant unless physically exposed by hand digging.
- The details of any contract, agreement or retainer for site assistance to locate telecommunications plant shall be for you to decide and agree with the organisation engaged. Telstra is not a party to any contract entered into between an owner and an Accredited Plant Locator. The Accredited Plant Locators are able to provide guidance concerning the extent of site investigations required.
- Payment for the site assistance will be your responsibility and payment details should be agreed before the engagement is confirmed.
- Telstra does not accept any liability or responsibility for the performance of or advice given by an Accredited Plant Locator. Accreditation is an initiative taken by Telstra towards the establishment and maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement.
- Each Accredited Plant Locator has been issued with a certificate which confirms the Accreditation. Every 2 years Telstra will reassess the accreditation and where appropriate will issue a letter confirming the accreditation for the next 2 years. You

have the right to request the organisation you engage to show evidence of their ID card.

- Neither the Accredited Plant Locator nor any of its employees are an employee or agent for Telstra and Telstra is not liable for any damage or loss caused by the Accredited Plant Locator or its employees.
- The attached list contains the current names and contact details of Accredited Plant Locators who service your area, however, these details are subject to change.

IDEA FOR CONSIDERATION:

Telstra offer free Cable Awareness Presentations & Advanced Cable Reading Presentations, if you believe you or your company would benefit from this offer please contact Network Integrity on 1800 810 443 or **F1102490@team.telstra.com**

Telstra Accredited Plant Locators - New South Wales (North Region)

If a physical location is required please contact a Telstra accredited locator from the list below (fees apply).

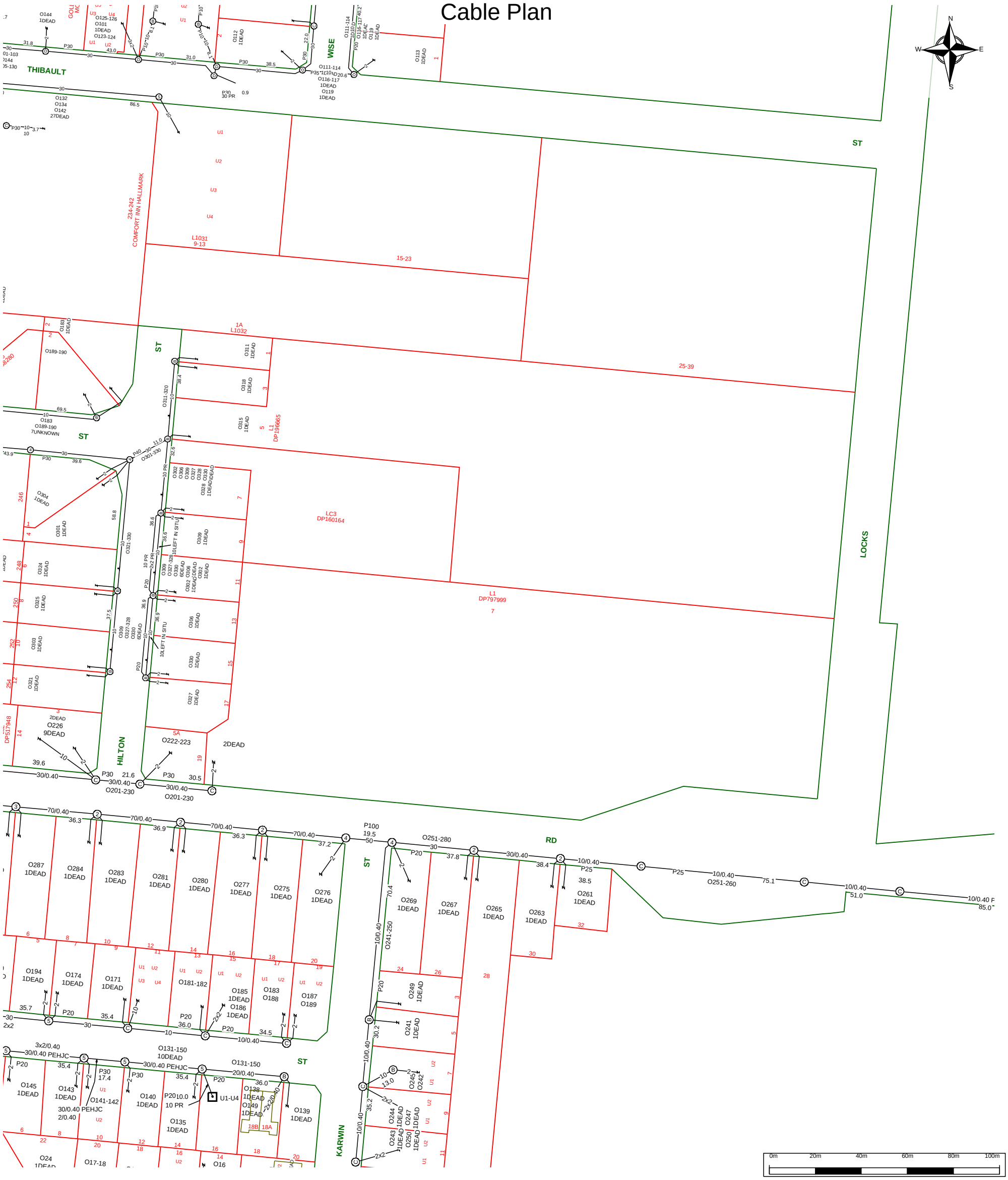
Name & areas covered	Contact details
A1 Midcoast Gas & Plumbing *Port Macquarie, Laurieton, Wauchope, Kempsey*	0412 655 130
ABC Locators Pty Ltd - *Toowoomba* *Darling Downs, Southern Downs, Burnett, Lockyer Valley, Brisbane Valley, South East QLD, Southern QLD, Northern NSW*	(07) 4632 3499 or 0407 423 499
Absolute Locating Services Pty Ltd - *Pennant Hills*	(02) 9939 6978 or 0425 257 147 Fax: (02) 9484 7313
Advanced Ground Locations - *Maitland* *Newcastle, Hunter Valley, Central Coast*	(02) 4930 3195 or 0412 497488 Fax: (02) 4930 3222
All About Pipes - *Leppington*	(02) 9606 2320 or 0408 790 010 Fax: (02) 9606 2325
Alpha Plant Locations - *Camira* *SE Qld, S Qld, NSW - NTH*	0429 968 812 Fax: (07) 3818 6595
Armidale Electrical - *Armidale* *Armidale, Glen Innes, Inverell, Moree*	(02) 6772 3702 0412 377 477
Australian Locating Services *All Areas*	1300 761 545 or 0412 227 434 Fax (02) 9531 2169
Australian Underground Survey Solutions Pty Ltd - *Narre Warren* *All Areas*	(03) 9700 2311 or 0419 488 883 Fax: (03) 9314 1568
Barry Bros Specialised Services - Milperra	(02) 8723 8777 or 0417 374 252 Fax (02) 9773 0777
Cable & Pipe Locations *Coffs Harbour, Yamba, Dorrigo, Grafton, Nambucca, Kempsey*	0408 730 430 Fax: (02) 6649 1236
Cable & Pipe Search *Coffs Harbour, Grafton, Yamba, Belligin, Dorrigo, Armidale, Tamworth, Guyra, Glen Innes, Inverell, Tenterfield, Kempsey, Port Macquarie, Taree, Macksville*	(02) 6653 6693 or 0418 660 823 Fax (02) 6653 6691
Cardno Australian Underground Services *All Areas*	1300 224 664 or (02) 9627 5988
Chris Bates and Associates - *Tighes Hill* *Mid North Coast, Newcastle, Hunter Valley and Central Coast*	0408 427 391 Fax (02) 4969 4028
Dags Location Services - *Glenwood*	0417 147 945 Fax: (02) 8824 5667
Darryl Smith Electrical - *Grafton* *Grafton*	(02) 6642 3731 or 0439 423 731 Fax: (02) 6642 4319
Downunder Detection Services - *Rose Bay*	(02) 9371 7744

Name & areas covered	Contact details
Downunder Locations - *Banora Point* *South East Qld and Northern NSW - Brisbane to Ballina/Tweed Heads*	0438 243 856 Fax: (02) 5523 0702
Down Under Pipeline Surveys Pty Ltd - *Orangeville*	(02) 4653 1286 or 0418 675 374 Fax (02) 4653 1747
Far West Communications - *Broken Hill*	(08) 8087 3577 Fax: (08) 8087 3588
Ground Scan Locating *Bathurst & Central West*	0414 640 640 Fax (02) 6332 2599
GWN (NSW) Pty Ltd - *Branxton*	0422 775 210 Fax (02) 4938 3421
Hi-Tech Locations - *Barnsley* *Newcastle, Hunter Valley, North Coast, South Coast*	(02) 4953 4226 or 0466 583 962 Fax: (02) 4953 4227
How Deep Water Leaks - *Arundel* *Runaway Bay, Gold Coast, Brisbane, The Tweed, Northern Rivers, Murwillumbah, Far North NSW*	0412 214 810 Fax: (07) 5571 6287
Hunter Ground Search - *Cameron Park* *Central Coast, Hunter Valley, Newcastle*	(02) 4953 1244 or 0418 684 819
Hunter Valley Excavations Pty Ltd - *Muswellbrook* *Singleton, Muswellbrook, Aberdeen, Scone, Murrorundi, Merriwa*	0427 949 507 Fax: (02) 6541 5280
Hydro Digga - *Korora* *All of NSW, ACT & South East QLD*	Mob: 0447 774 000 Fax: (02) 6653 7255 Email: locator@hydrodigga.com
IR & M Johnson - *Mudgeeraba* *Brisbane, Gold Coast, Northern NSW to Murwillumbah*	(07) 5530 5773 or 0427 305 773 or 0413 661 768 Fax (07) 5522 9769
IRT Plumbing Services Pty Ltd - *Bribie Island*	(07) 5497 6345 or 0417 668 069
Jacksons Utility Location Service - *Pakenham*	0417 511 114
Johns Cable Locations - *Goonellabah* *Lismore area including Murwillumbah to Grafton and Tenterfield to Ballina*	0415 45 8152
JNC Group Australia Pty Ltd - *Armidale* *Armidale & North West*	(02) 6772 9980 or 0413 305 218 Fax: (02) 6772 0781
K & K Directional Drilling - *Tamworth* *Tamworth*	(02) 6762 6424 or 0405 196 177 or 0429 087 657
Katacole - *Greenbank*	(07) 3297 6090 or 0438 873 683 Fax: (07) 3297 7068
Kerr Technologies - *Wollongong* *Woolongong, Southern Highlands, South Coast to Bega, West to Wagga, North to Newcastle Inc Sydney/West Sydney*	(02) 4262 2009 or 0417 622 009 Fax (02) 4262 0364
Lambert Locations - *Gold Coast* *South East Queensland, Northern NSW*	1300 150 035 or 0418 150 035

Name & areas covered	Contact details
Lend Lease Infrastructure Services - *Seven Hills*	1300 484 008 Fax: (02) 9620 9516
Lyntet Communications - *Dubbo* *Dubbo, Forbes, Grenfell, Parkes, Bourke, Bourke North, Nyngan, Coonabarabran, Coonable, Mudgee, Narramine, Wellington, Orange, Bathurst, Molong, Yeoval, Coolah, Dunedoo, Gilgandra, Mendooran*	0409 811 673 Fax (02) 6882 9856
M & K Farmer Enterprises - *Goondiwindi*	(07) 4671 2443 or 0429 622 897
McWhelan Pty Ltd - *Mudgee*	0414 810 652 Fax: (02) 6372 4753
Mia Pipe & Cable Layers Pty Ltd - *Griffith*	(02) 6964 0083 or 0418 501 050 Fax: (02) 6964 7877
Mid North Coast Hydro Digging – *Lake Cathie* *Port Macquarie, Kempsey*	0418 409 465 Email: djblack1@bigpond.com
MSG Locating - *Tamworth* *North & North West NSW*	(02) 6760 7722 or 0448 674 601 Fax: (02) 6760 7755
Multi-Phase Asset Location & Electrical Pty Ltd - *Maclean* *Northern Rivers, Grafton, Casino, Lismore, Ballina, Coffs Harbour, Iluka, Yamba, Gulmarrad, Maclean, Coast & Inland Service*	(02) 6645 5594 or 0408 520 554 Fax: (02) 6645 5596 email: multi-phase@bigpond.com
Network Protection Specialists - *Tweed Heads* *Brisbane, Gold Coast, Northern Rivers*	0418 257 527
North West Civil - *Tamworth, Scone* *All North Coast, Hunter Valley & North West*	(02) 6762 8911 or 0438 914 875 Fax (02) 6762 8633
O'Donnell Griffin Pty Ltd - *Mitchell* *Canberra, Queanbeyan, Yass*	(02) 6204 3300 or 0428 227 608 Fax: (08) 6209 9761
Online Pipe & Cable Locating - *Girraween*	1300 665 384 or 0418 402 234 Fax (02) 9676 6127
Pennoscan - *Blacktown*	1800 459 879 or 0403 908 099 george@pennoscan.com.au
PBH Civil Pty Ltd - *Bonny Hills*	(02) 6585 5621 or 0434 268 872
Pipeline Locators Australia Pty Ltd - *Greenbank*	(07) 3200 0340 or 0418 183 858 Fax: (07) 3200 0170
Pipeline Technology Services	(08) 8351 7000 or 0419 878 220 Fax:(08) 8159 7537
Riteway Traffic Control - *Charmhaven* *Central Coast - Newcastle/Hunter*	0419 212 969 email: kbrowne@ritewaytc.com.au
Riverina Horizontal Boring Pty Ltd - *Wodonga*	(02) 6059 1788 or 0419 149 153 Fax: (02) 6059 5090
Rock Boring Solutions - *West Burleigh* *South East Qld and Northern NSW*	(07) 3807 9890 or 0414 775 500 Fax: (07) 3807 9890

Name & areas covered	Contact details
Rock Drilling Australia Pty Ltd - *Upper Coomera*	(07) 5573 1578 or 0407 319 997 Fax: (07) 5665 7233
Rubicof - *Cessnock* *Gosford, Newcastle, Taree, Bathurst*	(02) 4990 5718 or 0418 683 451 Fax: (02) 4991 2600
Rutherford Electrical Engineering Services - *Rutherford*	(02) 4932 7344 Fax (02) 4932 5219
Safe Dig Vacuum Excavation - *Greenbank*	0439 220 076 or 0408 880 262 Fax: (07) 3297 6639
Seek Locations Pty Ltd - *Tuncurry* *Forster, Gloucester, Taree, Port Macquarie, Karuah, Kempsey*	(02) 6555 8550 or 0407 256 858 Fax (02) 6555 2548
SGI Communications Pty Ltd *Depots at Muswellbrook, Tamworth & Armidale*	Muswellbrook - 0417 665 982 Tamworth - 0419 633 354 Armidale - 0427 402 592
Shamrock Civil - *Birkdale*	0424 605 497
Signal Support Services - *Goulburn* *Goulburn, Southern Highlands, Canberra*	(02) 4821 8334 or 0418 237 668 Fax: (02) 4821 0203
Suk Truk Services Pty Ltd - *Branxton* *Lower & Upper Hunter Valley, Mid North Coast, Central Coast, Newcastle*	0419 125 551 Fax: (02) 4938 3418
Suresearch Aust - *Wentworthville* *Sydney, Penrith, Richmond, Woolongong, Kotoomba, Macarthur, Central Coast, Newcastle, Maitland, Hunter Valley, Port Macquarie*	1300 884 520 or 0408 221 046 Fax: (02) 8915 1487
Vac-U-Digga Pty Ltd - *Ormeau*	1300 822 834 Mob: 0409 468 711 Fax: 07 3807 5599
Utility Location Services Pty Ltd - *West Burleigh* *Far North Coast*	0414 775 500
W.A. Hempstead Bulldozing Services Pty Ltd - *Nemingha* *Tamworth, Armidale, Inverell, Glen Innes, Gunnedah & surrounding districts*	(02) 6760 9191 Fax (02) 6760 9981

Cable Plan



Telstra	For all Telstra DBYD plan enquiries - email - Telstra.Plans@team.telstra.com For urgent onsite contact only - ph 1800 653 935 (bus hrs)
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	
Generated On 15/11/2012 16:09:19	Sequence Number: 27071930
	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.

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

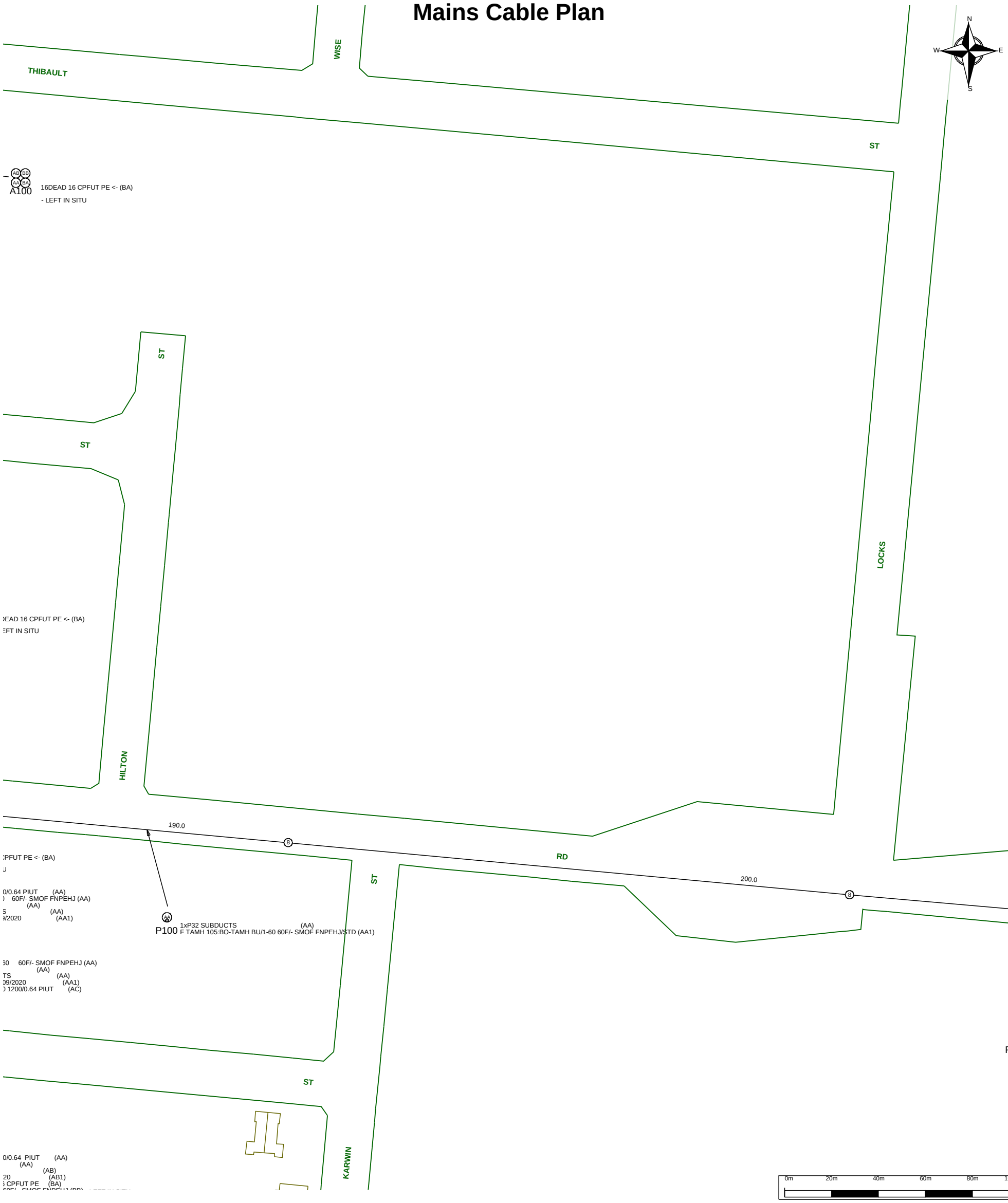
WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths 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.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

Mains Cable Plan



Telstra

For all Telstra DBYD plan enquiries -
email - Telstra.Plans@team.telstra.com
For urgent onsite contact only - ph 1800 653 935 (bus hrs)

TELSTRA CORPORATION LIMITED A.C.N. 051 775 556

Generated On 15/11/2012 16:09:24

Sequence Number: 27071930

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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Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

ATTACHMENT E

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**S1**
Project Number:	**1201085**
Hole Depth:	**0.80 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.20	Natural	GC		**Clayey GRAVEL with Sand** - moderate brown (5YR 4/4), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, shale gravels.	damp	
		0.4		CL		**Lean CLAY with Sand** - dusky yellowish brown (10YR 2/2), 80% silt and clay, 20% sand, stiff.	damp	
		0.8						
		1.0				**End of Hole at 0.80 m**		
		1.2						
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**7/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:15 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**S2**
Project Number:	**1201085**
Hole Depth:	**0.75 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Natural	GC		**Clayey GRAVEL with Sand** - dark yellowish brown (10YR 4/2), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, shale gravels and rounded gravels.	damp	
		0.40						
		0.6	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		0.8				**End of Hole at 0.75 m**		
		1.0						
		1.2						
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:16 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**S3**
Project Number:	**1201085**
Hole Depth:	**1.25 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - moderate reddish brown (10R 4/6), 70% silt and clay, 10% sand, 20% gravel, soft, shale gravel, rounded gravels, piece of tile.	damp	
		0.30						
		0.4	Natural	SC		**Clayey SAND** - dark yellowish brown (10YR 4/2), 50% silt and clay, 50% sand, medium dense.	dry	
		0.6						
		0.80						
		1.0		SC		**Clayey SAND** - greyish orange (10YR 7/4) and dusky yellowish brown (10YR 2/2), 30% silt and clay, 60% sand, 10% gravel, medium dense, alluvial.	damp	
		1.2						
		1.4				**End of Hole at 1.25 m**		
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:18 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**S4**
Project Number:	**1201085**
Hole Depth:	**1.20 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
		0.2	Fill			**FILL** - dark yellowish brown (10YR 4/2), 50% silt and clay, 10% sand, 40% gravel, loose, shale gravels.	damp	
		0.30						
		0.4				**FILL** - dark yellowish brown (10YR 4/2), 20% silt and clay, 20% sand, 60% gravel, loose, shale gravels.	damp	
		0.6						
		0.80						
		1.0	Natural	GC		**Clayey GRAVEL with Sand** - dark yellowish brown (10YR 4/2), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, shale gravels.	damp	
		1.2						
		1.4				**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.6				**End of Hole at 1.20 m**		
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:20 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**S5**
Project Number:	**1201085**
Hole Depth:	**0.80 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Natural	CL		**Lean CLAY** - and dark yellowish brown (10YR 4/2), 80% silt and clay, 20% sand, soft, medium plasticity.	damp	
		0.30						
		0.4		CH		**Fat CLAY** - and dusky yellowish brown (10YR 2/2), 90% silt and clay, 10% sand, stiff, high plasticity.	damp	
		0.6						
		0.8						
		1.0				**End of Hole at 0.80 m**		
		1.2						
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**7/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:21 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**S6**
Project Number:	**1201085**
Hole Depth:	**0.50 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.20	Fill			**FILL** - moderate reddish brown (10R 4/6), 65% silt and clay, 30% sand, 5% gravel, soft.	damp	
		0.35	Natural	GC		**Clayey GRAVEL with SAND** - dark yellowish brown (10YR 4/2), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense.	damp	
		0.4		CL		**Lean CLAY with Sand** - dusky yellowish brown (10YR 2/2), 80% silt and clay, 20% sand, stiff.	damp	
		0.6				**End of Hole at 0.50 m**		
		0.8						
		1.0						
		1.2						
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**7/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:23 PM

Test Pit Log

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Hole ID.	**TP1**
Project Number:	**1201085**
Hole Depth:	**0.80 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2 *0.30* 0.4 0.6 0.8	Natural Bedrock	GC		**Clayey GRAVEL with Sand** - light brown (5YR 5/6), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, large shale gravels. **Weathered SHALE** - greyish orange (10YR 7/4).	damp	
		1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4				**End of Hole at 0.80 m**		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:24 PM

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Hole ID.	**TP2**
Project Number:	**1201085**
Hole Depth:	**0.80 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Natural	GC		**Clayey GRAVEL with Sand** - light brown (5YR 5/6), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, large shale gravels.	damp	
		0.40	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		0.8				**End of Hole at 0.80 m**		
		1.0						
		1.2						
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:42 PM

Test Pit Log

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Hole ID.	**TP3**
Project Number:	**1201085**
Hole Depth:	**0.80 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2 0.4 *0.50*	Natural	GC		**Clayey GRAVEL with Sand** - light brown (5YR 5/6), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, coarse shale gravels and cobbles, pebbles.	damp	
		0.6 0.8	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4				**End of Hole at 0.80 m**		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

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Hole ID.	**TP4**
Project Number:	**1201085**
Hole Depth:	**2.00 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.10	Fill			**FILL** - moderate yellowish brown (10YR 5/4), 20% silt and clay, 20% sand, 60% gravel, loose, shale gravels.	dry to damp	
		0.2				**FILL** - moderate yellowish brown (10YR 5/4), 30% silt and clay, 30% sand, 40% gravel, loose, shale gravels.	dry	
		0.4						
		0.6						
		0.8						
		1.0						
		1.2						
		1.40	Natural	GC		**Clayey GRAVEL with Sand** - dusky yellowish brown (10YR 2/2), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, shale gravels.	damp	
		1.6						
		1.8						
		2.0				**End of Hole at 2.00 m**		
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

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Test Pit Log

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Hole ID.	**TP5**
Project Number:	**1201085**
Hole Depth:	**1.40 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2 / 0.4 / 0.6 / **0.80**	Fill			**FILL** - moderate yellowish brown (10YR 5/4), 20% silt and clay, 20% sand, 60% gravel, loose, roots, paper, sandstone pieces, fibro piece encountered at 0.1m.	dry	
		1.00	Natural	GC		**Clayey GRAVEL with Sand** - dark yellowish brown (10YR 4/2), 50% silt and clay, 20% sand, 30% coarse gravel, medium dense, shale gravels.	damp	
		1.2 / 1.4	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.6 / 1.8 / 2.0 / 2.2 / 2.4				**End of Hole at 1.40 m**		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

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Hole ID.	**TP6**
Project Number:	**1201085**
Hole Depth:	**1.20 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - dark yellowish brown (10YR 4/2), 70% silt and clay, 20% sand, 10% gravel, soft, shale gravels.	damp	
		0.30						
		0.4	Natural	SC		**Clayey SAND** - light brown (5YR 5/6), 70% silt and clay, 25% sand, 5% gravel, firm.	damp	
		0.6						
		0.70						
		0.8	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.0						
		1.2						
						End of Hole at 1.20 m		
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:48 PM

Test Pit Log

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Hole ID.	**TP7**
Project Number:	**1201085**
Hole Depth:	**1.35 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - dark yellowish brown (10YR 4/2), 70% silt and clay, 20% sand, 10% coarse gravel, soft, shale gravels.	damp	
		0.4 *0.45*						
		0.6	Natural	GC		**Clayey GRAVEL** - dark yellowish brown (10YR 4/2), 60% silt and clay, 10% sand, 30% coarse gravel, firm, large shale gravels.	damp	
		0.70 0.8	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.0						
		1.2						
		1.4				**End of Hole at 1.35 m**		
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:50 PM

Test Pit Log

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Hole ID.	**TP8**
Project Number:	**1201085**
Hole Depth:	**1.00 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - dark yellowish brown (10YR 4/2), 70% silt and clay, 20% sand, 10% coarse gravel, soft, shale gravels.	damp	
		0.30						
		0.4	Natural	GC		**Clayey GRAVEL** - dark yellowish brown (10YR 4/2), 60% silt and clay, 10% sand, 30% coarse gravel, firm, large shale gravels.	damp	
		0.60						
		0.8	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.0						
		1.2				**End of Hole at 1.00 m**		
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

REUMAD

Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: **Jenna Seymour** Date: **6/12/2012**
Checked By: **Jenna Seymour** Date: **12/02/2013**

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Hole ID.	**TP9**
Project Number:	**1201085**
Hole Depth:	**0.95 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - dark yellowish brown (10YR 4/2), 70% silt and clay, 20% sand, 10% coarse gravel, soft, shale gravels.	damp	
		0.30						
		0.4	Natural	CL		**Lean CLAY with Sand** - light brown (5YR 5/6), 85% silt and clay, 15% sand, firm, coarse shale gravels and cobbles.	damp	
		0.6						
		0.70						
		0.8	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.0				**End of Hole at 0.95 m**		
		1.2						
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

REUMAD

Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: **Jenna Seymour** Date: **6/12/2012**
Checked By: **Jenna Seymour** Date: **12/02/2013**

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Hole ID.	**TP10**
Project Number:	**1201085**
Hole Depth:	**0.70 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.18	Natural	CL		**Lean CLAY with Sand** - moderate brown (5YR 4/4), 80% silt and clay, 20% sand, soft.	damp	
		0.40		CL		**Lean CLAY with Sand** - very pale orange (10YR 8/2), 80% silt and clay, 20% sand, soft.	dry	
		0.6		CL		**Lean CLAY** - light brown (5YR 5/6), 90% silt and clay, 10% sand, stiff, low plasticity.	dry	
		0.8				**End of Hole at 0.70 m**		
		1.0						
		1.2						
		1.4						
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

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Hole ID.	**TP11**
Project Number:	**1201085**
Hole Depth:	**1.40 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2, 0.4, 0.6, 0.8, *1.00*	Fill			**FILL** - 30% silt and clay, 20% sand, 50% gravel, loose, sandstone gravels, piece of plastic.	damp	
		1.2, *1.30*	Natural	CL		**Sandy Lean CLAY** - dark yellowish brown (10YR 4/2), 70% silt and clay, 20% sand, 10% gravel, soft.	damp	
		1.4		CL		**Lean CLAY** - pale yellowish brown (10YR 6/2), 90% silt and clay, 10% sand, firm, low plasticity.	damp	
						End of Hole at 1.40 m		
		1.6, 1.8, 2.0, 2.2, 2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

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Hole ID.	**TP12**
Project Number:	**1201085**
Hole Depth:	**2.20 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - light brown (5YR 5/6), 70% silt and clay, 20% sand, 10% gravel, soft.	damp	
		0.30				**FILL** - moderate yellowish brown (10YR 5/4), 30% silt and clay, 10% sand, 60% gravel, loose, coarse shale gravels and cobbles.	dry	
		0.4						
		0.6						
		0.8						
		1.0						
		1.2						
		1.4						
		1.6						
		1.8						
		2.00						
		2.2	Natural	CL		**Lean CLAY** - brownish grey (5YR 4/1), 90% silt and clay, 10% sand, soft, low plasticity.	dry	
		2.4				**End of Hole at 2.20 m**		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:29 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**TP13**
Project Number:	**1201085**
Hole Depth:	**1.30 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**6/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**6/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - light brown (5YR 5/6), 70% silt and clay, 20% sand, 10% gravel, soft.	damp	
		0.30						
		0.4				**FILL** - moderate yellowish brown (10YR 5/4), 80% silt and clay, 20% sand, 60% gravel, loose, coarse shale gravels and cobbles.	dry	
		0.6						
		0.80						
		1.00	Natural	CL		**Lean CLAY** - moderate reddish brown (10R 4/6), 90% silt and clay, 10% sand, soft.	dry	
		1.2	Bedrock			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.4				**End of Hole at 1.30 m**		
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**6/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:31 PM

Test Pit Log

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Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
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www.geo-logix.com.au

Hole ID.	**TP14**
Project Number:	**1201085**
Hole Depth:	**1.35 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Fill			**FILL** - dark yellowish brown (10YR 4/2), 30% silt and clay, 30% sand, 40% coarse gravel, loose, bricks, metal, fibro cement fragments.	damp	
		0.4						
		0.6						
		0.8						
		0.90						
		1.0				**FILL** - dusky yellowish brown (10YR 2/2), 70% silt and clay, 20% sand, 10% gravel, loose, charcoal.	damp	
		1.10						
		1.2	Natural			**Weathered SHALE** - greyish orange (10YR 7/4).		
		1.4				**End of Hole at 1.35 m**		
		1.6						
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**7/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:32 PM

Test Pit Log

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Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
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www.geo-logix.com.au

Hole ID.	**TP15**
Project Number:	**1201085**
Hole Depth:	**1.90 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2 / 0.4 / 0.6 / 0.8 / 1.0 / 1.2 / 1.4 / 1.6 / *1.70*	Fill			**FILL** - dark yellowish brown (10YR 4/2), 20% silt and clay, 30% sand, 50% gravel, loose, bricks, fibro cement fragments, glass, metal wires, pipes, large concrete pieces.	damp	
		1.80	Nat.	CL		**Sandy Lean CLAY** - dark yellowish brown (10YR 4/2), 70% silt and clay, 20% sand, 10% gravel, soft.	damp	
			Bed.			**Weathered SHALE** - greyish orange (10YR 7/4).		
		2.0 / 2.2 / 2.4				**End of Hole at 1.90 m**		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**7/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:34 PM

Test Pit Log

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Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**TP16**
Project Number:	**1201085**
Hole Depth:	**2.60 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2 / 0.4 / 0.6 / 0.8 / 1.0 / 1.2 / 1.4 / 1.6 / 1.8 / 2.0 / 2.20	Fill			**FILL** - dark yellowish brown (10YR 4/2), 30% silt and clay, 30% sand, 40% coarse gravel, loose, shale, bricks, steel pipes.	damp	
		2.40	Natural	CL		**Sandy Lean CLAY** - dark yellowish brown (10YR 4/2), 70% silt and clay, 20% sand, 10% gravel, soft.	damp	
		2.6	Bedrock			**Weathered SHALE**.		
		2.8				**End of Hole at 2.60 m**		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: **Jenna Seymour** Date: **7/12/2012**
Checked By: **Jenna Seymour** Date: **12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:36 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
www.geo-logix.com.au

Hole ID.	**TP17**
Project Number:	**1201085**
Hole Depth:	**3.60 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5	Fill			**FILL** - dark yellowish brown (10YR 4/2), 30% silt and clay, 30% sand, 40% coarse gravel, loose, shale, bricks, metal items, pipes, plastic, concrete, charcoal, fibro cement piece.	damp	
						End of Hole at 3.60 m		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**7/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:37 PM

Test Pit Log

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Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
Ph: (02) 9979 1722 | Fax: (02) 9979 1222
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Hole ID.	**TP18**
Project Number:	**1201085**
Hole Depth:	**1.40 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.2	Natural	GC		**Clayey GRAVEL with Sand** - moderate brown (5YR 4/4), 30% silt and clay, 30% sand, 40% coarse gravel, medium dense, shale gravels.	dry to damp	
		0.40						
		0.6		CL		**Lean CLAY with Sand** - dusky yellowish brown (10YR 2/2), 80% silt and clay, 20% sand, soft, top 0.2m with shale gravels.	damp	
		0.8						
		1.0						
		1.2						
		1.4						
		1.6				**End of Hole at 1.40 m**		
		1.8						
		2.0						
		2.2						
		2.4						

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

REUMAD

Log Drawn By: Laurie White
Contact: laurie.white@reumad.com.au

Logged By: **Jenna Seymour** Date: **7/12/2012**
Checked By: **Jenna Seymour** Date: **12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:39 PM

Test Pit Log

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street, Warriewood NSW 2102
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www.geo-logix.com.au

Hole ID.	**TP19**
Project Number:	**1201085**
Hole Depth:	**1.20 m**
Sheet:	**1 of 1**

Project Name:	**Tamworth 1201085**	Date Started:	**7/12/2012**
Location / Site:	**5-7 Hilton St & 7 Scott Rd, South Tamworth NSW**	Date Completed:	**7/12/2012**
Client:	**Hydrox Nominees Pty Ltd**	Level:	**----------**
Contractor:	**Danny & Julie Excavator Hire**	Easting:	**----------**
Method:	**Excavation**	Northing:	**----------**

Method	Water Level	Depth (m)	Material Type	USCS Symbol	Graphic Log	Material Description	Moisture	Observations / Comments
Excavation		0.20	Natural	SC		**Clayey SAND** - moderate brown (5YR 4/4), 70% silt and clay, 30% sand, medium dense, roots.	dry	
		0.50		CL		**Lean CLAY with Sand** - brownish grey (5YR 4/1), 80% silt and clay, 20% sand, firm, low plasticity.	dry	
		1.2		CL		**Lean CLAY with Sand** - dark yellowish orange (10YR 6/6), 80% silt and clay, 20% sand, stiff.	dry to damp	
						End of Hole at 1.20 m		

Hydrocarbon Odour
H High
M Moderate
L Low
Z Zero

Sample Type
D Disturbed
U Undisturbed

Additional Comments

Log Drawn By:	Laurie White	Logged By:	**Jenna Seymour**	Date:	**7/12/2012**
Contact:	laurie.white@reumad.com.au	Checked By:	**Jenna Seymour**	Date:	**12/02/2013**

GL LOG 2 TAMWORTH 1201085.GPJ GL.GDT 12/2/13 3:22:40 PM

ATTACHMENT F

mgt LabMark
ENVIRONMENTAL LABORATORIES

Certificate of Analysis

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Attention:Jenna Seymour

NATA WORLD RECOGNISED ACCREDITATION

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Report	**362423-S-V3**
Client Reference	1201085
Received Date	Dec 10, 2012

Client Sample ID			**TP1**	**TP2**	**TP3**	**D1**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**S12-De06342**	**S12-De06343**	**S12-De06344**	**S12-De06345**
Date Sampled			**Dec 06, 2012**	**Dec 06, 2012**	**Dec 06, 2012**	**Dec 06, 2012**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	10	mg/kg	< 10	< 10	< 10	< 10
TRH C10-C14	50	mg/kg	< 50	< 50	< 50	< 50
TRH C15-C28	100	mg/kg	< 100	< 100	< 100	< 100
TRH C29-C36	100	mg/kg	< 100	< 100	< 100	< 100
TRH C10-36 (Total)	100	mg/kg	< 100	< 100	< 100	< 100
BTEX						
Benzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total m+p-Xylenes	1	mg/kg	< 1	< 1	< 1	< 1
o-Xylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Total BTEX	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
4-Bromofluorobenzene (surr.)	1	%	114	86	96	95
Total Recoverable Hydrocarbons - Draft 2010 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	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Organochlorine Pesticides (OC)						
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05

mgt LabMark
ENVIRONMENTAL LABORATORIES

Client Sample ID			TP1	TP2	TP3	D1
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06342	S12-De06343	S12-De06344	S12-De06345
Date Sampled			Dec 06, 2012	Dec 06, 2012	Dec 06, 2012	Dec 06, 2012
Test/Reference	LOR	Unit				
Organochlorine Pesticides (OC)						
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	100	91	77	81
Tetrachloro-m-xylene (surr.)	1	%	109	97	102	108
Polyaromatic Hydrocarbons (PAH)						
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)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	< 1	< 1	< 1	< 1
Benzo(g.h.i)perylene	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	1	mg/kg	< 1	< 1	< 1	< 1
2-Fluorobiphenyl (surr.)	1	%	90	96	92	89
p-Terphenyl-d14 (surr.)	1	%	97	101	98	94
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	26	36
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	5.3	5.0	28	23
Copper	5	mg/kg	47	37	36	33
Lead	5	mg/kg	31	12	17	17
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	8.4	10	15	13
Zinc	5	mg/kg	110	58	41	40
% Moisture	0.1	%	14	19	19	19

Client Sample ID			S2	S4	TP4	TP5
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06346	S12-De06348	S12-De06349	S12-De06350
Date Sampled			Dec 06, 2012	Dec 06, 2012	Dec 06, 2012	Dec 06, 2012
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	10	mg/kg	-	-	< 10	< 10
TRH C10-C14	50	mg/kg	-	-	< 50	< 50
TRH C15-C28	100	mg/kg	-	-	< 100	< 100
TRH C29-C36	100	mg/kg	-	-	< 100	< 100
TRH C10-36 (Total)	100	mg/kg	-	-	< 100	< 100
BTEX						
Benzene	0.5	mg/kg	-	-	< 0.5	< 0.5
Toluene	0.5	mg/kg	-	-	< 0.5	< 0.5
Ethylbenzene	0.5	mg/kg	-	-	< 0.5	< 0.5
Total m+p-Xylenes	1	mg/kg	-	-	< 1	< 1
o-Xylene	0.5	mg/kg	-	-	< 0.5	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	-	-	< 1.5	< 1.5
Total BTEX	1.5	mg/kg	-	-	< 1.5	< 1.5
4-Bromofluorobenzene (surr.)	1	%	-	-	98	91
Total Recoverable Hydrocarbons - Draft 2010 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	-	-	< 100	< 100
TRH >C34-C40	100	mg/kg	-	-	< 100	< 100
Organochlorine Pesticides (OC)						
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	80	89	99	77
Tetrachloro-m-xylene (surr.)	1	%	93	101	78	93
Polyaromatic Hydrocarbons (PAH)						
Acenaphthene	0.5	mg/kg	-	-	< 0.5	< 0.5

Client Sample ID			**S2**	**S4**	**TP4**	**TP5**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**S12-De06346**	**S12-De06348**	**S12-De06349**	**S12-De06350**
Date Sampled			**Dec 06, 2012**	**Dec 06, 2012**	**Dec 06, 2012**	**Dec 06, 2012**
Test/Reference	LOR	Unit				
Polyaromatic Hydrocarbons (PAH)						
Acenaphthylene	0.5	mg/kg	-	-	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	-	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	-	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	-	< 0.5	< 0.5
Benzo(b)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	-	-	< 1	< 1
Benzo(g.h.i)perylene	0.5	mg/kg	-	-	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	-	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	-	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	-	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	-	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	-	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	-	-	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	-	< 0.5	< 0.5
Pyrene	0.5	mg/kg	-	-	< 0.5	< 0.5
Total PAH	1	mg/kg	-	-	< 1	< 1
2-Fluorobiphenyl (surr.)	1	%	-	-	87	91
p-Terphenyl-d14 (surr.)	1	%	-	-	93	98
Heavy Metals						
Arsenic	2	mg/kg	7.7	< 2	< 2	3.1
Cadmium	0.4	mg/kg	0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	18	< 5	9.5	32
Copper	5	mg/kg	45	43	77	51
Lead	5	mg/kg	84	14	13	23
Mercury	0.05	mg/kg	0.12	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	15	10	14	21
Zinc	5	mg/kg	400	100	96	120
% Moisture	0.1	%	12	16	12	15

Client Sample ID			**TP5/0.1A**	**TP6**	**TP7**	**TP8**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**S12-De06351**	**S12-De06353**	**S12-De06354**	**S12-De06356**
Date Sampled			**Dec 06, 2012**	**Dec 06, 2012**	**Dec 06, 2012**	**Dec 06, 2012**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	10	mg/kg	-	< 10	< 10	< 10
TRH C10-C14	50	mg/kg	-	< 50	< 50	< 50
TRH C15-C28	100	mg/kg	-	< 100	< 100	< 100
TRH C29-C36	100	mg/kg	-	< 100	< 100	< 100
TRH C10-36 (Total)	100	mg/kg	-	< 100	< 100	< 100
BTEX						
Benzene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Toluene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total m+p-Xylenes	1	mg/kg	-	< 1	< 1	< 1

Client Sample ID			TP5/0.1A	TP6	TP7	TP8
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06351	S12-De06353	S12-De06354	S12-De06356
Date Sampled			Dec 06, 2012	Dec 06, 2012	Dec 06, 2012	Dec 06, 2012
Test/Reference	LOR	Unit				
BTEX						
o-Xylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	-	< 1.5	< 1.5	< 1.5
Total BTEX	1.5	mg/kg	-	< 1.5	< 1.5	< 1.5
4-Bromofluorobenzene (surr.)	1	%	-	86	92	87
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	-	< 100	< 100	< 100
Organochlorine Pesticides (OC)						
4.4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-Chlordane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-Chlordane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	-	89	78	74
Tetrachloro-m-xylene (surr.)	1	%	-	102	90	82
Polyaromatic Hydrocarbons (PAH)						
Acenaphthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Benzo(b)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	-	< 1	< 1	< 1
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5

Client Sample ID			TP5/0.1A	TP6	TP7	TP8
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06351	S12-De06353	S12-De06354	S12-De06356
Date Sampled			Dec 06, 2012	Dec 06, 2012	Dec 06, 2012	Dec 06, 2012
Test/Reference	LOR	Unit				
Polyaromatic Hydrocarbons (PAH)						
Naphthalene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PAH	1	mg/kg	-	< 1	< 1	< 1
2-Fluorobiphenyl (surr.)	1	%	-	90	88	90
p-Terphenyl-d14 (surr.)	1	%	-	96	93	97
Heavy Metals						
Arsenic	2	mg/kg	-	2.9	< 2	5.1
Cadmium	0.4	mg/kg	-	< 0.4	< 0.4	0.5
Chromium	5	mg/kg	-	6.9	11	6.4
Copper	5	mg/kg	-	49	30	47
Lead	5	mg/kg	-	26	13	81
Mercury	0.05	mg/kg	-	< 0.05	< 0.05	0.05
Nickel	5	mg/kg	-	11	13	11
Zinc	5	mg/kg	-	130	78	830
% Moisture	0.1	%	-	15	16	14
Asbestos			See attached	-	-	-

Client Sample ID			TP9	TP10/0.1	TP11	TP12
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06358	S12-De06360	S12-De06363	S12-De06365
Date Sampled			Dec 06, 2012	Dec 06, 2012	Dec 06, 2012	Dec 06, 2012
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	10	mg/kg	< 10	< 10	< 10	< 10
TRH C10-C14	50	mg/kg	< 50	< 50	< 50	< 50
TRH C15-C28	100	mg/kg	< 100	< 100	< 100	< 100
TRH C29-C36	100	mg/kg	< 100	< 100	< 100	< 100
TRH C10-36 (Total)	100	mg/kg	< 100	< 100	< 100	< 100
BTEX						
Benzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total m+p-Xylenes	1	mg/kg	< 1	< 1	< 1	< 1
o-Xylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Total BTEX	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
4-Bromofluorobenzene (surr.)	1	%	87	85	83	85
Total Recoverable Hydrocarbons - Draft 2010 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

Client Sample ID			TP9	TP10/0.1	TP11	TP12
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06358	S12-De06360	S12-De06363	S12-De06365
Date Sampled			Dec 06, 2012	Dec 06, 2012	Dec 06, 2012	Dec 06, 2012
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *						
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Organochlorine Pesticides (OC)						
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	74	78	71	72
Tetrachloro-m-xylene (surr.)	1	%	85	87	81	84
Polyaromatic Hydrocarbons (PAH)						
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)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	< 1	< 1	< 1	< 1
Benzo(g.h.i)perylene	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	1	mg/kg	< 1	< 1	< 1	< 1
2-Fluorobiphenyl (surr.)	1	%	93	84	90	87
p-Terphenyl-d14 (surr.)	1	%	103	89	95	96
Heavy Metals						
Arsenic	2	mg/kg	4.0	< 2	8.4	< 2
Cadmium	0.4	mg/kg	0.9	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	13	6.5	8.3

Client Sample ID			TP9	TP10/0.1	TP11	TP12
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06358	S12-De06360	S12-De06363	S12-De06365
Date Sampled			Dec 06, 2012	Dec 06, 2012	Dec 06, 2012	Dec 06, 2012
Test/Reference	LOR	Unit				
Heavy Metals						
Copper	5	mg/kg	120	35	47	32
Lead	5	mg/kg	38	20	17	29
Mercury	0.05	mg/kg	0.06	0.07	< 0.05	< 0.05
Nickel	5	mg/kg	13	15	17	13
Zinc	5	mg/kg	280	90	100	150
% Moisture	0.1	%	15	17	14	11

Client Sample ID			TP13	TP14	TP14/A	TP15
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06368	S12-De06370	S12-De06371	S12-De06373
Date Sampled			Dec 06, 2012	Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	10	mg/kg	< 10	< 10	-	< 10
TRH C10-C14	50	mg/kg	< 50	< 50	-	< 50
TRH C15-C28	100	mg/kg	< 100	< 100	-	< 100
TRH C29-C36	100	mg/kg	< 100	< 100	-	< 100
TRH C10-36 (Total)	100	mg/kg	< 100	< 100	-	< 100
BTEX						
Benzene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Toluene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Ethylbenzene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total m+p-Xylenes	1	mg/kg	< 1	< 1	-	< 1
o-Xylene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	< 1.5	< 1.5	-	< 1.5
Total BTEX	1.5	mg/kg	< 1.5	< 1.5	-	< 1.5
4-Bromofluorobenzene (surr.)	1	%	80	85	-	84
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	-	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	-	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	-	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	-	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	-	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	-	< 100
Organochlorine Pesticides (OC)						
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4.4'-DDT	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
a-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
a-Chlordane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05

mgt LabMark
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Client Sample ID			TP13	TP14	TP14/A	TP15
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06368	S12-De06370	S12-De06371	S12-De06373
Date Sampled			Dec 06, 2012	Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit				
Organochlorine Pesticides (OC)						
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
g-Chlordane	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dibutylchlorendate (surr.)	1	%	75	70	-	74
Tetrachloro-m-xylene (surr.)	1	%	82	82	-	84
Polyaromatic Hydrocarbons (PAH)						
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Benzo(b)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	< 1	< 1	-	< 1
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total PAH	1	mg/kg	< 1	< 1	-	< 1
2-Fluorobiphenyl (surr.)	1	%	93	94	-	98
p-Terphenyl-d14 (surr.)	1	%	102	101	-	103
Heavy Metals						
Arsenic	2	mg/kg	2.0	5.7	-	4.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	-	< 0.4
Chromium	5	mg/kg	16	7.5	-	5.1
Copper	5	mg/kg	39	47	-	31
Lead	5	mg/kg	18	39	-	71
Mercury	0.05	mg/kg	< 0.05	0.06	-	0.08
Nickel	5	mg/kg	19	15	-	9.9
Zinc	5	mg/kg	60	140	-	170
% Moisture	0.1	%	13	6.9	-	9.1
Asbestos			-	-	See attached	-

Client Sample ID			TP15/A	TP16	TP16/A	TP17
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06374	S12-De06376	S12-De06377	S12-De06378
Date Sampled			Dec 07, 2012	Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	10	mg/kg	-	< 10	-	< 10
TRH C10-C14	50	mg/kg	-	< 50	-	< 50
TRH C15-C28	100	mg/kg	-	< 100	-	< 100
TRH C29-C36	100	mg/kg	-	< 100	-	< 100
TRH C10-36 (Total)	100	mg/kg	-	< 100	-	< 100
BTEX						
Benzene	0.5	mg/kg	-	< 0.5	-	< 0.5
Toluene	0.5	mg/kg	-	< 0.5	-	< 0.5
Ethylbenzene	0.5	mg/kg	-	< 0.5	-	< 0.5
Total m+p-Xylenes	1	mg/kg	-	< 1	-	< 1
o-Xylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	-	< 1.5	-	< 1.5
Total BTEX	1.5	mg/kg	-	< 1.5	-	< 1.5
4-Bromofluorobenzene (surr.)	1	%	-	86	-	84
Total Recoverable Hydrocarbons - Draft 2010 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	-	< 100	-	< 100
TRH >C34-C40	100	mg/kg	-	< 100	-	< 100
Organochlorine Pesticides (OC)						
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDT	0.2	mg/kg	-	< 0.2	-	< 0.2
a-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
a-Chlordane	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
g-Chlordane	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	-	< 0.2
Dibutylchlorendate (surr.)	1	%	-	72	-	73
Tetrachloro-m-xylene (surr.)	1	%	-	84	-	84
Polyaromatic Hydrocarbons (PAH)						
Acenaphthene	0.5	mg/kg	-	< 0.5	-	< 0.5

mgt LabMark
ENVIRONMENTAL LABORATORIES

Client Sample ID			**TP15/A**	**TP16**	**TP16/A**	**TP17**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**S12-De06374**	**S12-De06376**	**S12-De06377**	**S12-De06378**
Date Sampled			**Dec 07, 2012**	**Dec 07, 2012**	**Dec 07, 2012**	**Dec 07, 2012**
Test/Reference	LOR	Unit				
Polyaromatic Hydrocarbons (PAH)						
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(b)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	-	< 1	-	< 1
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	-	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PAH	1	mg/kg	-	< 1	-	< 1
2-Fluorobiphenyl (surr.)	1	%	-	90	-	96
p-Terphenyl-d14 (surr.)	1	%	-	96	-	104
Heavy Metals						
Arsenic	2	mg/kg	-	4.1	-	3.2
Cadmium	0.4	mg/kg	-	0.5	-	1.0
Chromium	5	mg/kg	-	7.6	-	6.1
Copper	5	mg/kg	-	98	-	120
Lead	5	mg/kg	-	66	-	160
Mercury	0.05	mg/kg	-	0.06	-	0.08
Nickel	5	mg/kg	-	14	-	14
Zinc	5	mg/kg	-	1000	-	750
% Moisture	0.1	%	-	10	-	14
Asbestos			See attached	-	See attached	-

Client Sample ID			**TP17/A**	**TP18**	**S5**	**TP19**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
mgt-LabMark Sample No.			**S12-De06379**	**S12-De06381**	**S12-De06383**	**S12-De06385**
Date Sampled			**Dec 07, 2012**	**Dec 07, 2012**	**Dec 07, 2012**	**Dec 07, 2012**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	10	mg/kg	-	< 10	-	< 10
TRH C10-C14	50	mg/kg	-	< 50	-	< 50
TRH C15-C28	100	mg/kg	-	< 100	-	< 100
TRH C29-C36	100	mg/kg	-	< 100	-	< 100
TRH C10-36 (Total)	100	mg/kg	-	< 100	-	< 100
BTEX						
Benzene	0.5	mg/kg	-	< 0.5	-	< 0.5
Toluene	0.5	mg/kg	-	< 0.5	-	< 0.5
Ethylbenzene	0.5	mg/kg	-	< 0.5	-	< 0.5

mgt LabMark
ENVIRONMENTAL LABORATORIES

Client Sample ID			TP17/A	TP18	S5	TP19
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06379	S12-De06381	S12-De06383	S12-De06385
Date Sampled			Dec 07, 2012	Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit				
BTEX						
Total m+p-Xylenes	1	mg/kg	-	< 1	-	< 1
o-Xylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	-	< 1.5	-	< 1.5
Total BTEX	1.5	mg/kg	-	< 1.5	-	< 1.5
4-Bromofluorobenzene (surr.)	1	%	-	90	-	83
Total Recoverable Hydrocarbons - Draft 2010 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	-	< 100	-	< 100
TRH >C34-C40	100	mg/kg	-	< 100	-	< 100
Organochlorine Pesticides (OC)						
4.4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-Chlordane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-Chlordane	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	-	72	73	76
Tetrachloro-m-xylene (surr.)	1	%	-	83	90	88
Polyaromatic Hydrocarbons (PAH)						
Acenaphthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(b)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	-	< 1	-	< 1
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	-	< 0.5

Client Sample ID			TP17/A	TP18	S5	TP19
Sample Matrix			Soil	Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06379	S12-De06381	S12-De06383	S12-De06385
Date Sampled			Dec 07, 2012	Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit				
Polyaromatic Hydrocarbons (PAH)						
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	-	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PAH	1	mg/kg	-	< 1	-	< 1
2-Fluorobiphenyl (surr.)	1	%	-	110	-	97
p-Terphenyl-d14 (surr.)	1	%	-	110	-	104
Heavy Metals						
Arsenic	2	mg/kg	-	6.6	4.4	3.2
Cadmium	0.4	mg/kg	-	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	-	31	23	20
Copper	5	mg/kg	-	52	44	46
Lead	5	mg/kg	-	17	14	12
Mercury	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	-	23	29	24
Zinc	5	mg/kg	-	77	80	79
% Moisture	0.1	%	-	10	21	15
Asbestos			See attached	-	-	-

Client Sample ID			S1	S6	D2
Sample Matrix			Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06388	S12-De06390	S12-De06392
Date Sampled			Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	10	mg/kg	-	-	< 10
TRH C10-C14	50	mg/kg	-	-	< 50
TRH C15-C28	100	mg/kg	-	-	< 100
TRH C29-C36	100	mg/kg	-	-	< 100
TRH C10-36 (Total)	100	mg/kg	-	-	< 100
BTEX					
Benzene	0.5	mg/kg	-	-	< 0.5
Toluene	0.5	mg/kg	-	-	< 0.5
Ethylbenzene	0.5	mg/kg	-	-	< 0.5
Total m+p-Xylenes	1	mg/kg	-	-	< 1
o-Xylene	0.5	mg/kg	-	-	< 0.5
Xylenes(ortho.meta and para)	1.5	mg/kg	-	-	< 1.5
Total BTEX	1.5	mg/kg	-	-	< 1.5
4-Bromofluorobenzene (surr.)	1	%	-	-	105
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *					
Naphthalene[N02]	0.5	mg/kg	-	-	< 0.5
TRH C6-C10	20	mg/kg	-	-	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	-	< 20
TRH >C10-C16	50	mg/kg	-	-	< 50

Client Sample ID			S1	S6	D2
Sample Matrix			Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06388	S12-De06390	S12-De06392
Date Sampled			Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *					
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	-	< 50
TRH >C16-C34	100	mg/kg	-	-	< 100
TRH >C34-C40	100	mg/kg	-	-	< 100
Organochlorine Pesticides (OC)					
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.2	mg/kg	< 0.2	< 0.2	< 0.2
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-Chlordane	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	77	72	70
Tetrachloro-m-xylene (surr.)	1	%	85	83	81
Polyaromatic Hydrocarbons (PAH)					
Acenaphthene	0.5	mg/kg	-	-	< 0.5
Acenaphthylene	0.5	mg/kg	-	-	< 0.5
Anthracene	0.5	mg/kg	-	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	-	< 0.5
Benzo(b)fluoranthene & Benzo(k)fluoranthene	1	mg/kg	-	-	< 1
Benzo(g.h.i)perylene	0.5	mg/kg	-	-	< 0.5
Chrysene	0.5	mg/kg	-	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	-	< 0.5
Fluoranthene	0.5	mg/kg	-	-	< 0.5
Fluorene	0.5	mg/kg	-	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	-	< 0.5
Naphthalene	0.5	mg/kg	-	-	< 0.5
Phenanthrene	0.5	mg/kg	-	-	< 0.5
Pyrene	0.5	mg/kg	-	-	< 0.5
Total PAH	1	mg/kg	-	-	< 1
2-Fluorobiphenyl (surr.)	1	%	-	-	92
p-Terphenyl-d14 (surr.)	1	%	-	-	97
Heavy Metals					
Arsenic	2	mg/kg	5.1	3.2	5.1
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4

Client Sample ID			S1	S6	D2
Sample Matrix			Soil	Soil	Soil
mgt-LabMark Sample No.			S12-De06388	S12-De06390	S12-De06392
Date Sampled			Dec 07, 2012	Dec 07, 2012	Dec 07, 2012
Test/Reference	LOR	Unit			
Heavy Metals					
Chromium	5	mg/kg	19	18	14
Copper	5	mg/kg	42	45	48
Lead	5	mg/kg	12	13	58
Mercury	0.05	mg/kg	< 0.05	< 0.05	0.06
Nickel	5	mg/kg	30	15	19
Zinc	5	mg/kg	94	61	160
% Moisture	0.1	%	19	17	9.4

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Dec 12, 2012	14 Day
- Method: E004 Petroleum Hydrocarbons (TPH)			
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *	Sydney	Dec 12, 2012	14 Day
- Method: LM-LTM-ORG2010			
BTEX	Sydney	Dec 11, 2012	14 Day
- Method: E029/E016 BTEX			
Organochlorine Pesticides (OC)	Sydney	Dec 12, 2012	14 Day
- Method: E013 Organochlorine Pesticides (OC)			
Polyaromatic Hydrocarbons (PAH)	Sydney	Dec 12, 2012	14 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Metals M8	Sydney	Dec 11, 2012	28 Day
- Method: E022 Acid Extractable metals in Soils & E026 Mercury			
% Moisture	Sydney	Dec 11, 2012	28 Day
- Method: E005 Moisture Content			

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Site # 1254 & 14271

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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

Company Name:	Geo-Logix P/L	**Order No.:**	316192	**Received:**	Dec 10, 2012 11:10 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	**Report #:**	362423	**Due:**	Dec 17, 2012
		Phone:	02 9979 1722	**Priority:**	5 Day
		Fax:	02 9979 1222	**Contact Name:**	Jenna Seymour
Client Job No.:	1201085				

mgt-LabMark Client Manager: Jean Heng

Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
TP1	Dec 06, 2012		Soil	S12-De06342	X			X	X	X	X	X
TP2	Dec 06, 2012		Soil	S12-De06343	X			X	X	X	X	X
TP3	Dec 06, 2012		Soil	S12-De06344	X			X	X	X	X	X
D1	Dec 06, 2012		Soil	S12-De06345	X			X	X	X	X	X
S2	Dec 06, 2012		Soil	S12-De06346	X			X		X		
S3	Dec 06, 2012		Soil	S12-De06347			X					
S4	Dec 06, 2012		Soil	S12-De06348	X			X		X		
TP4	Dec 06, 2012		Soil	S12-De06349	X			X	X	X	X	X
TP5	Dec 06, 2012		Soil	S12-De06350	X			X	X	X	X	X
TP5/0.1A	Dec 06, 2012		Soil	S12-De06351		X						

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Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP5 ACM	Dec 06, 2012		Other	S12-De06352			X					
TP6	Dec 06, 2012		Soil	S12-De06353	X			X	X	X	X	X
TP7	Dec 06, 2012		Soil	S12-De06354	X			X	X	X	X	X
TP7/A	Dec 06, 2012		Soil	S12-De06355			X					
TP8	Dec 06, 2012		Soil	S12-De06356	X			X	X	X	X	X
TP8/A	Dec 06, 2012		Soil	S12-De06357			X					
TP9	Dec 06, 2012		Soil	S12-De06358	X			X	X	X	X	X
TP9/A	Dec 06, 2012		Soil	S12-De06359			X					
TP10/0.1	Dec 06, 2012		Soil	S12-De06360	X			X	X	X	X	X
TP10/0.3	Dec 06, 2012		Soil	S12-De06361			X					
TP10/A	Dec 06, 2012		Soil	S12-De06362			X					

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Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP11	Dec 06, 2012		Soil	S12-De06363	X			X	X	X	X	X
TP11/A	Dec 06, 2012		Soil	S12-De06364			X					
TP12	Dec 06, 2012		Soil	S12-De06365	X			X	X	X	X	X
TP12/1.9	Dec 06, 2012		Soil	S12-De06366			X					
TP12/A	Dec 06, 2012		Soil	S12-De06367			X					
TP13	Dec 06, 2012		Soil	S12-De06368	X			X	X	X	X	X
TP13/A	Dec 06, 2012		Soil	S12-De06369			X					
TP14	Dec 07, 2012		Soil	S12-De06370	X			X	X	X	X	X
TP14/A	Dec 07, 2012		Soil	S12-De06371		X						
TP14 ACM	Dec 07, 2012		Other	S12-De06372			X					
TP15	Dec 07, 2012		Soil	S12-De06373	X			X	X	X	X	X

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Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP15/A	Dec 07, 2012		Soil	S12-De06374		X						
TP15 ACM	Dec 07, 2012		Other	S12-De06375			X					
TP16	Dec 07, 2012		Soil	S12-De06376	X			X	X	X	X	X
TP16/A	Dec 07, 2012		Soil	S12-De06377		X						
TP17	Dec 07, 2012		Soil	S12-De06378	X			X	X	X	X	X
TP17/A	Dec 07, 2012		Soil	S12-De06379		X						
TP17 ACM	Dec 07, 2012		Other	S12-De06380			X					
TP18	Dec 07, 2012		Soil	S12-De06381	X			X	X	X	X	X
TP18/A	Dec 07, 2012		Soil	S12-De06382			X					
S5	Dec 07, 2012		Soil	S12-De06383	X			X		X		
S5/A	Dec 07, 2012		Soil	S12-De06384			X					

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Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP19	Dec 07, 2012		Soil	S12-De06385	X			X	X	X	X	X
TP19/A	Dec 07, 2012		Soil	S12-De06386			X					
SS ACM	Dec 07, 2012		Other	S12-De06387			X					
S1	Dec 07, 2012		Soil	S12-De06388	X			X		X		
S1/A	Dec 07, 2012		Soil	S12-De06389			X					
S6	Dec 07, 2012		Soil	S12-De06390	X			X		X		
S6/A	Dec 07, 2012		Soil	S12-De06391			X					
D2	Dec 07, 2012		Soil	S12-De06392	X			X	X	X	X	X
DS	Dec 07, 2012		Soil	S12-De06393			X					

mgt-LabMark Internal Quality Control Review

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. 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 Sample Receipt Acknowledgment.

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.

****NOTE:** pH duplicates are reported as a range NOT as RPD

UNITS

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Units

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. 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.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environment Protection Authority
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC was performed on samples not pertaining to this report, however QC is representative of the sequence or batch that client samples were analysed within

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 20-130%.

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.
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, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene 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 Arochlor 1260 in Matrix Spikes and LCS's.
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 RPD's are calculated from raw analytical data thus it is possible to have two sets of data.

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions E004 Petroleum Hydrocarbons (TPH)							
TRH C6-C9	mg/kg	< 10			10	Pass	
TRH C10-C14	mg/kg	< 50			50	Pass	
TRH C15-C28	mg/kg	< 100			100	Pass	
TRH C29-C36	mg/kg	< 100			100	Pass	
Method Blank							
BTEX E029/E016 BTEX							
Benzene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.5			0.5	Pass	
Total m+p-Xylenes	mg/kg	< 1			1	Pass	
o-Xylene	mg/kg	< 0.5			0.5	Pass	
Xylenes(ortho.meta and para)	mg/kg	< 1.5			1.5	Pass	
Total BTEX	mg/kg	< 1.5			1.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions * LM-LTM-ORG2010							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH C6-C10 less BTEX (F1)	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							
Organochlorine Pesticides (OC) E013 Organochlorine Pesticides (OC)							
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.2			0.2	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
a-Chlordane	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
g-Chlordane	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polyaromatic Hydrocarbons (PAH) E007 Polyaromatic Hydrocarbons (PAH)							
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	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	mg/kg	< 1			1	Pass	
Benzo(g.h.i)perylene	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							
Metals M8 E022 Acid Extractable metals in Soils & E026 Mercury							
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	< 0.05			0.05	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions E004 Petroleum Hydrocarbons (TPH)							
TRH C6-C9	%	96			70-130	Pass	
TRH C10-C14	%	108			70-130	Pass	
LCS - % Recovery							
BTEX E029/E016 BTEX							
Benzene	%	96			70-130	Pass	
Toluene	%	93			70-130	Pass	
Ethylbenzene	%	104			70-130	Pass	
Total m+p-Xylenes	%	105			70-130	Pass	
o-Xylene	%	105			70-130	Pass	
Xylenes(ortho.meta and para)	%	105			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions * LM-LTM-ORG2010							
Naphthalene	%	125			70-130	Pass	
TRH C6-C10	%	89			70-130	Pass	
TRH >C10-C16	%	98			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides (OC) E013 Organochlorine Pesticides (OC)							
4.4'-DDD	%	70			70-130	Pass	
4.4'-DDE	%	73			70-130	Pass	
4.4'-DDT	%	71			70-130	Pass	
a-BHC	%	75			70-130	Pass	
a-Chlordane	%	71			70-130	Pass	
Aldrin	%	76			70-130	Pass	
b-BHC	%	73			70-130	Pass	
d-BHC	%	72			70-130	Pass	
Dieldrin	%	70			70-130	Pass	
Endosulfan I	%	75			70-130	Pass	
Endosulfan II	%	71			70-130	Pass	
Endosulfan sulphate	%	71			70-130	Pass	
Endrin	%	72			70-130	Pass	
Endrin aldehyde	%	72			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin ketone	%	71			70-130	Pass	
g-BHC (Lindane)	%	71			70-130	Pass	
g-Chlordane	%	72			70-130	Pass	
Heptachlor	%	74			70-130	Pass	
Heptachlor epoxide	%	74			70-130	Pass	
Hexachlorobenzene	%	80			70-130	Pass	
Methoxychlor	%	72			70-130	Pass	
LCS - % Recovery							
Polyaromatic Hydrocarbons (PAH) E007 Polyaromatic Hydrocarbons (PAH)							
Acenaphthene	%	94			70-130	Pass	
Acenaphthylene	%	88			70-130	Pass	
Anthracene	%	96			70-130	Pass	
Benz(a)anthracene	%	99			70-130	Pass	
Benzo(a)pyrene	%	94			70-130	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	%	95			70-130	Pass	
Benzo(g.h.i)perylene	%	91			70-130	Pass	
Chrysene	%	89			70-130	Pass	
Dibenz(a.h)anthracene	%	88			70-130	Pass	
Fluoranthene	%	89			70-130	Pass	
Fluorene	%	90			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	89			70-130	Pass	
Naphthalene	%	94			70-130	Pass	
Phenanthrene	%	89			70-130	Pass	
Pyrene	%	90			70-130	Pass	
LCS - % Recovery							
Metals M8 E022 Acid Extractable metals in Soils & E026 Mercury							
Arsenic	%	105			70-130	Pass	
Cadmium	%	119			70-130	Pass	
Chromium	%	118			70-130	Pass	
Copper	%	121			70-130	Pass	
Lead	%	113			70-130	Pass	
Mercury	%	105			70-130	Pass	
Nickel	%	111			70-130	Pass	
Zinc	%	121			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 Fractions				Result 1					
TRH C6-C9	S12-De06342	CP	%	81			70-130	Pass	
TRH C10-C14	S12-De06342	CP	%	86			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S12-De06342	CP	%	85			70-130	Pass	
Toluene	S12-De06342	CP	%	84			70-130	Pass	
Ethylbenzene	S12-De06342	CP	%	95			70-130	Pass	
Total m+p-Xylenes	S12-De06342	CP	%	95			70-130	Pass	
o-Xylene	S12-De06342	CP	%	97			70-130	Pass	
Xylenes(ortho.meta and para)	S12-De06342	CP	%	96			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1					
Naphthalene	S12-De06342	CP	%	129			70-130	Pass	
TRH C6-C10	S12-De06342	CP	%	74			70-130	Pass	
TRH >C10-C16	S12-De06342	CP	%	83			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides (OC)				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDD	S12-De06342	CP	%	113			70-130	Pass	
4.4'-DDE	S12-De06342	CP	%	94			70-130	Pass	
4.4'-DDT	S12-De06342	CP	%	82			70-130	Pass	
a-BHC	S12-De06342	CP	%	108			70-130	Pass	
a-Chlordane	S12-De06342	CP	%	91			70-130	Pass	
Aldrin	S12-De06342	CP	%	94			70-130	Pass	
b-BHC	S12-De06342	CP	%	94			70-130	Pass	
d-BHC	S12-De06342	CP	%	92			70-130	Pass	
Dieldrin	S12-De06342	CP	%	86			70-130	Pass	
Endosulfan I	S12-De06342	CP	%	93			70-130	Pass	
Endosulfan II	S12-De06342	CP	%	91			70-130	Pass	
Endosulfan sulphate	S12-De06342	CP	%	90			70-130	Pass	
Endrin	S12-De06342	CP	%	99			70-130	Pass	
Endrin aldehyde	S12-De06342	CP	%	76			70-130	Pass	
Endrin ketone	S12-De06342	CP	%	86			70-130	Pass	
g-BHC (Lindane)	S12-De06342	CP	%	106			70-130	Pass	
g-Chlordane	S12-De06342	CP	%	91			70-130	Pass	
Heptachlor	S12-De06342	CP	%	93			70-130	Pass	
Heptachlor epoxide	S12-De06342	CP	%	96			70-130	Pass	
Hexachlorobenzene	S12-De06342	CP	%	99			70-130	Pass	
Methoxychlor	S12-De06342	CP	%	86			70-130	Pass	
Spike - % Recovery									
Polyaromatic Hydrocarbons (PAH)				Result 1					
Acenaphthene	S12-De06342	CP	%	99			70-130	Pass	
Acenaphthylene	S12-De06342	CP	%	96			70-130	Pass	
Anthracene	S12-De06342	CP	%	96			70-130	Pass	
Benz(a)anthracene	S12-De06342	CP	%	94			70-130	Pass	
Benzo(a)pyrene	S12-De06342	CP	%	94			70-130	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	S12-De06342	CP	%	99			70-130	Pass	
Benzo(g.h.i)perylene	S12-De06342	CP	%	97			70-130	Pass	
Chrysene	S12-De06342	CP	%	103			70-130	Pass	
Dibenz(a.h)anthracene	S12-De06342	CP	%	94			70-130	Pass	
Fluoranthene	S12-De06342	CP	%	97			70-130	Pass	
Fluorene	S12-De06342	CP	%	96			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S12-De06342	CP	%	98			70-130	Pass	
Naphthalene	S12-De06342	CP	%	100			70-130	Pass	
Phenanthrene	S12-De06342	CP	%	96			70-130	Pass	
Pyrene	S12-De06342	CP	%	98			70-130	Pass	
Spike - % Recovery									
Metals M8				Result 1					
Arsenic	S12-De06345	CP	%	79			70-130	Pass	
Cadmium	S12-De06345	CP	%	111			70-130	Pass	
Chromium	S12-De06345	CP	%	115			70-130	Pass	
Copper	S12-De06345	CP	%	102			70-130	Pass	
Lead	S12-De06345	CP	%	111			70-130	Pass	
Mercury	S12-De06345	CP	%	107			70-130	Pass	
Nickel	S12-De06345	CP	%	102			70-130	Pass	
Zinc	S12-De06345	CP	%	119			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S12-De06356	CP	%	111			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1					
TRH >C10-C16	S12-De06356	CP	%	94			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organochlorine Pesticides (OC)				Result 1					
4.4'-DDD	S12-De06356	CP	%	74			70-130	Pass	
4.4'-DDE	S12-De06356	CP	%	108			70-130	Pass	
4.4'-DDT	S12-De06356	CP	%	73			70-130	Pass	
a-BHC	S12-De06356	CP	%	81			70-130	Pass	
a-Chlordane	S12-De06356	CP	%	78			70-130	Pass	
Aldrin	S12-De06356	CP	%	78			70-130	Pass	
b-BHC	S12-De06356	CP	%	74			70-130	Pass	
d-BHC	S12-De06356	CP	%	73			70-130	Pass	
Dieldrin	S12-De06356	CP	%	78			70-130	Pass	
Endosulfan I	S12-De06356	CP	%	82			70-130	Pass	
Endosulfan II	S12-De06356	CP	%	77			70-130	Pass	
Endosulfan sulphate	S12-De06356	CP	%	75			70-130	Pass	
Endrin	S12-De06356	CP	%	77			70-130	Pass	
Endrin aldehyde	S12-De06356	CP	%	72			70-130	Pass	
Endrin ketone	S12-De06356	CP	%	71			70-130	Pass	
g-BHC (Lindane)	S12-De06356	CP	%	77			70-130	Pass	
g-Chlordane	S12-De06356	CP	%	74			70-130	Pass	
Heptachlor	S12-De06356	CP	%	76			70-130	Pass	
Heptachlor epoxide	S12-De06356	CP	%	111			70-130	Pass	
Hexachlorobenzene	S12-De06356	CP	%	81			70-130	Pass	
Methoxychlor	S12-De06356	CP	%	72			70-130	Pass	
Spike - % Recovery									
Polyaromatic Hydrocarbons (PAH)				Result 1					
Acenaphthene	S12-De06356	CP	%	99			70-130	Pass	
Acenaphthylene	S12-De06356	CP	%	93			70-130	Pass	
Anthracene	S12-De06356	CP	%	92			70-130	Pass	
Benz(a)anthracene	S12-De06356	CP	%	90			70-130	Pass	
Benzo(a)pyrene	S12-De06356	CP	%	97			70-130	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	S12-De06356	CP	%	100			70-130	Pass	
Benzo(g.h.i)perylene	S12-De06356	CP	%	94			70-130	Pass	
Chrysene	S12-De06356	CP	%	102			70-130	Pass	
Dibenz(a.h)anthracene	S12-De06356	CP	%	91			70-130	Pass	
Fluoranthene	S12-De06356	CP	%	94			70-130	Pass	
Fluorene	S12-De06356	CP	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S12-De06356	CP	%	93			70-130	Pass	
Naphthalene	S12-De06356	CP	%	97			70-130	Pass	
Phenanthrene	S12-De06356	CP	%	93			70-130	Pass	
Pyrene	S12-De06356	CP	%	94			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S12-De06360	CP	%	85			70-130	Pass	
Toluene	S12-De06360	CP	%	90			70-130	Pass	
Ethylbenzene	S12-De06360	CP	%	89			70-130	Pass	
Total m+p-Xylenes	S12-De06360	CP	%	91			70-130	Pass	
o-Xylene	S12-De06360	CP	%	91			70-130	Pass	
Xylenes(ortho.meta and para)	S12-De06360	CP	%	91			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1					
Naphthalene	S12-De06360	CP	%	93			70-130	Pass	
Spike - % Recovery									
Metals M8				Result 1					
Arsenic	S12-De06360	CP	%	99			70-130	Pass	
Cadmium	S12-De06360	CP	%	115			70-130	Pass	
Chromium	S12-De06360	CP	%	113			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Copper	S12-De06360	CP	%	101			70-130	Pass	
Lead	S12-De06360	CP	%	96			70-130	Pass	
Mercury	S12-De06360	CP	%	103			70-130	Pass	
Nickel	S12-De06360	CP	%	99			70-130	Pass	
Zinc	S12-De06360	CP	%	106			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S12-De06381	CP	%	104			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1					
TRH >C10-C16	S12-De06381	CP	%	94			70-130	Pass	
Spike - % Recovery									
Polyaromatic Hydrocarbons (PAH)				Result 1					
Acenaphthene	S12-De06381	CP	%	96			70-130	Pass	
Acenaphthylene	S12-De06381	CP	%	93			70-130	Pass	
Anthracene	S12-De06381	CP	%	95			70-130	Pass	
Benz(a)anthracene	S12-De06381	CP	%	90			70-130	Pass	
Benzo(a)pyrene	S12-De06381	CP	%	96			70-130	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	S12-De06381	CP	%	97			70-130	Pass	
Benzo(g.h.i)perylene	S12-De06381	CP	%	97			70-130	Pass	
Chrysene	S12-De06381	CP	%	100			70-130	Pass	
Dibenz(a.h)anthracene	S12-De06381	CP	%	94			70-130	Pass	
Fluoranthene	S12-De06381	CP	%	91			70-130	Pass	
Fluorene	S12-De06381	CP	%	92			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S12-De06381	CP	%	95			70-130	Pass	
Naphthalene	S12-De06381	CP	%	97			70-130	Pass	
Phenanthrene	S12-De06381	CP	%	91			70-130	Pass	
Pyrene	S12-De06381	CP	%	93			70-130	Pass	
Spike - % Recovery									
Metals M8				Result 1					
Arsenic	S12-De06381	CP	%	94			70-130	Pass	
Cadmium	S12-De06381	CP	%	110			70-130	Pass	
Chromium	S12-De06381	CP	%	119			70-130	Pass	
Copper	S12-De06381	CP	%	120			70-130	Pass	
Lead	S12-De06381	CP	%	122			70-130	Pass	
Mercury	S12-De06381	CP	%	78			70-130	Pass	
Nickel	S12-De06381	CP	%	107			70-130	Pass	
Zinc	S12-De06381	CP	%	92			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S12-De06342	CP	mg/kg	< 10	< 10	<1	30%	Pass	
TRH C10-C14	S12-De06342	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C15-C28	S12-De06342	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH C29-C36	S12-De06342	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total m+p-Xylenes	S12-De06342	CP	mg/kg	< 1	< 1	<1	30%	Pass	
o-Xylene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes(ortho.meta and para)	S12-De06342	CP	mg/kg	< 1.5	< 1.5	<1	30%	Pass	
Total BTEX	S12-De06342	CP	mg/kg	< 1.5	< 1.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
Naphthalene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S12-De06342	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10 less BTEX (F1)	S12-De06342	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S12-De06342	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S12-De06342	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S12-De06342	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides (OC)				Result 1	Result 2	RPD			
4.4'-DDD	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S12-De06342	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
a-BHC	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-Chlordane	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-Chlordane	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S12-De06342	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S12-De06342	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polyaromatic Hydrocarbons (PAH)				Result 1	Result 2	RPD			
Acenaphthene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	S12-De06342	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Benzo(g.h.i)perylene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S12-De06342	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	S12-De06344	CP	mg/kg	26	29	9.0	30%	Pass	
Cadmium	S12-De06344	CP	mg/kg	< 0.4	< 0.4	9.0	30%	Pass	
Chromium	S12-De06344	CP	mg/kg	28	31	9.0	30%	Pass	
Copper	S12-De06344	CP	mg/kg	36	40	9.0	30%	Pass	
Lead	S12-De06344	CP	mg/kg	17	19	13	30%	Pass	
Mercury	S12-De06344	CP	mg/kg	< 0.05	< 0.05	6.0	30%	Pass	

Duplicate									
Metals M8				Result 1	Result 2	RPD			
Nickel	S12-De06344	CP	mg/kg	15	18	23	30%	Pass	
Zinc	S12-De06344	CP	mg/kg	41	40	1.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S12-De06356	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C15-C28	S12-De06356	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH C29-C36	S12-De06356	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
TRH >C10-C16	S12-De06356	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S12-De06356	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S12-De06356	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides (OC)				Result 1	Result 2	RPD			
4.4'-DDD	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S12-De06356	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
a-BHC	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-Chlordane	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-Chlordane	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S12-De06356	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S12-De06356	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polyaromatic Hydrocarbons (PAH)				Result 1	Result 2	RPD			
Acenaphthene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	S12-De06356	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Benzo(g.h.i)perylene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S12-De06356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	S12-De06358	CP	mg/kg	4.0	4.7	15	30%	Pass	
Cadmium	S12-De06358	CP	mg/kg	0.9	1.1	20	30%	Pass	
Chromium	S12-De06358	CP	mg/kg	< 5	< 5	16	30%	Pass	
Copper	S12-De06358	CP	mg/kg	120	120	7.0	30%	Pass	
Lead	S12-De06358	CP	mg/kg	38	44	16	30%	Pass	
Mercury	S12-De06358	CP	mg/kg	0.06	< 0.05	23	30%	Pass	
Nickel	S12-De06358	CP	mg/kg	13	13	5.0	30%	Pass	
Zinc	S12-De06358	CP	mg/kg	280	300	6.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S12-De06360	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S12-De06360	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	S12-De06360	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	S12-De06360	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total m+p-Xylenes	S12-De06360	CP	mg/kg	< 1	< 1	<1	30%	Pass	
o-Xylene	S12-De06360	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes(ortho.meta and para)	S12-De06360	CP	mg/kg	< 1.5	< 1.5	<1	30%	Pass	
Total BTEX	S12-De06360	CP	mg/kg	< 1.5	< 1.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
Naphthalene	S12-De06360	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S12-De06360	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10 less BTEX (F1)	S12-De06360	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	S12-De06378	CP	mg/kg	3.2	3.3	6.0	30%	Pass	
Cadmium	S12-De06378	CP	mg/kg	1.0	1.0	5.0	30%	Pass	
Chromium	S12-De06378	CP	mg/kg	6.1	< 5	30	30%	Pass	
Copper	S12-De06378	CP	mg/kg	120	170	33	30%	Fail	Q13
Lead	S12-De06378	CP	mg/kg	160	170	5.0	30%	Pass	
Mercury	S12-De06378	CP	mg/kg	0.08	0.07	16	30%	Pass	
Nickel	S12-De06378	CP	mg/kg	14	14	3.0	30%	Pass	
Zinc	S12-De06378	CP	mg/kg	750	920	20	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S12-De06381	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C15-C28	S12-De06381	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH C29-C36	S12-De06381	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
TRH >C10-C16	S12-De06381	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S12-De06381	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S12-De06381	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides (OC)				Result 1	Result 2	RPD			
4.4'-DDD	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S12-De06381	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
a-BHC	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-Chlordane	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides (OC)				Result 1	Result 2	RPD			
Dieldrin	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-Chlordane	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S12-De06381	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S12-De06381	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polyaromatic Hydrocarbons (PAH)				Result 1	Result 2	RPD			
Acenaphthene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b)fluoranthene & Benzo(k)fluoranthene	S12-De06381	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Benzo(g.h.i)perylene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S12-De06381	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S12-De06392	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S12-De06392	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	S12-De06392	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	S12-De06392	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total m+p-Xylenes	S12-De06392	CP	mg/kg	< 1	< 1	<1	30%	Pass	
o-Xylene	S12-De06392	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes(ortho.meta and para)	S12-De06392	CP	mg/kg	< 1.5	< 1.5	<1	30%	Pass	
Total BTEX	S12-De06392	CP	mg/kg	< 1.5	< 1.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
Naphthalene	S12-De06392	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S12-De06392	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10 less BTEX (F1)	S12-De06392	CP	mg/kg	< 20	< 20	<1	30%	Pass	

Comments

Please note: Asbestos analysed by ASET (Job : ASET31893/35073/1-5) NATA Accreditation : 14484

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	Yes

Qualifier Codes/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.
Q13	Some elements for this test have failed in the QC sample. However when at least 80% have passed the QC can be released. All other QC has passed in this test batch

Authorised By

Jean Heng	Client Services
Laura Schofield	Senior Analyst-Volatile (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
James Norford	Senior Analyst-Metal (NSW)

Dr. Bob Symons

Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

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NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name: Geo-Logix P/L
Address: Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Client Job No.: 1201085

Order No.: 316192
Report #: 362423
Phone: 02 9979 1722
Fax: 02 9979 1222

Received: Dec 10, 2012 11:10 AM
Due: Dec 17, 2012
Priority: 5 Day
Contact Name: Jenna Seymour

mgt-LabMark Client Manager: Jean Heng

Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
TP1	Dec 06, 2012		Soil	S12-De06342	X			X	X	X	X	X
TP2	Dec 06, 2012		Soil	S12-De06343	X			X	X	X	X	X
TP3	Dec 06, 2012		Soil	S12-De06344	X			X	X	X	X	X
D1	Dec 06, 2012		Soil	S12-De06345	X			X	X	X	X	X
S2	Dec 06, 2012		Soil	S12-De06346	X			X		X		
S3	Dec 06, 2012		Soil	S12-De06347			X					
S4	Dec 06, 2012		Soil	S12-De06348	X			X		X		
TP4	Dec 06, 2012		Soil	S12-De06349	X			X	X	X	X	X
TP5	Dec 06, 2012		Soil	S12-De06350	X			X	X	X	X	X
TP5/0.1A	Dec 06, 2012		Soil	S12-De06351		X						

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Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP5 ACM	Dec 06, 2012		Other	S12-De06352			X					
TP6	Dec 06, 2012		Soil	S12-De06353	X			X	X	X	X	X
TP7	Dec 06, 2012		Soil	S12-De06354	X			X	X	X	X	X
TP7/A	Dec 06, 2012		Soil	S12-De06355			X					
TP8	Dec 06, 2012		Soil	S12-De06356	X			X	X	X	X	X
TP8/A	Dec 06, 2012		Soil	S12-De06357			X					
TP9	Dec 06, 2012		Soil	S12-De06358	X			X	X	X	X	X
TP9/A	Dec 06, 2012		Soil	S12-De06359			X					
TP10/0.1	Dec 06, 2012		Soil	S12-De06360	X			X	X	X	X	X
TP10/0.3	Dec 06, 2012		Soil	S12-De06361			X					
TP10/A	Dec 06, 2012		Soil	S12-De06362			X					

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Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP11	Dec 06, 2012		Soil	S12-De06363	X			X	X	X	X	X
TP11/A	Dec 06, 2012		Soil	S12-De06364			X					
TP12	Dec 06, 2012		Soil	S12-De06365	X			X	X	X	X	X
TP12/1.9	Dec 06, 2012		Soil	S12-De06366			X					
TP12/A	Dec 06, 2012		Soil	S12-De06367			X					
TP13	Dec 06, 2012		Soil	S12-De06368	X			X	X	X	X	X
TP13/A	Dec 06, 2012		Soil	S12-De06369			X					
TP14	Dec 07, 2012		Soil	S12-De06370	X			X	X	X	X	X
TP14/A	Dec 07, 2012		Soil	S12-De06371		X						
TP14 ACM	Dec 07, 2012		Other	S12-De06372			X					
TP15	Dec 07, 2012		Soil	S12-De06373	X			X	X	X	X	X

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NATA # 1261 Site # 20794

Company Name:	Geo-Logix P/L	**Order No.:**	316192	**Received:**	Dec 10, 2012 11:10 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	**Report #:**	362423	**Due:**	Dec 17, 2012
		Phone:	02 9979 1722	**Priority:**	5 Day
		Fax:	02 9979 1222	**Contact Name:**	Jenna Seymour
Client Job No.:	1201085				

mgt-LabMark Client Manager: Jean Heng

Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP15/A	Dec 07, 2012		Soil	S12-De06374		X						
TP15 ACM	Dec 07, 2012		Other	S12-De06375			X					
TP16	Dec 07, 2012		Soil	S12-De06376	X			X	X	X	X	X
TP16/A	Dec 07, 2012		Soil	S12-De06377		X						
TP17	Dec 07, 2012		Soil	S12-De06378	X			X	X	X	X	X
TP17/A	Dec 07, 2012		Soil	S12-De06379		X						
TP17 ACM	Dec 07, 2012		Other	S12-De06380			X					
TP18	Dec 07, 2012		Soil	S12-De06381	X			X	X	X	X	X
TP18/A	Dec 07, 2012		Soil	S12-De06382			X					
S5	Dec 07, 2012		Soil	S12-De06383	X			X		X		
S5/A	Dec 07, 2012		Soil	S12-De06384			X					

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1/21 Smallwood Place
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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Company Name:	Geo-Logix P/L	**Order No.:**	316192	**Received:**	Dec 10, 2012 11:10 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	**Report #:**	362423	**Due:**	Dec 17, 2012
		Phone:	02 9979 1722	**Priority:**	5 Day
		Fax:	02 9979 1222	**Contact Name:**	Jenna Seymour
Client Job No.:	1201085				

mgt-LabMark Client Manager: Jean Heng

Sample Detail					% Moisture	Asbestos	HOLD	Metals M8	BTEX	Organochlorine Pesticides (OC)	Polyaromatic Hydrocarbons (PAH)	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X		X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory						X						
TP19	Dec 07, 2012		Soil	S12-De06385	X			X	X	X	X	X
TP19/A	Dec 07, 2012		Soil	S12-De06386			X					
SS ACM	Dec 07, 2012		Other	S12-De06387			X					
S1	Dec 07, 2012		Soil	S12-De06388	X			X		X		
S1/A	Dec 07, 2012		Soil	S12-De06389			X					
S6	Dec 07, 2012		Soil	S12-De06390	X			X		X		
S6/A	Dec 07, 2012		Soil	S12-De06391			X					
D2	Dec 07, 2012		Soil	S12-De06392	X			X	X	X	X	X
DS	Dec 07, 2012		Soil	S12-De06393			X					

mgt LabMark ENVIRONMENTAL LABORATORIES

ABN – 50 005 085 521 e.mail : enviro@mgtlabmark.com.au web : www.mgtlabmark.com.au

Melbourne
3-5 Kingston Town Close
Oakleigh Vic 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F6, 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

Sample Receipt Advice

Company name: **Geo-Logix P/L**

Contact name: Jenna Seymour
Client job number: 1201085
COC number: Not provided
Turn around time: 5 Day
Date/Time received: Dec 10, 2012 11:10 AM
mgt-LabMark reference: **362423**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ Sample Temperature of a random sample selected from the batch as recorded by mgt-LabMark Sample Receipt : 12.5 degrees Celsius.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Organic samples had Teflon liners.

☑ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

Asbestos analysis conducted at ASET. | Labelling discrepancies: Samples TB1, 2, and 3 on COC; Jar = TP1, 2 and 3. Samples names adjusted as per jar unless otherwise specified. Sample TP5/0.1A on COC, Jar = TP5/0.1; labelled as per COC unless otherwise requested. Sampe TP17/A on COC; Zip-loc = TP17; presumed to be TP17/A as per COC unless otherwise specified

Contact notes

If you have any questions with respect to these samples please contact:

Jean Heng on Phone : (+61) (2) 9900 8400 or by e.mail: jean.heng@mgtlabmark.com.au

Results will be delivered electronically via e.mail to Jenna Seymour - jseymour@geo-logix.com.au.

#362423 Jpramuy

Enquiries Syd

From: Jenna Seymour [jseymour@geo-logix.com.au]
Sent: Monday, 10 December 2012 11:10 AM
To: Enquiries Syd
Cc: Enviro Syd
Subject: RE: COC request
Attachments: SBizhub12121009570.pdf.pdf

Please find attached.

Thanks

Jenna Seymour
BSc Applied Chem. MEnvMgt
Environmental Scientist

Geo-Logix Pty Ltd
Building Q2, Level 3
Unit 2309 / 4 Daydream Street
Warriewood NSW 2102

P: 02 9979 1722
F: 02 9979 1222
M: 0402 933 344

www.geo-logix.com.au

From: Enquiries Syd [mailto:Enquiries.Syd@mgtlabmark.com.au]
Sent: Monday, 10 December 2012 9:39 AM
To: 'Jenna Seymour'
Cc: Enviro Syd
Subject: COC request
Importance: High

Hi Jenna

We've received soil samples for Geo-logix without a COC. The job number is 120185 and the sampling date is December 6. Could a COC with analysis be forwarded on at your earliest convenience?

Thanks and regards,

It is essential to include all correspondence to: enviro.syd@mgtlabmark.com.au

Priscilla Tourany

mgt LabMark
ENVIRONMENTAL LABORATORIES

Reception
Unit F6, Building F
16 Mars Road
Lane Cove West, NSW 2066
T:(+61) (2) 9900 8400

Sample Receipt
Unit F3, Building F
16 Mars Road
Lane Cove West, NSW 2066

#362423.

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

CHAIN OF CUSTODY

Page 1 of 4

Project Manager: Jenna Seymour
Contact email: jseymour@geo-logix.com.au
Project Name: "
Project Number: 120108-5
Date Submitted: 10.12.12

Purchase Order No: 316192
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: Std 5day

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix: soil	water	air	paint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	VOCs	BTEX	PAHs	PCBs	OCPs	OPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP	Asbestos				Hold
	TB1	6/12/12	X							X	X		X	X		X						X						
	TB2		X							X	X		X	X		X						X						
	TB3		X							X	X		X	X		X						X						
	D1		X							X	X		X	X		X						X						
	S2		X													X						X						
	S3		X																									X
	S4		X													X						X						
	TP4		X							X	X		X	X		X						X						
	TP5		X							X	X		X	X		X						X						
	TP5/0.1A		X																					X				
	TP5 ACM		X																									X
	TP6		X							X	X		X	X		X						X						
	TP7		X							X	X		X	X		X						X						
	TP7/A		X																									X
	TP8		X							X	X		X	X		X						X						
	TP8/A		X																									X
	TP9	↓	X							X	X		X	X		X						X						

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: J.Seymour Date/Time: 10.12.12 Signature:
Received by: Brisilla mgt-habmark Date/Time: 10/12 11:10am Signature:

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

CHAIN OF CUSTODY

Project Manager: Jessa Seymour
Contact email: jseymour@geo-logix.com.au
Project Name:
Project Number: 120108 5
Date Submitted: 10.12.12

Purchase Order No: 316192
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: Std 5 day

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix: soil	water	air	paint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	VOCs	BTEX	PAHs	PCBs	OCPs	OPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP	Asbestos				Hold
	TP9/A	6.12.12	X																									X
	TP10/0.1		X							X	X		X	X		X						X						
	TP10/0.3		X																									X
	TP10/A		X																									X
	TP11		X							X	X		X	X		X						X						
	TP11/A		X																									X
	TP12		X							X	X		X	X		X						X						
	TP12/1.9		X																									X
	TP12/A		X																									X
	TP13		X							X	X		X	X		X						X						
	TP13/A		X																									X
	TP14	7.12.12	X							X	X		X	X		X						X						
	TP14/A		X																				X					
	TP14ACM		X																									X
	TP15		X							X	X		X	X		X						X						
	TP15/A		X																				X					
	TP15ACM		X																									X

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: J. Seymour Date/Time: 10.12.12 Signature:
Received by: Priscilla Mgt-LabMark Date/Time: 10/12 11:10am Signature:

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

CHAIN OF CUSTODY

Project Manager: Jena Seymour
Contact email: JSeymour@geo-logix.com.au
Project Name:
Project Number: 120108S
Date Submitted: 10.12.12

Purchase Order No: 316192
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: Std 5day

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix: soil	water	air	paint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	VOCs	BTEX	PAHs	PCBs	OCPs	OPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP	Asbestos				Hold
	TP16	7.12.12	X							X	X		X	X		X						X						
	TP16/A		X																					X				
	TP17		X							X	X		X	X		X						X						
	TP17/A		X																					X				
	TP17ACM		X																									X
	TP18		X							X	X		X	X		X						X						
	TP18/A		X																									X
	S5		X													X						X						
	S5/A		X																									X
	TP19		X							X	X		X	X		X						X						
	TP19/A		X																									X
	SSACM		X																									X
	S1		X													X						X						
	S1/A		X																									X
	S6		X													X						X						
	S6/A		X																									X
	D2	↓	X							X	X		X	X		X						X						

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: J. Seymour Date/Time: 10.12.12 Signature:
Received by: Priscilla mgt-habMark Date/Time: 10/12 11:10am Signature:

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

CHAIN OF CUSTODY

Project Manager: Jenna Seymour
Contact email: jseymour@geo-logix.com.au
Project Name:
Project Number: 1201085
Date Submitted: 10.12.12

Purchase Order No: 316192
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: Std 5day

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix: soil	water	air	paint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	VOCs	BTEX	PAHs	PCBs	OCPs	OPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP					Hold
	DS	7.12.12	X																									X

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: J. Seymour Date/Time: 10.12.12 Signature:

Received by: Priscilla mgt-habMark Date/Time: 10/12 11:10am Signature:

#362423

Enquiries Syd

From: Jenna Seymour [jseymour@geo-logix.com.au]
Sent: Monday, 10 December 2012 3:35 PM
To: Enquiries Syd
Subject: Re: COC request

Asbestos not tclp , thanks

Sent from my iPhone

On 10/12/2012, at 10:25 AM, Enquiries Syd <Enquiries.Syd@mgtlabmark.com.au> wrote:

> Hi Jenna
>
> Thanks for that.
>
> I am in the process of logging this in but I have noticed that you have indicated TCLP testing on page 2 of the COC. Did you perhaps means Asbestos and have accidently indicated TCLP instead?
>
> It is essential to include all correspondence to: enviro.syd@mgtlabmark.com.au
>
> Kind Regards,
>
> Priscilla Tourany
>
> <image001.gif>
>
> **Reception**
> Unit F6, Building F
> 16 Mars Road
> Lane Cove West, NSW 2066
> T:(+61) (2) 9900 8400
> F:(+61) (2) 9420 2977
>
> **Sample Receipt**
> Unit F3, Building F
> 16 Mars Road
> Lane Cove West, NSW 2066
>
> *Please consider the environment before printing this email*

From: Jenna Seymour [mailto:jseymour@geo-logix.com.au]
Sent: Monday, 10 December 2012 11:10 AM
To: Enquiries Syd
Cc: Enviro Syd
Subject: RE: COC request

Please find attached.

Thanks

Jenna Seymour
BSc Applied Chem. MEnvMgt
Environmental Scientist

Geo-Logix Pty Ltd

Building Q2, Level 3
Unit 2309 / 4 Daydream Street
Warriewood NSW 2102

P: 02 9979 1722
F: 02 9979 1222
M: 0402 933 344

www.geo-logix.com.au

From: Enquiries Syd [mailto:Enquiries.Syd@mgtlabmark.com.au]
Sent: Monday, 10 December 2012 9:39 AM
To: 'Jenna Seymour'
Cc: Enviro Syd
Subject: COC request
Importance: High

Hi Jenna

We've received soil samples for Geo-logix without a COC. The job number is 120185 and the sampling date is December 6. Could a COC with analysis be forwarded on at your earliest convenience?

Thanks and regards,

It is essential to include all correspondence to: enviro.syd@mgtlabmark.com.au

Priscilla Tourany

<image001.gif>

Reception
Unit F6, Building F
16 Mars Road
Lane Cove West, NSW 2066
T:(+61) (2) 9900 8400
F:(+61) (2) 9420 2977

Sample Receipt
Unit F3, Building F
16 Mars Road
Lane Cove West, NSW 2066

Please consider the environment before printing this email

mgt LabMark
ENVIRONMENTAL LABORATORIES

Certificate of Analysis

Geo-Logix P/L
Bld Q2 Level 3, 2309/4 Daydream St
Warriewood
NSW 2102

Attention:Jenna Seymour

NATA WORLD RECOGNISED ACCREDITATION

NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Report	**362642-S**
Client Reference	1201085
Received Date	Dec 11, 2012

Client Sample ID			**T1**	**T2**
Sample Matrix			**Soil**	**Soil**
mgt-LabMark Sample No.			**M12-De08001**	**M12-De08002**
Date Sampled			**Dec 10, 2012**	**Dec 10, 2012**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50
BTEX				
Benzene	0.05	mg/kg	< 0.05	< 0.05
Toluene	0.05	mg/kg	< 0.05	< 0.05
Ethylbenzene	0.05	mg/kg	< 0.05	< 0.05
o-Xylene	0.05	mg/kg	< 0.05	< 0.05
Total m+p-Xylenes	0.10	mg/kg	< 0.1	< 0.1
Xylenes(ortho.meta and para)	0.15	mg/kg	< 0.15	< 0.15
Fluorobenzene (surr.)	1	%	91	83
Total Recoverable Hydrocarbons - Draft 2010 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	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			T1	T2
Sample Matrix			Soil	Soil
mgt-LabMark Sample No.			M12-De08001	M12-De08002
Date Sampled			Dec 10, 2012	Dec 10, 2012
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH	0.5	mg/kg	< 0.5	< 0.5
p-Terphenyl-d14 (surr.)	1	%	100	73
2-Fluorobiphenyl (surr.)	1	%	102	74
Organochlorine Pesticides				
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
Chlordane	0.1	mg/kg	< 0.1	< 0.1
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05
Toxaphene	0.1	mg/kg	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	74	127
Tetrachloro-m-xylene (surr.)	1	%	79	126
Heavy Metals				
Arsenic	2	mg/kg	28	5.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	32	12
Copper	5	mg/kg	27	33
Lead	5	mg/kg	12	35
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	13	9.6
Zinc	5	mg/kg	20	82
% Moisture	0.1	%	14	11

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Dec 12, 2012	14 Day
- Method: TRH C6-C36 - MGT 100A			
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *	Melbourne	Dec 12, 2012	14 Day
- Method: LM-LTM-ORG2010			
BTEX	Melbourne	Dec 12, 2012	14 Day
- Method: USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons and MGT 100A			
Polycyclic Aromatic Hydrocarbons	Melbourne	Dec 12, 2012	14 Day
- Method: USEPA 8270 Polycyclic Aromatic Hydrocarbons			
Organochlorine Pesticides	Melbourne	Dec 12, 2012	14 Day
- Method: USEPA 8081 Organochlorine Pesticides			
Metals M8	Melbourne	Dec 12, 2012	28 Day
- Method: USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury			
% Moisture	Melbourne	Dec 12, 2012	14 Day
- Method: Method 102 - ANZECC - % Moisture			

mgt LabMark ENVIRONMENTAL LABORATORIES

ABN – 50 005 085 521 e.mail : enviro@mgtlabmark.com.au web : www.mgtlabmark.com.au

Melbourne
3-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F6, 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

Company Name:	Geo-Logix P/L	**Order No.:**	316193	**Received:**	Dec 11, 2012 8:54 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	**Report #:**	362642	**Due:**	Dec 18, 2012
		Phone:	02 9979 1722	**Priority:**	5 Day
		Fax:	02 9979 1222	**Contact Name:**	Jenna Seymour
Client Job No.:	1201085				

mgt-LabMark Client Manager: Jean Heng

Sample Detail					% Moisture	BTEX	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Metals M8	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted										
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217										
Brisbane Laboratory - NATA Site # 20794										
External Laboratory										
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
T1	Dec 10, 2012		Soil	M12-De08001	X	X	X	X	X	X
T2	Dec 10, 2012		Soil	M12-De08002	X	X	X	X	X	X

mgt-LabMark Internal Quality Control Review

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. 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 Sample Receipt Acknowledgment.

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.

****NOTE:** pH duplicates are reported as a range NOT as RPD

UNITS

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Units

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. 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.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environment Protection Authority
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC was performed on samples not pertaining to this report, however QC is representative of the sequence or batch that client samples were analysed within

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 20-130%.

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.
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, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene 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 Arochlor 1260 in Matrix Spikes and LCS's.
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 RPD's are calculated from raw analytical data thus it is possible to have two sets of data.

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions TRH C6-C36 - MGT 100A							
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							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons and MGT 100A							
Benzene	mg/kg	< 0.05			0.05	Pass	
Toluene	mg/kg	< 0.05			0.05	Pass	
Ethylbenzene	mg/kg	< 0.05			0.05	Pass	
o-Xylene	mg/kg	< 0.05			0.05	Pass	
Total m+p-Xylenes	mg/kg	< 0.1			0.10	Pass	
Xylenes(ortho.meta and para)	mg/kg	< 0.15			0.15	Pass	
Method Blank							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions * LM-LTM-ORG2010							
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							
Polycyclic Aromatic Hydrocarbons USEPA 8270 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	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b)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							
Organochlorine Pesticides USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
Chlordane	mg/kg	< 0.1			0.1	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.05			0.05	Pass	
Toxaphene	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Metals M8 USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
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 TRH C6-C36 - MGT 100A							
TRH C6-C9	%	88			70-130	Pass	
TRH C10-C14	%	107			70-130	Pass	
LCS - % Recovery							
BTEX USEPA 8260 - MGT 350A Monocyclic Aromatic Hydrocarbons and MGT 100A							
Benzene	%	93			70-130	Pass	
Toluene	%	83			70-130	Pass	
Ethylbenzene	%	86			70-130	Pass	
Total m+p-Xylenes	%	88			70-130	Pass	
Xylenes(ortho.meta and para)	%	88			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions * LM-LTM-ORG2010							
TRH C6-C10	%	88			70-130	Pass	
TRH >C10-C16	%	104			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons USEPA 8270 Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	96			70-130	Pass	
Acenaphthylene	%	98			70-130	Pass	
Anthracene	%	108			70-130	Pass	
Benz(a)anthracene	%	103			70-130	Pass	
Benzo(a)pyrene	%	118			70-130	Pass	
Benzo(b)fluoranthene	%	98			70-130	Pass	
Benzo(g.h.i)perylene	%	109			70-130	Pass	
Benzo(k)fluoranthene	%	108			70-130	Pass	
Chrysene	%	96			70-130	Pass	
Dibenz(a.h)anthracene	%	116			70-130	Pass	
Fluoranthene	%	80			70-130	Pass	
Fluorene	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	128			70-130	Pass	
Naphthalene	%	82			70-130	Pass	
Phenanthrene	%	105			70-130	Pass	
Pyrene	%	81			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Organochlorine Pesticides USEPA 8081 Organochlorine Pesticides							
4.4'-DDD	%	110			70-130	Pass	
4.4'-DDE	%	90			70-130	Pass	
4.4'-DDT	%	92			70-130	Pass	
a-BHC	%	114			70-130	Pass	
Aldrin	%	114			70-130	Pass	
b-BHC	%	110			70-130	Pass	
d-BHC	%	113			70-130	Pass	
Dieldrin	%	100			70-130	Pass	
Endosulfan I	%	108			70-130	Pass	
Endosulfan II	%	106			70-130	Pass	
Endosulfan sulphate	%	103			70-130	Pass	
Endrin	%	110			70-130	Pass	
Endrin aldehyde	%	103			70-130	Pass	
Endrin ketone	%	106			70-130	Pass	
g-BHC (Lindane)	%	112			70-130	Pass	
Heptachlor	%	106			70-130	Pass	
Heptachlor epoxide	%	107			70-130	Pass	
Hexachlorobenzene	%	96			70-130	Pass	
Methoxychlor	%	94			70-130	Pass	
LCS - % Recovery							
Metals M8 USEPA 6010/6020 Heavy Metals & USEPA 7470/71 Mercury							
Arsenic	%	98			80-120	Pass	
Cadmium	%	101			80-120	Pass	
Chromium	%	108			80-120	Pass	
Copper	%	111			80-120	Pass	
Lead	%	106			80-120	Pass	
Mercury	%	88			75-125	Pass	
Nickel	%	108			80-120	Pass	
Zinc	%	105			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	M12-De08254	NCP	%	99			70-130	Pass	
TRH C10-C14	M12-De07616	NCP	%	107			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M12-De08254	NCP	%	106			70-130	Pass	
Toluene	M12-De08254	NCP	%	88			70-130	Pass	
Ethylbenzene	M12-De08254	NCP	%	99			70-130	Pass	
o-Xylene	M12-De08254	NCP	%	99			70-130	Pass	
Total m+p-Xylenes	M12-De08254	NCP	%	102			70-130	Pass	
Xylenes(ortho.meta and para)	M12-De08254	NCP	%	101			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1					
TRH C6-C10	M12-De08254	NCP	%	99			70-130	Pass	
TRH >C10-C16	M12-De07616	NCP	%	103			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M12-De08015	NCP	%	90			70-130	Pass	
Acenaphthylene	M12-De08015	NCP	%	98			70-130	Pass	
Anthracene	M12-De08015	NCP	%	107			70-130	Pass	
Benz(a)anthracene	M12-De08015	NCP	%	122			70-130	Pass	
Benzo(a)pyrene	M12-De08015	NCP	%	93			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(b)fluoranthene	M12-De08015	NCP	%	125			70-130	Pass	
Benzo(g.h.i)perylene	M12-De08015	NCP	%	106			70-130	Pass	
Benzo(k)fluoranthene	M12-De08015	NCP	%	107			70-130	Pass	
Chrysene	M12-De08015	NCP	%	111			70-130	Pass	
Dibenz(a.h)anthracene	M12-De08015	NCP	%	123			70-130	Pass	
Fluoranthene	M12-De08015	NCP	%	99			70-130	Pass	
Fluorene	M12-De08015	NCP	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M12-De08015	NCP	%	126			70-130	Pass	
Naphthalene	M12-De08015	NCP	%	77			70-130	Pass	
Phenanthrene	M12-De08015	NCP	%	113			70-130	Pass	
Pyrene	M12-De08015	NCP	%	97			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDD	M12-De07470	NCP	%	102			70-130	Pass	
4.4'-DDE	M12-De07470	NCP	%	105			70-130	Pass	
4.4'-DDT	M12-De07470	NCP	%	118			70-130	Pass	
a-BHC	M12-De07470	NCP	%	117			70-130	Pass	
Aldrin	M12-De07470	NCP	%	118			70-130	Pass	
b-BHC	M12-De07470	NCP	%	118			70-130	Pass	
d-BHC	M12-De07470	NCP	%	123			70-130	Pass	
Dieldrin	M12-De07470	NCP	%	122			70-130	Pass	
Endosulfan I	M12-De07470	NCP	%	111			70-130	Pass	
Endosulfan II	M12-De07470	NCP	%	113			70-130	Pass	
Endosulfan sulphate	M12-De07470	NCP	%	113			70-130	Pass	
Endrin	M12-De07470	NCP	%	124			70-130	Pass	
Endrin aldehyde	M12-De07470	NCP	%	111			70-130	Pass	
Endrin ketone	M12-De07470	NCP	%	116			70-130	Pass	
g-BHC (Lindane)	M12-De07470	NCP	%	115			70-130	Pass	
Heptachlor	M12-De07470	NCP	%	118			70-130	Pass	
Heptachlor epoxide	M12-De07470	NCP	%	120			70-130	Pass	
Hexachlorobenzene	M12-De07470	NCP	%	95			70-130	Pass	
Methoxychlor	M12-De07470	NCP	%	114			70-130	Pass	
Spike - % Recovery									
Metals M8				Result 1					
Arsenic	M12-De00276	NCP	%	76			75-125	Pass	
Cadmium	M12-De08636	NCP	%	79			75-125	Pass	
Chromium	M12-De08636	NCP	%	80			75-125	Pass	
Copper	M12-De08636	NCP	%	93			75-125	Pass	
Lead	M12-De00276	NCP	%	75			75-125	Pass	
Mercury	M12-De09905	NCP	%	63			70-130	Fail	
Nickel	M12-De08636	NCP	%	79			75-125	Pass	
Zinc	M12-De08636	NCP	%	77			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	M12-De07286	NCP	mg/kg	< 20	< 20	10	30%	Pass	
TRH C10-C14	M12-De06513	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M12-De06513	NCP	mg/kg	60	< 50	24	30%	Pass	
TRH C29-C36	M12-De06513	NCP	mg/kg	78	55	36	30%	Fail	Q15
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M12-De07286	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toluene	M12-De07286	NCP	mg/kg	0.54	0.39	31	30%	Fail	Q15
Ethylbenzene	M12-De07286	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
o-Xylene	M12-De07286	NCP	mg/kg	0.24	0.22	10	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Total m+p-Xylenes	M12-De07286	NCP	mg/kg	0.40	0.33	17	30%	Pass	
Xylenes(ortho.meta and para)	M12-De07286	NCP	mg/kg	0.64	0.55	14	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - Draft 2010 NEPM Fractions *				Result 1	Result 2	RPD			
Naphthalene	M12-De07286	NCP	mg/kg	< 0.5	< 0.5	19	30%	Pass	
TRH C6-C10	M12-De07286	NCP	mg/kg	< 20	< 20	4.0	30%	Pass	
TRH >C10-C16	M12-De06513	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M12-De06513	NCP	mg/kg	110	< 100	32	30%	Fail	Q15
TRH >C34-C40	M12-De06513	NCP	mg/kg	< 100	< 100	6.4	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			Q15
Acenaphthene	M12-De08015	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M12-De08015	NCP	mg/kg	< 0.5	< 0.5	120	30%	Fail	
Anthracene	M12-De08015	NCP	mg/kg	< 0.5	< 0.5	130	30%	Fail	
Benz(a)anthracene	M12-De08015	NCP	mg/kg	< 0.5	1.7	120	30%	Fail	
Benzo(a)pyrene	M12-De08015	NCP	mg/kg	0.50	2.3	120	30%	Fail	
Benzo(b)fluoranthene	M12-De08015	NCP	mg/kg	< 0.5	1.7	120	30%	Fail	
Benzo(g.h.i)perylene	M12-De08015	NCP	mg/kg	< 0.5	1.7	120	30%	Fail	
Benzo(k)fluoranthene	M12-De08015	NCP	mg/kg	< 0.5	1.7	120	30%	Fail	
Chrysene	M12-De08015	NCP	mg/kg	< 0.5	1.6	130	30%	Fail	
Dibenz(a.h)anthracene	M12-De08015	NCP	mg/kg	< 0.5	0.87	120	30%	Fail	
Fluoranthene	M12-De08015	NCP	mg/kg	< 0.5	2.2	140	30%	Fail	
Fluorene	M12-De08015	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M12-De08015	NCP	mg/kg	< 0.5	1.8	120	30%	Fail	
Naphthalene	M12-De08015	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M12-De08015	NCP	mg/kg	< 0.5	0.90	150	30%	Fail	
Pyrene	M12-De08015	NCP	mg/kg	< 0.5	2.0	130	30%	Fail	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
4.4'-DDD	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Chlordane	M12-De07470	NCP	mg/kg	0.10	0.10	3.0	30%	Pass	
d-BHC	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M12-De07470	NCP	mg/kg	0.13	0.10	24	30%	Pass	
Endosulfan I	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M12-De07470	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M12-De07470	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Metals M8				Result 1	Result 2	RPD			
Arsenic	M12-De08636	NCP	mg/kg	< 2	< 2	1.0	30%	Pass	
Cadmium	M12-De08636	NCP	mg/kg	< 0.4	< 0.4	1.0	30%	Pass	
Chromium	M12-De08636	NCP	mg/kg	15	14	2.0	30%	Pass	

Duplicate									
Metals M8				Result 1	Result 2	RPD			
Copper	M12-De08636	NCP	mg/kg	17	19	15	30%	Pass	
Lead	M12-De08636	NCP	mg/kg	21	21	1.0	30%	Pass	
Mercury	M12-De08015	NCP	mg/kg	< 0.1	< 0.1	22	30%	Pass	
Nickel	M12-De08636	NCP	mg/kg	12	12	3.0	30%	Pass	
Zinc	M12-De08636	NCP	mg/kg	38	38	1.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Organic samples had Teflon liners	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
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.
Q15	The RPD reported passes mgt-LabMark's Acceptance Criteria as stipulated in SOP 05. Refer to Glossary Page of this report for further details

Authorised By

Jean Heng	Client Services
Stacey Jenkins	Senior Analyst-Organic (VIC)
Carroll Lee	Senior Analyst-Volatile (VIC)
Emily Rosenberg	Senior Analyst-Metal (VIC)

Glenn Jackson

Laboratory Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

mgt LabMark
ENVIRONMENTAL LABORATORIES

ABN – 50 005 085 521 e.mail : enviro@mgtlabmark.com.au web : www.mgtlabmark.com.au

Melbourne
3-5 Kingston Town Close
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Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F6, 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

Company Name:	Geo-Logix P/L	**Order No.:**	316193	**Received:**	Dec 11, 2012 8:54 AM
Address:	Bld Q2 Level 3, 2309/4 Daydream St Warriewood NSW 2102	**Report #:**	362642	**Due:**	Dec 18, 2012
		Phone:	02 9979 1722	**Priority:**	5 Day
		Fax:	02 9979 1222	**Contact Name:**	Jenna Seymour
Client Job No.:	1201085				

mgt-LabMark Client Manager: Jean Heng

Sample Detail					% Moisture	BTEX	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Metals M8	Total Recoverable Hydrocarbons
Laboratory where analysis is conducted										
Melbourne Laboratory - NATA Site # 1254 & 14271					X	X	X	X	X	X
Sydney Laboratory - NATA Site # 18217										
Brisbane Laboratory - NATA Site # 20794										
External Laboratory										
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
T1	Dec 10, 2012		Soil	M12-De08001	X	X	X	X	X	X
T2	Dec 10, 2012		Soil	M12-De08002	X	X	X	X	X	X

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1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Sample Receipt Advice

Company name: **Geo-Logix P/L**

Contact name: Jenna Seymour
Client job number: 1201085
COC number: Not provided
Turn around time: 5 Day
Date/Time received: Dec 11, 2012 8:54 AM
mgt-LabMark reference: **362642**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ Sample Temperature of a random sample selected from the batch as recorded by mgt-LabMark Sample Receipt : 14.2 degrees Celsius.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Organic samples had Teflon liners.

☒ 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:

Jean Heng on Phone : (+61) (2) 9900 8400 or by e.mail: jean.heng@mgtlabmark.com.au

Results will be delivered electronically via e.mail to Jenna Seymour - jseymour@geo-logix.com.au.

mgt-LabMark Sample Receipt

for Melbourne

CHAIN OF CUSTODY

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 Manager: Jenna Seymour
Contact email: jseymour@geo-logix.com.au
Project Name:
Project Number: 1201085
Date Submitted: 10.12.12

Page 1 of 1
Purchase Order No: 31693
Quote Reference:
Send Invoice to: accounts@geo-logix.com.au
TAT required: Std 5day

VIA LANE COVE

ANALYSIS REQUIRED

Lab ID	Sample ID	Date	Matrix: soil	water	air	paint, filters	other	Comments	COMPOSITE	TPH - C6 - C9	TPH - C10 - C36	VOCs	BTEX	PAHs	PCBs	OCPs	OPPs	PCBs	Phenols	Metals - Lead	Metals - Specify	Metals - M8	TCLP						Hold
	T1		X							X	X		X	X		X						X							
	T2		X							X	X		X	X		X						X							

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: J Seymour Date/Time: 10.12.12 Signature:
RELIN: CHRISTINE 10/12/12. 3:15PM

Received by: Steven MGT Date/Time: 11/12 8:54 AM Signature:
362642

AUSTRALIAN SAFER ENVIRONMENT & TECHNOLOGY PTY LTD
ABN 36 088 095 112

Our ref: ASET31893/ 35073 / 1 - 5
Your ref: 362423
NATA Accreditation No: 14484

14 December 2012

MGT- Labmark Environmental Pty Ltd
Unit F3, Building F, 16 Mars Road
Lane Cove NSW 2066

Attn: Dr Robert Symons
Laboratory & Technical Manager

Dear Robert

Asbestos Identification
This report presents the results of five samples, forwarded by MGT- Labmark Environmental Pty Ltd on 11 December 2012, for analysis for asbestos.

1.Introduction: Five samples forwarded were examined and analysed for the presence of asbestos.

2. Methods : The samples were examined under a Stereo Microscope and selected fibres were analysed by Polarized Light Microscopy in conjunction with Dispersion Staining method **(Safer Environment Method 1.)**

3. Results :

Sample No. 1. ASET31893 / 35073 / 1. TP5/0.1 - De06351
Approx dimensions 6.0 cm x 6.0 cm x 2.5 cm
The sample consisted of a mixture of clayish soil, stones and plant matter.
No asbestos detected.

Sample No. 2. ASET31893 / 35073 / 2. TP14/A - De06371
Approx dimensions 8.0 cm x 8.0 cm x 5.0 cm
The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement like material and pieces of ceramic tiles.
No asbestos detected.

Sample No. 3. ASET31893 / 35073 / 3. TP15/A - De06374
Approx dimensions 8.0 cm x 8.0 cm x 4.5 cm
The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement and brick.
No asbestos detected.

Sample No. 4. ASET31893 / 35073 / 4. TP16/A - De06377
Approx dimensions 8.0 cm x 8.0 cm x 5.0 cm
The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster, cement and brick.
No asbestos detected.

Sample No. 5. ASET31893 / 35073 / 5. TP17/A - De06379
Approx dimensions 8.0 cm x 8.0 cm x 4.0 cm
The sample consisted of a mixture of clayish soil, stones, plant matter, fragments of plaster and brick.
No asbestos detected.

Analysed and reported by,

Nisansala Maddage. BSc(Hons)
Environmental Scientist/Approved Identifier

Mahen De Silva . BSc. MSc. Grad Dib (Occ Hyg)
Occupational Hygienist / Approved Signatory

This document is issued in accordance with NATA's Accreditation requirements. Accredited for compliance with ISO/IEC 17025.

GEO_LOGIX PTY LTD
ABN 86 116 892 936

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