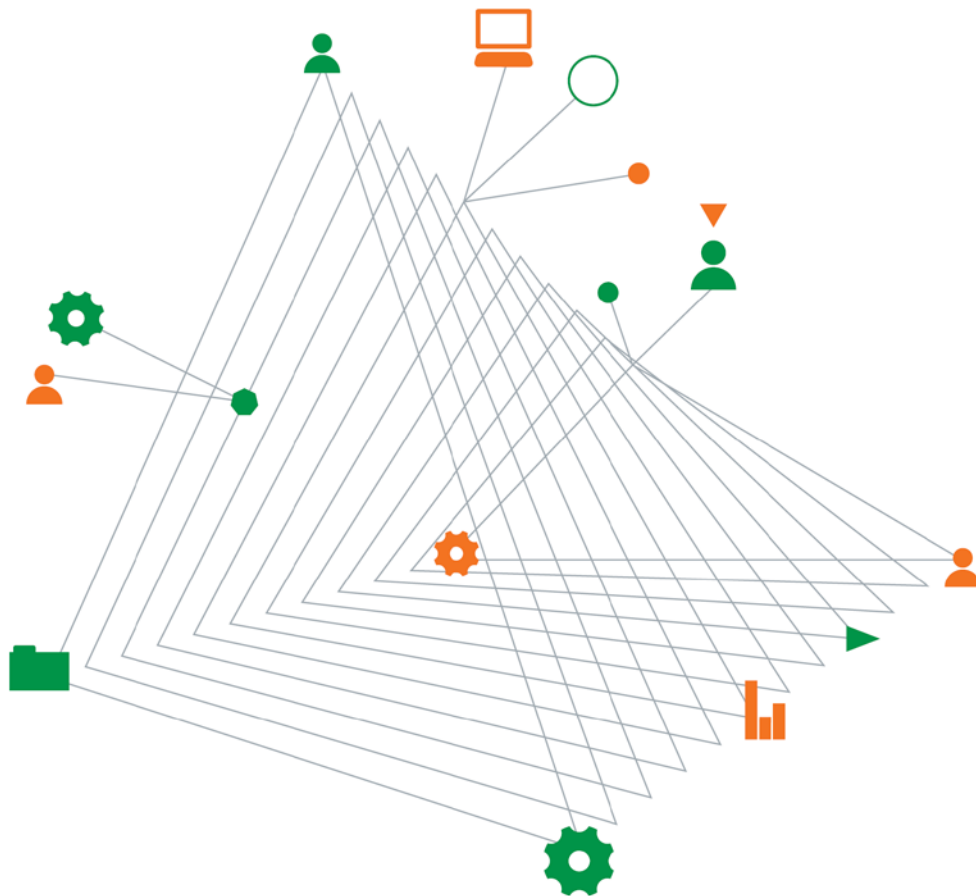


**John Holland Pty Ltd**

**Phase 2 Environmental Site Assessment**

New Grafton Correctional Centre

26 May 2017



Experience  
comes to life  
when it is  
powered by  
expertise

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26 May 2017

Our ref: 754-CFSGE195610-AE

John Holland Pty Ltd  
Level 3, 65 Pirrama Road  
PYRMONT NSW 2009

Delivered via email: [Mark.Turner@jhgc.com.au](mailto:Mark.Turner@jhgc.com.au)

Attention: Mark Turner

Dear Mark,

**New Grafton Correctional Centre – Phase 2 Environmental Site Assessment**

Coffey Services Australia Pty Ltd is pleased to present this Phase 2 Environmental Site Assessment prepared to assess areas of potential soil contamination previously identified on the New Grafton Correctional Centre site. The Phase 2 ESA also includes an assessment for pesticide and herbicide residues and if these contaminants are present in soils on this site associated with its past use for agricultural grazing activities.

We draw your attention to the attached sheet "*Important Information About Your Coffey Environmental Report*" which outlines and discusses limitations associated with interpreting environmental investigations and drawing conclusions based on the data.

I trust that this report meets with your requirements. If you require further information please contact the undersigned in our Coffs Harbour office on 02 6691 7300.

For and on behalf of Coffey



**Andrew Ballard**  
Associate Environmental Scientist

## Quality information

### Revision history

| Revision | Description | Date        | Author      | Reviewer       |
|----------|-------------|-------------|-------------|----------------|
| Original | Phase 2 ESA | 24 May 2017 | Joel Parkin | Andrew Ballard |
| Final    | Phase 2 ESA | 26 May 2017 | Joel Parkin | Andrew Ballard |

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## Abbreviations and Terms

| Abbreviation | Description                                                                                                                                                                |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AEC          | Area of Environmental Concern                                                                                                                                              |
| BH           | Borehole                                                                                                                                                                   |
| BTEX         | Benzene, Toluene, Ethylbenzene, Xylene compounds                                                                                                                           |
| CoC          | Chain of Custody                                                                                                                                                           |
| CSNSW        | Corrective Services New South Wales                                                                                                                                        |
| EPA          | Environment Protection Authority of New South Wales                                                                                                                        |
| HILs         | Health Investigation Levels                                                                                                                                                |
| HSLs         | Health Screening Levels                                                                                                                                                    |
| INSW         | Infrastructure New South Wales                                                                                                                                             |
| LOR          | Laboratory Limit of Reporting. This is the laboratory's minimum concentration (mg/kg) of a parameter at which the concentration can be reported at a 99% confidence level. |
| Mg/kg        | milligrams per kilogram                                                                                                                                                    |
| NATA         | National Association of Testing Authorities                                                                                                                                |
| NGCC         | New Grafton Correctional Centre                                                                                                                                            |
| OCP          | Organochlorine pesticides                                                                                                                                                  |
| OPP          | Organophosphorus pesticides                                                                                                                                                |
| PAH          | Polycyclic Aromatic Hydrocarbons                                                                                                                                           |
| PcoC         | Potential Contaminants of Concern                                                                                                                                          |
| Phase 2 ESA  | Phase 2 Environmental Site Assessment                                                                                                                                      |
| PPP          | Public Private Partnership                                                                                                                                                 |
| Project Site | The NGCC site comprising Lot 26 DP751376 and Lot 1 DP 1190399, 313 Avenue Road, Lavadia NSW                                                                                |
| QA/QC        | Quality Assurance / Quality Control                                                                                                                                        |
| SEPP 55      | State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55)                                                                                                  |
| SILs         | Soil Investigation Levels                                                                                                                                                  |
| SS           | Surface Sample                                                                                                                                                             |
| TP           | Test pit                                                                                                                                                                   |
| TRH          | Total Recoverable Hydrocarbons                                                                                                                                             |

## Executive Summary

Coffey Services Australia Pty Ltd (Coffey) was engaged by John Holland Pty Ltd to undertake a Phase 2 Environmental Site Assessment (ESA) for areas of environmental concern (AEC) located within the footprint of the proposed New Grafton Correctional Centre (NGCC), 313 Avenue Road, Lavadia NSW.

The objective of the Phase 2 ESA was to assess if soil contamination is present at the site, and whether more detailed investigation or remediation is required to make the site suitable for its proposed use as a correctional centre.

A Phase 1 Environmental Site Assessment prepared for this site by Jacobs in 2016 identified six potential areas of environmental interest. The Phase 1 concluded that these areas have a low or low-moderate contamination risk rating and therefore recommended that further testing not be required.

The Phase 2 ESA undertaken by Coffey included an assessment of two of the previously identified AEC's, the stockpile material near a farm dam in the south of the site and dark stained soils present at site of an abandoned broken down tractor. A preliminary assessment was also undertaken to screen for the presence of pesticide and herbicide residues which may have historically been used in grazing activities on this site.

In summary the field investigation for the site included a site walkover of the NGCC site and the collection of soil samples for laboratory analysis for potential contaminants of concern. Surface soil samples (0-0.15m) were collected from a total of 16 locations using hand tools.

The laboratory test results of the samples analysed did not identify presence of soil contamination which exceed adopted soil investigation levels. The results reported level of metals that are consistent with natural background concentrations and pesticide and herbicide residues were not detected at concentrations above the laboratory limit of reporting.

Marginally elevated concentrations of total recoverable hydrocarbons were reported in the surface soils at the former location of the abandoned tractor and minor oil or hydraulic fluid leaks from this machine. As only a small area is affected by this staining we considered the surface soil contamination to be an aesthetic issue and have included recommendations and actions to remove, waste classify, and appropriately dispose of this impacted soil.

Based on observations made during the site walkover and the laboratory test results the findings of the Phase 2 ESA found that there is a low potential for contamination to be present on the NGCC site. The findings are consistent with the Phase 1 ESA previously prepared for the site. Therefore, no further detailed site investigation or the preparation of a remedial action plan is required.

# 1. Introduction

Coffey Services Australia Pty Ltd (Coffey) was engaged by John Holland Pty Ltd to undertake a Phase 2 Environmental Site Assessment (ESA) for areas of environmental concern (AEC) located within the footprint of the proposed New Grafton Correctional Centre (NGCC), 313 Avenue Road, Lavadia NSW.

The NGCC is to be developed on a 195 hectare parcel of rural land comprising of Lot 26 DP751376 and Lot 1 DP 1190399, the Project Site. The land is currently cleared, grassed rural land and was understood to have previously been used for cattle grazing. There are few built structures remaining on the Project Site and at the time of this assessment in May 2017 were limited to a derelict and vandalized house, adjacent concrete slab associated with a former metal clad building (recently removed), and timber cattle yards in poor repair.

A Phase 1 Preliminary Site Investigation report was prepared for the NGCC site for Infrastructure New South Wales by Jacobs Australia Pty Ltd, ref: V04, dated 21 June 2016. The Phase 1 investigation included a review of historical records and aerial photography and found that with the exception of cattle grazing that the Project Site appears to have been largely vacant since 1958 up to 2015. During 2015 the house and associated shed was constructed on Lot 1 in the southern portion of the site adjacent to Avenue Road.

The Phase 1 investigation identified six potential areas of environmental interest and concluded that these areas have a low or low-moderate contamination risk rating and therefore recommended that further testing not be required. The Phase 1 Investigation identified these areas as following:

1. stockpiled miscellaneous waste material near the farm dam on Lot 1;
2. the four farm dams on-site;
3. the entire site, given it has been historically used for grazing activities;
4. a broken down tractor on Lot 26;
5. miscellaneous waste material across the site; and
6. a septic tank associated with the existing dwelling on Lot 1.

The Phase 2 ESA includes an assessment of two AEC's identified above, they are No.1 Stockpile material near the farm dam on Lot 1 and No. 4. Soils at site of the abandoned broken down tractor on Lot 26. Given the large size of the Project Site a preliminary assessment using judgemental sampling at nominated locations was also undertaken to screen for the presence of pesticide and herbicide residues which may have historically been used in grazing activities, see No.3 above. The Phase 2 ESA was undertaken in accordance with the revised proposal prepared by Coffey (Ref: 754-CFSGE195610-AD, dated 15 May 2017).

## 2. Background

In 2016, the NSW Government called for Expressions of Interest from the private sector to design, build, operate and maintain the NGCC. Following a competitive tender process, NorthernPathways were announced as the preferred bidder. The project is being delivered a Public Private Partnership (PPP) which means NorthernPathways will design, construct, operate and maintain the new facility on behalf of the NSW Government for the next 20 years.

Infrastructure NSW (INSW) is the Proponent for the environmental impact statement and lodgement of an application for environmental and planning approval. INSW is working with NorthernPathways on the community consultation and public exhibition of this environmental impact statement.

NGCC will be the major multifunctional, regional correctional facility servicing the northern part of NSW and will be the primary correctional facility for all corrections operations from the Queensland border in the north to Kempsey in the south, and Tamworth in the southwest.

The vision for the project is to operate in accordance with innovative best practice, both in providing safety and security and providing dynamic, pro-social management of inmates.

### 2.1. Stage 1 Consent

On 14 March 2017 consent was granted to the concept proposal for the staged development of New Grafton Correctional Centre (NGCC) comprising:

- 1,700 maximum and minimum security beds, consisting of:
  - o - 1,000 maximum security beds for male inmates;
  - o - 300 maximum security beds for female inmates; and
  - o - 400 minimum security beds for male inmates.
- core correctional facility buildings including: maximum and minimum accommodation units; special accommodation units; health facilities; education and programs areas; administration; workshops; staff amenities; and visitor facilities;
- a recreational oval within the perimeter of the facility;
- a six metre high fence or wall around the perimeter of the facility, with light and security camera poles up to 10 metres in height;
- store buildings, small ancillary facilities, a central energy plant, black-water treatment facilities and a drug dog detection unit and yard located outside the perimeter wall / fence;
- fire access roads on the inside and the outside of the perimeter wall/ fence of the facility;
- water, power, wastewater and communication utilities within the site;
- a maximum building height of 12 metres (approximately three storeys);
- total GFA of approximately 100,000m<sup>2</sup>;
- vegetative buffer of 50 metres along the northern boundary, 15 metres along the eastern boundary and 30 metres along the southern boundary; and
- asset protection zone of 100 metres from every boundary or vegetation buffer;
- one vehicular entry/exit point from Avenue Road;
- 500 car parking spaces;
- 1.5 metre high boundary fence; and
- landscaping of ground cover and /or shrubbery.

All development under the concept proposal consent (Stage 1 consent) is to be the subject of a subsequent development application with the exception of the Stage 1 works.

The approved Stage 1 works include:

- vegetation clearance and biodiversity management activities;
- bulk excavation and site stabilisation works;
- demolition of the existing house and sheds;
- construction of access roads including fire access roads to the extent required to conduct Stage 1 works
- construction of auxiliary facilities such as construction compound, construction staff parking facilities and stockpiles sites;
- temporary provision of water, power and communication services within the site to the extent required to conduct Stage 1 works; and
- landscaping.

These Stage 1 works will be undertaken to facilitate the subsequent development as envisaged in the concept proposals.

At the same time, Infrastructure New South Wales (INSW) is arranging for the delivery of services to the site including a mains water supply, electricity, telecommunications and access.

The subsequent development application (Stage 2 DA) will be generally consistent with the concept proposal as outlined on the previous page.

NGCC will be constructed and maintained by John Holland and Serco will operate the correctional centre.

## 2.2. Approvals Framework

NGCC is a State significant development with planning approval being obtained in two stages:

- Stage 1 – for the concept proposal and Stage 1 works; and
- Stage 2 – for the design and construction of the facility.

The Stage 1 consent was obtained by the Infrastructure NSW (INSW) on behalf of Corrective Services NSW (CSNSW), a division of the Department of Justice, with approval perceived 14 March 2017.

INSW is the applicant for the Stage 2 DA.

The development to which the Stage 2 development application relates is also State significant development. Clause 8(1)(b) in Part 2 of State Environmental Planning Policy (State and Regional development) 2011 ("the SRD SEPP"), development is declared to be State significant development if the development is specified in Schedule 1 or 2 of the SRD SEPP. Schedule 1 includes paragraph 16:

*16 Correctional centres*

*Development for the purpose of correctional centres that has a capital investment value of more than \$30 million.*

The proposed NGCC has a capital investment value of over \$30 million and is State Significant Development.

The Minister for Planning is the consent authority for State Significant Development.

## **2.3. The site and its context**

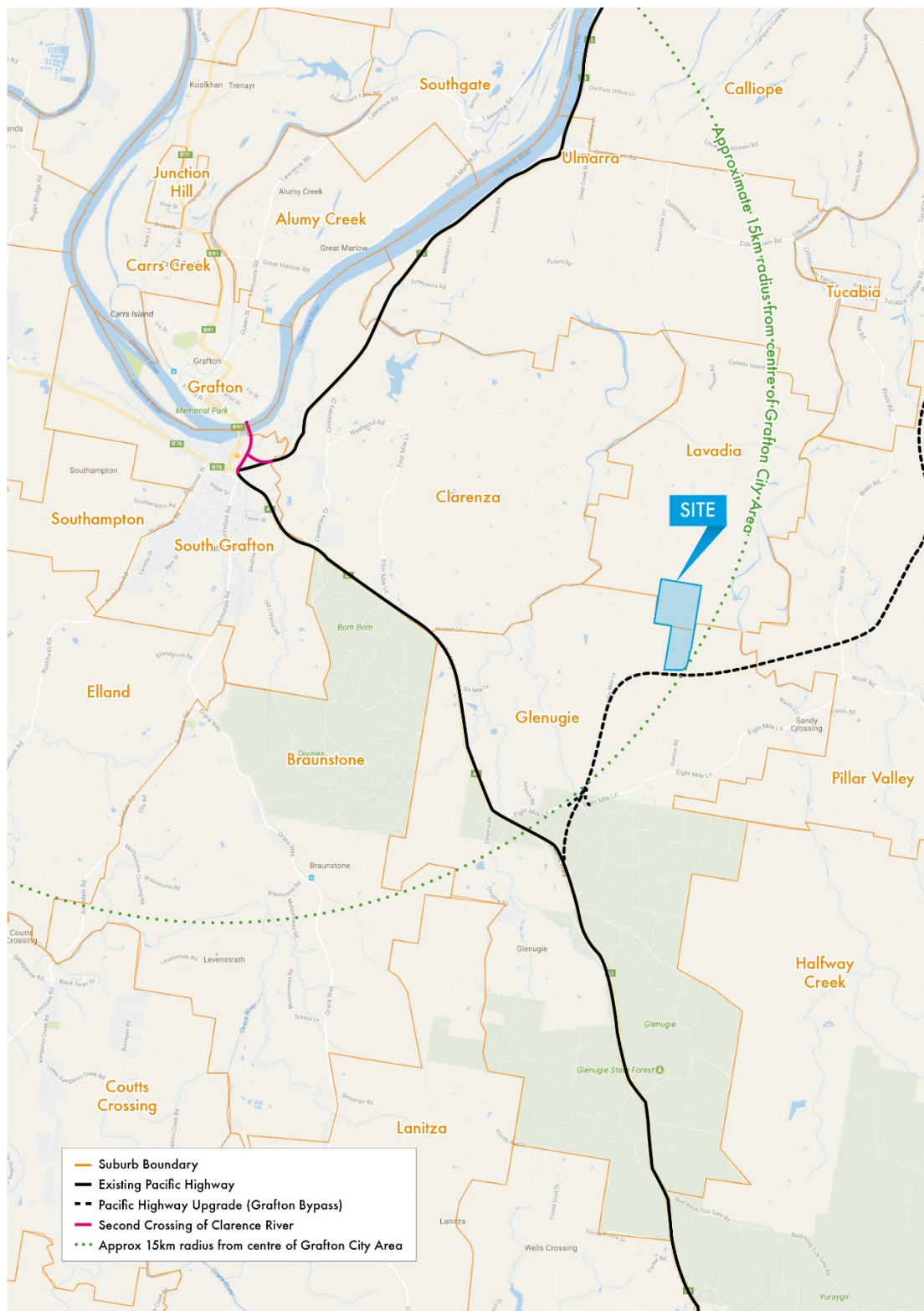
### **2.3.1. Regional context**

The site is located 23 kilometres by road to the south east of Grafton, 5 kilometres north east of Grafton Airport and 7 kilometres east of the Pacific Highway at 313 Avenue Road Lavadia, NSW, see Figure 1.

The Pacific Highway provides connections north towards Queensland and south towards the Hunter and Sydney. The Gwydir Highway provides a connection between the North Coast and the New England and Summerland Way extends north connecting Grafton, Casino and Kyogle to the Mt Lindesay Highway.

Grafton is a focal point for regional road, river and other transport networks and a focus for higher order services to the Clarence Valley sub-region. It is the sub-region's major employment centre and a centre for government administration.

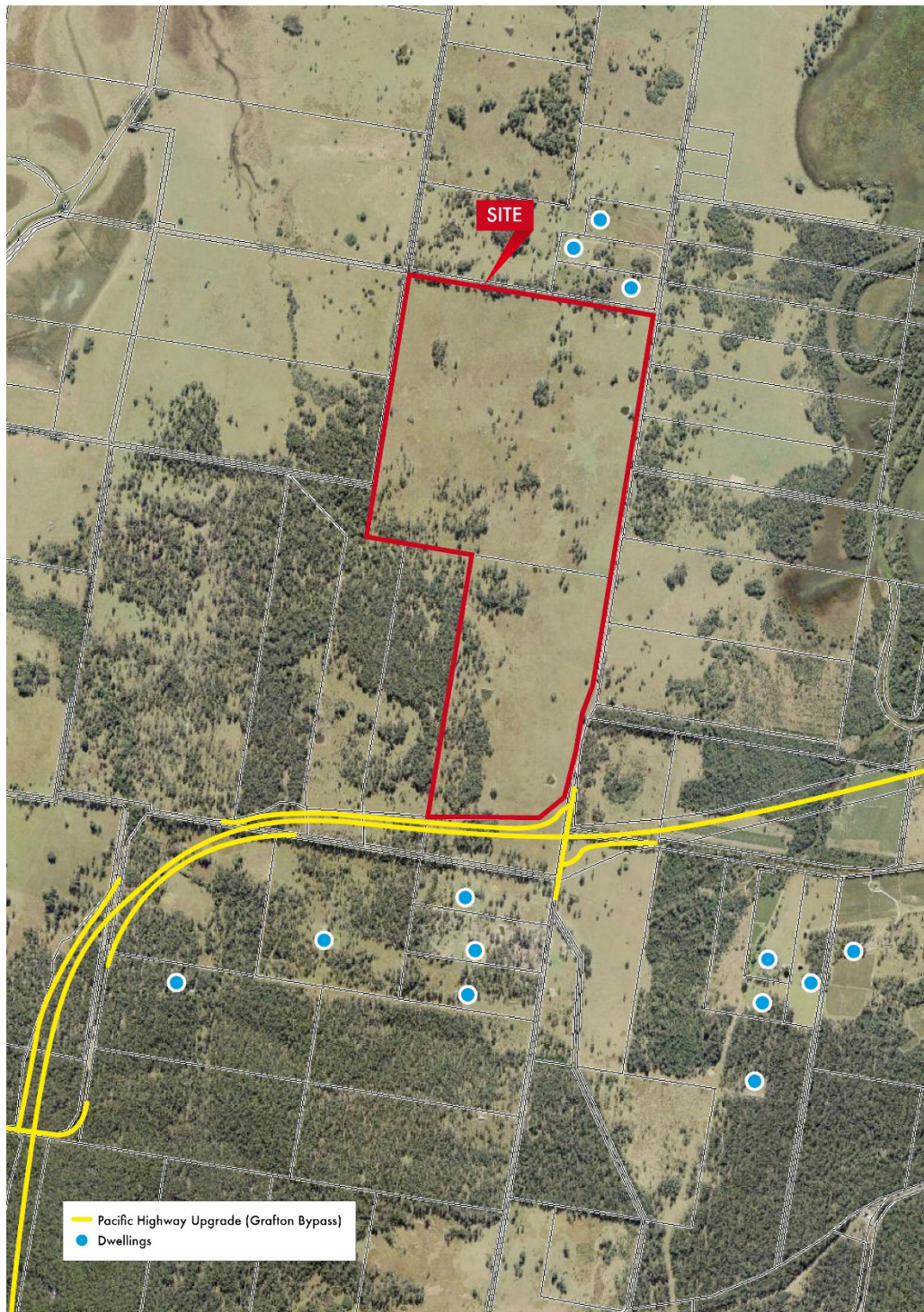
**Figure 1 – NGCC Location**



### 2.3.2. The site

The site comprises Lot 26 DP751376 and Lot 1 DP 1190399 each roughly rectangular with a total area of 195 hectares, see Figure 2. It is known as 313 Avenue Road Lavadia although the site straddles the boundary between the localities of Lavadia and Glenugie.

**Figure 2 – NGCC Project Site**



It has a frontage to Avenue Road of approximately 2.2 Kms, a northern boundary to an unformed Crown road of 1.1 Kms, a western boundary to adjoining private property and unformed Crown roads of 2.3 Kms and a southern boundary of 627 metres to the Pacific Highway under construction including the relocated Old Six Mile Lane.

## 2.4. The proposal

The proposed development comprises the construction of a new correctional centre designed to accommodate 1,700 male and female inmates comprising 14 different cohorts including but not limited to:

| Classification                          | Number | Gender |
|-----------------------------------------|--------|--------|
| Maximum Security Classification Inmates | 1000   | Male   |
| Maximum Security Classification Inmates | 300    | Female |
| Minimum Security Classification Inmates | 400    | Male   |
| Total                                   | 1,700  |        |

Other associated facilities include but are not limited to:

- Recreational oval, special accommodation units, administration, industries and educational facilities, workshops, staff amenities, visitor facilities, prisoner reception and health facilities (including beds and some diagnostic facilities), access, parking and utilities;
- An overall Gross Floor Area (GFA) of approximately 90,700 square metres;
- Secure perimeter fences to the two correctional precincts comprising concrete and anti-climb mesh fences with a Sterile Zone;
- Additional beds for remand/reception management and management of unforeseen contingencies such as a requirement to separate inmates;
- Associated support and ancillary buildings for the delivery of services (other than functions);
- Provision of integrated power, fire, general infrastructure and security & communications backbone;
- Provision of furniture, fittings & equipment (FF&E) to deliver the services and other functions.

Two distinct correctional precincts for the management of maximum and minimum security inmate cohorts are proposed with movement of staff, inmates and visitors managed through individual gatehouses.

These are located either side of central facilities such as parking areas, visitor arrivals areas and staff amenities.

The facility has been designed to be legible for all users, engendering a feeling of personal safety. In providing the physical spaces requisite for the execution of day-to-day operations and achievement of high-level goals, the design results in efficiencies and minimised impact on the environment through the location of buildings and design of movement systems.

The design provides a campus-style layout for the three correctional centres – male maximum, female maximum and male minimum and positions each centre on either side of the existing ridgeline running on a north–south axis through the Site. This ridgeline offers views to Glenugie Peak in the

distance to the south, captured by the proposed cultural centre located between the male maximum and female maximum centres. Views to this significant feature are symbolic and meaningful to locals, and particularly for the Indigenous community.

Each centre is designed with a 'spine' or 'street' of support facilities, and a number of neighbourhoods of residential accommodation. These spines are set out along a gentle curve, generated from the existing topography and natural landforms.

The male maximum and female maximum centres are enclosed by one maximum-security perimeter and designed with physical, visual and acoustic separation between male and female inmates. This is achieved through the natural ridgeline layering the support facilities spines for each centre on either side of a green space. A secure line between each of the centres prevents inmates from accessing the other.

Each centre is accessed from the support facilities spine through a series of managed secure officer posts in lieu of a central movement control post, facilitating ease of movement into the campus facilities (e.g. recreation, industries, programs and education). The facilities are set out along a curved communication spine determined by functional requirements, acting as the 'wayfinding' across the facility. This pathway network provides a functional solution aligned with operational needs and accommodates natural 'desire' lines of pedestrians. Movement areas are observed by staff points, and movement within the centres' shared spaces is controlled using buildings and landscape elements to define circulation routes.

The landscape design follows the campus style design approach being integrated into the existing local environmental context. Areas of existing vegetation are retained, wherever possible, and extensive screen planting of endemic trees, shrubs and grasses to the boundaries, the drainage lines, and the hill to the north. The entrance road planting of informal groves of local trees, retains the local rural character.

Secure perimeter fences would be provided to the two correctional precincts comprising 6.0m high concrete and anti-climb mesh fences with a secure sterile zone. Detection monitoring and CCTV coverage of perimeter security zones will be provided with security lighting.

A single point of entry and control would be provided from Avenue Road. Internal access roads and car parking for approximately 700 car spaces comprising:

- 350 staff car parking spaces and 10 motorcycles spaces
- 350 visitor car parking spaces and 10 motorcycles with a standover space with an overflow area accommodating a further 150 cars

A bus stop close to the visitor reception area would be provided with provision for bus

NorthernPathways propose to design, build and operate a Membrane Bioreactor (MBR) Waste Water Treatment Plant to accommodate inmates, staff and visitors and all peak load periods. The proposed MBR system is the combination of an activated sludge biological treatment plant with Ultra filtration membrane process utilising a suspended growth bioreactor producing Class A+ potable water. This water would be reticulated as recycle water through the facility, with excess directed to travelling surface irrigators. The plant would be fully automated and be remotely monitored for additional offsite technical support.

The facility would be constructed in one stage with occupancy managed by gradual ramp up to capacity over a period of 6 months. The facility will commence construction pursuant to the Stage 1 consent issued in March 2017 and, subject to works under a Stage 2 DA, is due for completion in early 2020 ready for occupation from July 2020.

The construction and delivery of the project will be undertaken in coordination with other major projects in the region, namely the Pacific Highway upgrade currently under construction by the Roads and Maritime Services and the additional bridge crossing of the Clarence River in Grafton.

Detailed consideration has been given to construction planning and management.

It is estimated that some 580 jobs would be provided at the facility with approximately 350 of these being custodial officers. During construction, some 1,100 jobs would be provided.

## 2.5. Purpose of this Phase 2 ESA

The purpose of this Phase 2 ESA report is to address the SEARs, the conditions of the Stage 1 consent and the applicable guidelines:

### SEAR 11. Contamination

Demonstrate that the site is suitable for the proposed use in accordance with *State Environmental Planning Policy No.55 – Remediation of Land* (SEPP 55).

- Relevant Policies and Guidelines
- Managing Land Contamination: Planning Guidelines – SEPP 55 Remediation of Land (DUAP)

To address condition 11 the Phase 2 ESA investigates if soil contamination is present in the nominated AEC present on this site. Based on the findings of the investigation and laboratory analysis soil samples whether a more detailed investigation or remediation is required to make the site suitable for the proposed NGCC development.

Also, the Ministerial Conditions of Approval for the NGCC Project include the following soil contamination conditions:

### Part A - B21. Contamination

If the Phase 2 contamination assessment report identifies a Remediation Action Plan is required to be prepared, a Remediation Action Plan must be submitted with the development application for Stage 2 or a site validation certificate provided to verify that the site has been remediated.

### Part B - B4. Contamination

A Phase 2 contamination assessment report must be prepared and submitted to the Secretary prior to the commencement of any works. This assessment is to define the nature, extent and degree of contamination (if any); assess potential risk posed by contaminants to health and the environment; and to obtain sufficient information to develop a remedial action plan (if required).

### Part B - B5. Contamination

A Remedial Action Plan (if required) is to be prepared and approved by an accredited site auditor prior to the commencement of works and submitted to the Certifying Authority.

### 3. Adopted Investigation Levels

#### 3.1. Soil Investigation Levels

The investigation levels presented in the following reference are generally the primary guideline used in NSW when setting soil investigation levels (SILs) for chemical concentrations in soil:

- *National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended April 2013)*, EPHC 2013, Canberra (ASC NEPM, 2013).

The ASC NEPM presents health investigation levels for different land uses (e.g. industrial / commercial, residential, recreational etc.) as well as ecological investigation levels.

As the proposed future use for land within the NGCC site is a correctional centre we have adopted the guideline criteria for commercial/ industrial (HILs Commercial/Industrial D) as soil investigation levels (SILs) for the respective potential contaminants of concern (PCoC).

The proposed future land use of this site is for a commercial development for a correctional centre. A series of new buildings are to be constructed for this development. With single storey on ground buildings there is potential for indoor air space intrusion of vapours and as such we have included the soil vapour intrusion HSLs in the adopted investigation levels.

Until recently the site was used for agricultural grazing and is currently vacant rural land. The development of the correctional centre will involve extensive earthworks and construction activity including removal of vegetation. Based on the proposed future land use the ecological values for the site are assessed to be low and as such we have not included the ecological investigation and screening levels provided in the ASC NEPM.

Coffey has adopted the following ASC NEPM guideline values as SILs for this Phase 2 ESA:

- Health investigation level (HIL) for Commercial/ Industrial land use (see Table 1A(1) HIL D)
- Soil HSLs for vapour intrusion of clay soils for Commercial/ Industrial (see Table 1A(3) HSL D)
- Management Limits for TRH fractions F1-F4 in soil for Commercial and industrial (see Table 1 B(7))

The adopted investigation levels are presented in the attached Table LR2.

## 4. Field Investigation

### 4.1. Site Observations

A site walkover was completed by Coffey Environmental Scientists on Monday 15 May 2017.

Site observations focused on AEC as described in the previous Phase 1 Investigation, see below:

#### **Stockpiled miscellaneous waste material used to construct dam levee wall on Lot 1**

Stockpiled material consisted of approximately 300m<sup>3</sup> of excavated soil used to construct a dam levee wall along eastern side of the dam (see photograph 1).

The origin of the soil material used in the construction of the levee is unknown, although it is likely that soil was excavated from the local surrounding area during the construction of this dam. Two surface soil samples (0-0.15m) were collected from the dam levee wall (SS01 & SS02) for this investigation.

#### **Abandoned Tractor on Lot 26**

An abandoned tractor was previously located on Lot 26 (see photograph 2) and has since been removed from the site. A small area (approximately 3m<sup>2</sup>) of dark stained surface soils was observed in the area where the tractor was previously located, (see photograph 3). The tractor footprint was approximately 15m<sup>2</sup> (3m x 5m). Two surface soil samples were collected from within the tractor footprint (SS03 & SS04).

#### **The entire NGCC site, historically used for grazing activities**

The Project Site consists of mostly undulating topography with low to medium grass cover with isolated stands of semi dense mature eucalypt trees. The site has historically been used for cattle grazing, and some associated structures, including stock holding yards and farm dams are still present. A derelict newly constructed house is present on Lot 1 which has been extensively vandalised. A domestic septic tank associated with the derelict house remains on-site. It is noted that this house was recently constructed and may not have been occupied and the septic tank is assessed to have a low contamination risk.

In conjunction with a Geotechnical Site Investigation underway for the Project Site surface soil samples (0-0.15m) were collected from 10 test pit locations and from borehole BH-002 to screen for the presence of pesticide and herbicide residues on the NGCC site, see Figure 3.

A small drainage line was observed to the north of the derelict house, which runs in a west-east direction and channels surface water run-off away from the NGCC site, beneath Avenue Road, to the north east. A culvert runs under Avenue Road (see photograph 4) and directs surface water run-off towards the neighbouring property to the east of Avenue Road. Sample SS05 was taken on the boundary of Lot 1 in the drainage line upslope of this culvert.

The Project Sites setting in a rural area and it's remoteness to other developed urban or industrial areas there is unlikely to be any potential cumulative impacts in the vicinity.

Observations made during the site walkover are summarised in Table 1.

**Table 1:** Summary of site walkover observations

| Site Observations                                                                                                                                                                                        |                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                         |                                                          |
| <p><b>Photograph 1,</b> Shows the farm dam levee in Lot 1.</p>                                                                                                                                           | <p><b>Photograph 2,</b> Shows the broken down tractor on Lot 26 in October 2016. This tractor has since been removed from the site.</p>    |
|                                                                                                                        |                                                         |
| <p><b>Photograph 3,</b> Shows the footprint where the broken down tractor was previously parked. A localised area of dark oil staining is visible on the ground surface in centre of the photograph.</p> | <p><b>Photograph 4,</b> Shows the culvert running underneath Avenue Road which collects surface water run-off from Lot 1 of NGCC site.</p> |

## 4.2. Field Investigation

Field investigation was carried out using hand tools on the 15 May 2017 by Coffey Environmental Scientists. The sampling methodology followed is summarised in Table 2.

**Table 2:** Sampling Methodology

| Activity                                    | Detail / Comments                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface Soil Sampling                       | Surface soil samples were collected from depths of 0–0.15m below ground surface (bgs) at sample locations. A stainless steel shovel was used to excavate a square of turf at each location. While wearing a new pair of nitrile gloves a soil sample was then collected by hand. A brief description of surface soil materials was recorded at each sample location.                                               |
| Sample Handling and Transportation          | Soil samples were collected in laboratory supplied containers and then placed into a chilled insulated container.<br><br>The samples were couriered to National Association of Testing Authorities (NATA) certified laboratories (Eurofins/ mgt laboratories in Sydney and Melbourne were the primary and secondary laboratories) under chain of custody documentation, see laboratory certificates in Appendix A. |
| Decontamination of sampling equipment       | A clean pair of disposable nitrile gloves was used to collect each sample. Hand tools were decontaminated by brush scrubbing with Decon 90™ solution and then rinsing with clean potable water between each sampling location.                                                                                                                                                                                     |
| Quality Assurance / Quality Control (QA/QC) | Additional soil samples were collected for QA/QC purposes. These samples were analysed for duplicate samples at a rate of 1 in 10 samples and triplicate samples at a rate of 1 in 20 samples.                                                                                                                                                                                                                     |

## 5. Quality Assurance / Quality Control (QA/QC)

Samples were transported under chain of custody conditions in a chilled insulated container to Eurofins mgt laboratory which is NATA accredited for the analyses performed. A copy of the chain of custody is included with the laboratory test results in Appendix A.

The laboratory conducted internal quality control using laboratory duplicates, spikes and method blanks. The results are shown with the laboratory report sheets attached to this report. Analytical methods used for the laboratory testing are also indicated on the laboratory report sheets.

For QA/QC purposes 2 duplicate and 1 triplicate samples were submitted for analysis. Reported exceedances of the relative percentage difference (RPD) 50% control limits was found in triplicate pair BH002: 0-0.15 / QC02 reporting a RPD value of 117% for copper, 94% for lead, 149% for zinc; duplicate pair SS02 / QC03 reporting and RPD value of 108% for arsenic, 73% for copper and 92% for zinc. The RPD exceedances are considered to be due to the heterogeneous nature of metals in the soil.

Based on the results it is considered that the field and laboratory methods are appropriate and that the data obtained is usable and considered to reasonably represent the concentrations at the sampling points at the time of sampling.

## 6. Results

The laboratory test results for soil samples are summarised in Table LR2 and laboratory certificates of analysis are provided in Appendix A. Comparison of soil concentrations to the adopted SILs discussed in Section 3.1 and provided in Table LR2 is as follows:

- Concentrations of TRH were below the adopted investigation levels. At the site of the abandoned tractor marginally elevated concentrations of TRH were reported from SS04 for TRH C<sub>16</sub>-C<sub>34</sub> (180 mg/kg), however below the adopted SILs. SS04 was collected in an area which had visible oil staining from the tractor oil leaks.
- Concentrations of metals were below the adopted investigation levels or the laboratory's limit of reporting (LOR) in the samples analysed.
- Concentrations of BTEX, PAH, phenols, OCP/OPPs and Acid Herbicides were below the adopted investigation levels and the laboratory's limit of reporting (LOR) in the samples analysed.

## 7. Conclusions & Recommendations

The Phase 2 ESA was undertaken to assess for the presence of soil contamination within two areas of environmental concern (AEC) previously identified within this site in the Phase 1 ESA prepared by Jacobs. Based on submissions received on this project a preliminary assessment was undertaken across the site to screen for the presence of pesticide and herbicide residues which may have historically been used in grazing activities.

The objective of the Phase 2 ESA was to assess if soil contamination is present at the NGCC site, and whether more detailed investigation or remediation is required to make the site suitable for its proposed use as a correctional centre.

The field investigation for the site included a site walkover and the collection of surface soil samples (0-0.15m) from 16 locations for laboratory analysis for potential contaminants of concern, including metals, petroleum hydrocarbons, pesticides and herbicides.

The laboratory results of the soil samples analysed reported low levels of contamination which were below the adopted soil investigation levels. Pesticide and herbicide residues were not detected with results below the laboratory limit of reporting.

Sample SS04 collected from an area of minor surface oil staining associated with an abandoned tractor reported marginally elevated concentration of total recoverable hydrocarbons, however below the adopted investigation levels. Given the small quantity of impacted soils affected by this oil staining it is assessed to be more of an aesthetic issue and not significant soil contamination. Table 3 provides more detail on suggested actions/ recommendation for the clean-up and validation of this area.

Based on observations made during the site walkover and the laboratory test results the findings of the Phase 2 ESA found that there is a low potential for contamination to be present on the NGCC site. The findings are consistent with the Phase 1 ESA previously prepared for the site. Therefore, no further detailed site investigation or the preparation of a remedial action plan is required.

**Table 3:** Summary of Phase 2 ESA Findings and Suggested Actions / Recommendations

| Issues                                                                                          | Findings                                                                                                                                                                                                                                                                                                                                                                                                                                               | Action/ Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minor petroleum hydrocarbon based soil staining of ground surface at site of abandoned tractor. | <p>Soil sample SS04 was collected in an area which had visible oil staining from the tractor oil leaks. Laboratory results reported marginally elevated concentration of TRH, however below the adopted SILs for the site. The findings suggest surface soil contamination is confined to the visible area of staining.</p> <p>Given the small quantities of surface soils affected it was assessed that the contamination was an aesthetic issue.</p> | <p>Recommend that the area of surface soil oil staining is cleaned-up, any surplus soils removed during the clean-up are waste classified by chemical assessment and then disposed of to a licenced waste facility.</p> <p>The clean-up works are to be undertaken under the supervision of a qualified environmental consultant.</p> <p>Actions for clean-up of soil staining include:</p> <ul style="list-style-type: none"> <li>• Using a backhoe or excavator to strip impacted surface soils to a depth where a visual inspection shows no oil staining remains present.</li> <li>• The excavated surplus soil is to be temporarily stockpiled in either a plastic lined bunded area or waste skip bin on site.</li> <li>• Soils samples are to be collected from the base of the stripped area for validation and from the stockpiled soils for waste classification.</li> <li>• Once laboratory results are received the stockpiled soils are to be waste classified and can then be disposed of appropriately to a licenced waste facility.</li> <li>• A soil validation report is to be prepared to confirm that the impacted soils have been removed and that the site of the abandoned tractor is suitable for its intended future use.</li> </ul> |

## 8. References

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NSW DEC. (2006). *Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (2nd Edition)*. Department of Environment and Conservation NSW, Sydney.

NSW EPA. (2011). *Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites*. Environmental Protection Authority NSW, Sydney.

NSW EPA. (1995). *Sampling Design Guidelines*. Environmental Protection Authority NSW, Sydney.

## 9. Limitations

The findings contained in this report are the result of discrete/specific methodologies used in accordance with normal practices and standards. To the best of our knowledge, they represent a reasonable interpretation of the past and present uses of the site. Under no circumstances, however, can it be considered that these findings represent the actual state of the site at all points. If material is observed during construction that does not conform to that described in this report, or is suspicious in nature, then an environmental consultant should be contacted and further assessments undertaken.

In preparing this report, current guidelines for assessment and management of contaminated land were followed. This work has been conducted in good faith in accordance with Coffey Services Australia's understanding of the client's brief and general accepted practice for environmental consulting.

This report was prepared for John Holland with the objective to assess if soil contamination is present at the site, and whether more detailed investigation or remediation is required to make the site suitable for its proposed use as a correctional centre.

The work was conducted, and the report has been prepared, in response to specific instructions from the client to whom this report is addressed, within the time and budgetary requirements of the client, and in reliance on certain data and information made available to Coffey. The analyses, evaluations, opinions and conclusions presented in this report are based on those instructions, requirements, data or information, and they could change if such instructions etc. are in fact inaccurate or incomplete.

Investigations have been based on an assessment conducted in accordance with relevant guidelines and standards, and normal industry practice, having regard to the client instructions, and interpretations of conditions are based on the data from those assessments and, where relevant and conducted, testing.

To the best of our knowledge, they represent a reasonable interpretation of the general levels of contaminants of concern present at this site. However there can be no guarantee that conditions at specific points not able to be assessed do not vary from the interpreted conditions based on the available observations/data.

In order to determine actual environmental conditions at specific intermediate points away from those observed/tested to date, those specific points would need to be assessed/tested.

It is also noted that sub-surface conditions can change with time, and the report is based on data that was gathered at the time of the report. Coffey will not update the report and has not taken into account events occurring after the time its assessment was conducted. If material is observed during construction that does not conform to that described in this report, or is suspicious in nature, then an environmental consultant should be contacted and further assessments undertaken.

We draw your attention to the attached sheet *"Important Information About Your Coffey Environmental Report"* which outlines or discusses limitations associated with interpreting environmental investigations and drawing conclusions based on the data.

We trust that this Phase 2 ESA report meets your requirements. If you require further information please contact our Coffs Harbour office on (02) 6691 7300.

COFFEY

# Important information about your Coffey Environmental Report

## **Introduction**

This report has been prepared by Coffey for you, as Coffey's client, in accordance with our agreed purpose, scope, schedule and budget.

The report has been prepared using accepted procedures and practices of the consulting profession at the time it was prepared, and the opinions, recommendations and conclusions set out in the report are made in accordance with generally accepted principles and practices of that profession.

The report is based on information gained from environmental conditions (including assessment of some or all of soil, groundwater, vapour and surface water) and supplemented by reported data of the local area and professional experience. Assessment has been scoped with consideration to industry standards, regulations, guidelines and your specific requirements, including budget and timing. The characterisation of site conditions is an interpretation of information collected during assessment, in accordance with industry practice.

This interpretation is not a complete description of all material on or in the vicinity of the site, due to the inherent variation in spatial and temporal patterns of contaminant presence and impact in the natural environment. Coffey may have also relied on data and other information provided by you and other qualified individuals in preparing this report. Coffey has not verified the accuracy or completeness of such data or information except as otherwise stated in the report. For these reasons the report must be regarded as interpretative, in accordance with industry standards and practice, rather than being a definitive record.

## **Your report has been written for a specific purpose**

Your report has been developed for a specific purpose as agreed by us and applies only to the site or area investigated. Unless otherwise stated in the report, this report cannot be applied to an adjacent site or area, nor can it be used when the nature of the specific purpose changes from that which we agreed.

For each purpose, a tailored approach to the assessment of potential soil and groundwater contamination is required. In most cases, a key objective is to identify, and if possible quantify, risks that both recognised and potential contamination pose in the context of the agreed purpose. Such risks may be financial (for example, clean up costs or constraints on site use) and/or physical (for example, potential health risks to users of the site or the general public).

## **Limitations of the Report**

The work was conducted, and the report has been prepared, in response to an agreed purpose and scope, within time and budgetary constraints, and in reliance on certain data and information made available to Coffey.

The analyses, evaluations, opinions and conclusions presented in this report are based on that purpose and scope, requirements, data or information, and they could change if such requirements or data are inaccurate or incomplete.

This report is valid as of the date of preparation. The condition of the site (including subsurface conditions) and extent or nature of contamination or other environmental hazards can change over time, as a result of either natural processes or human influence. Coffey should be kept apprised of any such events and should be consulted for further investigations if any changes are noted, particularly during construction activities where excavations often reveal subsurface conditions.

In addition, advancements in professional practice regarding contaminated land and changes in applicable statutes and/or guidelines may affect the validity of this report. Consequently, the currency of conclusions and recommendations in this report should be verified if you propose to use this report more than 6 months after its date of issue.

The report does not include the evaluation or assessment of potential geotechnical engineering constraints of the site.

## **Interpretation of factual data**

Environmental site assessments identify actual conditions only at those points where samples are taken and on the date collected. Data derived from indirect field measurements, and sometimes other reports on the site, are interpreted by geologists, engineers or scientists to provide an opinion about overall site conditions, their likely impact with respect to the report purpose and recommended actions.

Variations in soil and groundwater conditions may occur between test or sample locations and actual conditions may differ from those inferred to exist. No environmental assessment program, no matter how comprehensive, can reveal all subsurface details and anomalies. Similarly, no professional, no matter how well qualified, can reveal what is hidden by earth, rock or changed through time.

The actual interface between different materials may be far more gradual or abrupt than assumed based on the facts obtained. Nothing can be done to change the actual site conditions which exist, but steps can be taken to reduce the impact of unexpected conditions.

For this reason, parties involved with land acquisition, management and/or redevelopment should retain the services of a suitably qualified and experienced environmental consultant through the development and use of the site to identify variances, conduct additional tests if required, and recommend solutions to unexpected conditions or other unrecognised features encountered on site. Coffey would be pleased to assist with any investigation or advice in such circumstances.

### **Recommendations in this report**

This report assumes, in accordance with industry practice, that the site conditions recognised through discrete sampling are representative of actual conditions throughout the investigation area. Recommendations are based on the resulting interpretation.

Should further data be obtained that differs from the data on which the report recommendations are based (such as through excavation or other additional assessment), then the recommendations would need to be reviewed and may need to be revised.

### **Report for benefit of client**

Unless otherwise agreed between us, the report has been prepared for your benefit and no other party. Other parties should not rely upon the report or the accuracy or completeness of any recommendation and should make their own enquiries and obtain independent advice in relation to such matters.

Coffey assumes no responsibility and will not be liable to any other person or organisation for, or in relation to, any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report.

To avoid misuse of the information presented in your report, we recommend that Coffey be consulted before the report is provided to another party who may not be familiar with the background and the purpose of the report. In particular, an environmental disclosure report for a property vendor may not be suitable for satisfying the needs of that property's purchaser. This report should not be applied for any purpose other than that stated in the report.

### **Interpretation by other professionals**

Costly problems can occur when other professionals develop their plans based on misinterpretations of a report. To help avoid misinterpretations, a suitably qualified and experienced environmental consultant should be retained to explain the implications of the report to other professionals referring to the report and then review plans and specifications produced to see how other professionals have incorporated the report findings.

Given Coffey prepared the report and has familiarity with the site, Coffey is well placed to provide such assistance. If another party is engaged to interpret the recommendations of the report, there is a risk that the contents of the report may be misinterpreted and

Coffey disowns any responsibility for such misinterpretation.

### **Data should not be separated from the report**

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way. Logs, figures, laboratory data, drawings, etc. are customarily included in our reports and are developed by scientists or engineers based on their interpretation of field logs, field testing and laboratory evaluation of samples. This information should not under any circumstances be redrawn for inclusion in other documents or separated from the report in any way.

This report should be reproduced in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties.

### **Responsibility**

Environmental reporting relies on interpretation of factual information using professional judgement and opinion and has a level of uncertainty attached to it, which is much less exact than other design disciplines. This has often resulted in claims being lodged against consultants, which are unfounded. As noted earlier, the recommendations and findings set out in this report should only be regarded as interpretive and should not be taken as accurate and complete information about all environmental media at all depths and locations across the site.

Figure



|          |             |       |          |      |                                                                                                                                                   |
|----------|-------------|-------|----------|------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| revision | description | drawn | approved | date | <div>Legend:</div> <div><div><div></div></div>Approximate surface soil sample locations</div> <div><div></div></div> Approximate project boundary |
|----------|-------------|-------|----------|------|---------------------------------------------------------------------------------------------------------------------------------------------------|

## Tables

**Table LR1: Results of Quality Control Soil Samples**

All soil results in mg/kg

| Sample ID<br>Material<br>Date of Sampling<br>Depth (m) | Primary Sample<br>BH002<br>Soil<br>15-May-17<br>0-0.15 | Duplicate Sample<br>QC01<br>Soil<br>15-May-17<br>0-0.15 | RPD (%)<br><br>%RPD between<br>BH002 and QC01 | Primary Sample<br>BH002<br>Soil<br>15-May-17<br>0-0.15 | Triplicate Sample<br>QC02<br>Soil<br>15-May-17<br>0-0.15 | RPD (%)<br><br>%RPD between<br>BH002 and QC02 | Primary Sample<br>SS02<br>Soil<br>15-May-17<br>0-0.15 | Duplicate Sample<br>QC03<br>Soil<br>15-May-17<br>0-0.15 | RPD (%)<br><br>%RPD between<br>SS02 and QC03 |
|--------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|----------------------------------------------|
| <b>Metals</b>                                          |                                                        |                                                         |                                               |                                                        |                                                          |                                               |                                                       |                                                         |                                              |
| Arsenic                                                | 8.1                                                    | 7.9                                                     | 2                                             | 8.1                                                    | 13                                                       | 46                                            | 12                                                    | 3.6                                                     | <b>108</b>                                   |
| Cadmium                                                | < 0.4                                                  | < 0.4                                                   | NA                                            | < 0.4                                                  | < 0.4                                                    | NA                                            | < 0.4                                                 | < 0.4                                                   | NA                                           |
| Chromium                                               | < 5                                                    | < 5                                                     | NA                                            | < 5                                                    | 34                                                       | Inconsistent                                  | < 5                                                   | < 5                                                     | NA                                           |
| Copper                                                 | 8.9                                                    | 9.7                                                     | 9                                             | 8.9                                                    | 34                                                       | <b>117</b>                                    | 12                                                    | 5.6                                                     | <b>73</b>                                    |
| Lead                                                   | 13                                                     | 13                                                      | 0                                             | 13                                                     | 36                                                       | <b>94</b>                                     | 18                                                    | 7                                                       | NA                                           |
| Mercury                                                | < 0.1                                                  | < 0.1                                                   | N/A                                           | < 0.1                                                  | < 0.1                                                    | NA                                            | < 0.1                                                 | < 0.1                                                   | NA                                           |
| Nickel                                                 | < 5                                                    | < 5                                                     | NA                                            | < 5                                                    | 47                                                       | Inconsistent                                  | < 5                                                   | < 5                                                     | NA                                           |
| Zinc                                                   | 16                                                     | 17                                                      | 6                                             | 16                                                     | 110                                                      | <b>149</b>                                    | 27                                                    | 10                                                      | <b>92</b>                                    |
| <b>Organochlorine Pesticides</b>                       |                                                        |                                                         |                                               |                                                        |                                                          |                                               |                                                       |                                                         |                                              |
| OCPs (Totals)                                          | < LOR                                                  | < LOR                                                   | NA                                            | < LOR                                                  | < LOR                                                    | NA                                            | < LOR                                                 | < LOR                                                   | NA                                           |
| <b>Organophosphorus Pesticides</b>                     |                                                        |                                                         |                                               |                                                        |                                                          |                                               |                                                       |                                                         |                                              |
| OPPs (Totals)                                          | < LOR                                                  | < LOR                                                   | NA                                            | < LOR                                                  | < LOR                                                    | NA                                            | < LOR                                                 | < LOR                                                   | NA                                           |
| <b>Acid Herbicides</b>                                 |                                                        |                                                         |                                               |                                                        |                                                          |                                               |                                                       |                                                         |                                              |
| Acid Herbicides (Total)                                | < LOR                                                  | < LOR                                                   | NA                                            | < LOR                                                  | < LOR                                                    | NA                                            | < LOR                                                 | < LOR                                                   | NA                                           |

**Notes:**

|       |                                  |
|-------|----------------------------------|
| Value | RPD exceeds control limit of 50% |
|-------|----------------------------------|

NA Both samples have concentrations below laboratory's Limit of Reporting (LOR)

Inconsistent One sample has concentration below LOR, the second sample has concentrations above LOR

< LOR Concentrations below the laboratory's Limit of Reporting (LOR)

Table LR2 - Summary of Laboratory Results for Soil Samples

All results in mg/kg

| Borehole Number                         | HIL D                     | HSL D                                           | Management Limits                            | BH002     | TP004     | TP009     | TP014     | TP015     | TP016     | TP025     | TP026     | TP067     | TP096     | TP117     | SS01      | SS02      | SS03      | SS04      | SS05      |
|-----------------------------------------|---------------------------|-------------------------------------------------|----------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Depth (m)                               |                           | Clay 0-1m                                       | for TPH Fractions                            | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    | 0-0.15    |
| Material                                | Commercial/<br>Industrial | Vapour Intrusion<br>(Commercial/<br>Industrial) | Clay Soils<br>(Commercial and<br>Industrial) | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      | Soil      |
| Date of Sampling                        |                           |                                                 |                                              | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 | 15-May-17 |
| <b>Metals</b>                           |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| Arsenic                                 | 3,000 <sup>1</sup>        |                                                 |                                              | 8.1       | 9.2       | 3.2       | 3.2       | 5.5       | 3.2       | 3.7       | 4.2       | 9.2       | 3.4       | 5.1       | 2.8       | 12        | 4.2       | 12        | 2.9       |
| Cadmium                                 | 900 <sup>1</sup>          |                                                 |                                              | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     | < 0.4     |
| Chromium                                | 3,600 <sup>1</sup>        |                                                 |                                              | < 5       | 6.9       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | 6.7       | < 5       | < 5       | < 5       | < 5       | < 5       | 6.6       | 5.5       |
| Copper                                  | 240,000 <sup>1</sup>      |                                                 |                                              | 8.9       | 8.5       | 6.2       | 9.4       | < 5       | 11        | 6.7       | < 5       | 8.2       | 5         | 5.7       | 14        | 12        | 8.1       | 6.1       | < 5       |
| Lead                                    | 1,500 <sup>1</sup>        |                                                 |                                              | 13        | 15        | 7.5       | 8.5       | 11        | 10        | 9.5       | 6.8       | 44        | 11        | 9.8       | 10        | 18        | 10        | 19        | 8.8       |
| Mercury                                 | 730 <sup>1</sup>          |                                                 |                                              | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     | < 0.1     |
| Nickel                                  | 6,000 <sup>1</sup>        |                                                 |                                              | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       | < 5       |
| Zinc                                    | 400,000 <sup>1</sup>      |                                                 |                                              | 16        | 11        | 12        | 21        | 13        | 20        | 20        | 9.1       | 50        | 27        | 6.1       | 36        | 27        | 16        | 33        | 14        |
| <b>Total Recoverable Hydrocarbons</b>   |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| Naphthalene                             |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.5     | < 0.5     | -         |
| TRH >C10-C16                            |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 50      | < 50      | -         |
| TRH >C10-C16 (F2)                       |                           |                                                 | 3,500 <sup>3</sup>                           | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 50      | < 50      | -         |
| TRH >C16-C34                            |                           |                                                 | 5,000 <sup>3</sup>                           | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 100     | 180       | -         |
| TRH >C34-C40                            |                           |                                                 | 10,000 <sup>3</sup>                          | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 100     | < 100     | -         |
| TRH C6-C10                              |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 20      | < 20      | -         |
| TRH C6-C10 less BTEX (F1)               |                           | 310 <sup>2</sup>                                | 800 <sup>3</sup>                             | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 20      | < 20      | -         |
| <b>BTEX</b>                             |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| Benzene                                 |                           | 4 <sup>2</sup>                                  |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.1     | < 0.1     | -         |
| Ethylbenzene                            |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.1     | < 0.1     | -         |
| m&p-Xylenes                             |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.2     | < 0.2     | -         |
| o-Xylene                                |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.1     | < 0.1     | -         |
| Toluene                                 |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.1     | < 0.1     | -         |
| Xylenes - Total                         |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.3     | < 0.3     | -         |
| <b>Organochlorine Pesticides</b>        |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| OCPs (Totals)                           |                           |                                                 |                                              | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | -         | -         | < LOR     |
| <b>Organophosphorus Pesticides</b>      |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| OPPs (Totals)                           |                           |                                                 |                                              | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | -         | -         | < LOR     |
| <b>Polycyclic Aromatic Hydrocarbons</b> |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| PAH (Totals)                            |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 0.5     | < 0.5     | -         |
| <b>Phenols</b>                          |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| Phenols (Totals)                        |                           |                                                 |                                              | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | -         | < 1       | < 1       | -         |
| <b>Acid Herbicides</b>                  |                           |                                                 |                                              |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |           |
| Acid Herbicides (Total)                 |                           |                                                 |                                              | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | < LOR     | -         | -         | < LOR     |

Notes:

|        |                                                                                                            |
|--------|------------------------------------------------------------------------------------------------------------|
| Result | Concentration exceeds adopted human health investigation levels                                            |
| Result | Concentration exceeds adopted health screening level, vapour intrusion (commercial/industrial) - clay 0-1m |
| Result | Concentration exceeds adopted management limit for TPH fractions - fine grained soils                      |

<sup>1</sup> ASC NEPM - Table 1A(1): Health Investigation Levels for Soil Contaminants

<sup>2</sup> NEPC (2013) Soil Health Screening Levels for Vapour Intrusion, Commercial/Industrial, Clay 0m to <1m

<sup>3</sup> ASC NEPM - Table 1B(7) Management Limits for TPH fractions F1-F4 in fine grained soil

# Appendix A

## Laboratory Certificates of Analysis & Chain of Custody

## Certificate of Analysis

Coffey Geotechnics Pty Ltd  
Unit 1 18 Hurley Dve  
Coffs Harbour  
NSW 2450



NATA Accredited  
Accreditation Number 1261  
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

Attention: Andrew Ballard

Report 546414-S-V2  
Project name SOIL ANALYSIS  
Project ID 754-CFSGE195610  
Received Date May 17, 2017

| Client Sample ID                 |      |       | BH-002 (0-0.15M) | TP-004 (0-0.15M) | TP-009 (0-0.15M) | TP-014 (0-0.15M) |
|----------------------------------|------|-------|------------------|------------------|------------------|------------------|
| Sample Matrix                    |      |       | Soil             | Soil             | Soil             | Soil             |
| Eurofins   mgt Sample No.        |      |       | S17-My15916      | S17-My15917      | S17-My15918      | S17-My15919      |
| Date Sampled                     |      |       | May 15, 2017     | May 15, 2017     | May 15, 2017     | May 15, 2017     |
| Test/Reference                   | LOR  | Unit  |                  |                  |                  |                  |
| <b>Organochlorine Pesticides</b> |      |       |                  |                  |                  |                  |
| Chlordanes - Total               | 0.1  | mg/kg | < 0.1            | < 0.1            | < 0.1            | < 0.1            |
| 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                         | 0.05 | mg/kg | < 0.05           | < 0.05           | < 0.05           | < 0.05           |
| a-BHC                            | 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           |
| 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            |
| Toxaphene                        | 1    | mg/kg | < 1              | < 1              | < 1              | < 1              |
| Dibutylchlorendate (surr.)       | 1    | %     | 107              | 115              | 110              | 120              |
| Tetrachloro-m-xylene (surr.)     | 1    | %     | 89               | 93               | 90               | 90               |
| <b>Acid Herbicides</b>           |      |       |                  |                  |                  |                  |
| 2,4-D                            | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| 2,4-DB                           | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| 2,4,5-T                          | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| 2,4,5-TP                         | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Actril (loxynil)                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dicamba                          | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dichlorprop                      | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dinitro-o-cresol                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dinoseb                          | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| MCPA                             | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| MCPB                             | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |

| Client Sample ID                        |     |       | BH-002 (0-0.15M) | TP-004 (0-0.15M) | TP-009 (0-0.15M) | TP-014 (0-0.15M) |
|-----------------------------------------|-----|-------|------------------|------------------|------------------|------------------|
| Sample Matrix                           |     |       | Soil             | Soil             | Soil             | Soil             |
| Eurofins   mgt Sample No.               |     |       | S17-My15916      | S17-My15917      | S17-My15918      | S17-My15919      |
| Date Sampled                            |     |       | May 15, 2017     | May 15, 2017     | May 15, 2017     | May 15, 2017     |
| Test/Reference                          | LOR | Unit  |                  |                  |                  |                  |
| <b>Acid Herbicides</b>                  |     |       |                  |                  |                  |                  |
| Mecoprop                                | 0.5 | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Warfarin (surr.)                        | 1   | %     | 86               | 96               | 91               | 80               |
| <b>Organophosphorus Pesticides (OP)</b> |     |       |                  |                  |                  |                  |
| Azinphos-methyl                         | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Chlorpyrifos                            | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Coumaphos                               | 2   | mg/kg | < 2              | < 2              | < 2              | < 2              |
| Demeton (total)                         | 1   | mg/kg | < 1              | < 1              | < 1              | < 1              |
| Diazinon                                | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Dichlorvos                              | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Dimethoate                              | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Disulfoton                              | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Ethoprop                                | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Fenitrothion                            | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Fensulfothion                           | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Fenthion                                | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Malathion                               | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Methyl parathion                        | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Mevinphos                               | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Monocrotophos                           | 2   | mg/kg | < 2              | < 2              | < 2              | < 2              |
| Parathion                               | 0.5 | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Phorate                                 | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Profenofos                              | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Prothiofos                              | 0.5 | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Ronnel                                  | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Stirophos                               | 0.5 | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Trichloronate                           | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Triphenylphosphate (surr.)              | 1   | %     | 128              | 87               | 88               | 96               |
| <b>Heavy Metals</b>                     |     |       |                  |                  |                  |                  |
| Arsenic                                 | 2   | mg/kg | 8.1              | 9.2              | 3.2              | 3.2              |
| Cadmium                                 | 0.4 | mg/kg | < 0.4            | < 0.4            | < 0.4            | < 0.4            |
| Chromium                                | 5   | mg/kg | < 5              | 6.9              | < 5              | < 5              |
| Copper                                  | 5   | mg/kg | 8.9              | 8.5              | 6.2              | 9.4              |
| Lead                                    | 5   | mg/kg | 13               | 15               | 7.5              | 8.5              |
| Mercury                                 | 0.1 | mg/kg | < 0.1            | < 0.1            | < 0.1            | < 0.1            |
| Nickel                                  | 5   | mg/kg | < 5              | < 5              | < 5              | < 5              |
| Zinc                                    | 5   | mg/kg | 16               | 11               | 12               | 21               |
|                                         |     |       |                  |                  |                  |                  |
| % Moisture                              | 1   | %     | 17               | 20               | 16               | 18               |

| Client Sample ID                        |      |       | TP-015 (0-0.15M) | TP-016 (0-0.15M) | TP-025 (0-0.15M) | TP-026 (0-0.15M) |
|-----------------------------------------|------|-------|------------------|------------------|------------------|------------------|
| Sample Matrix                           |      |       | Soil             | Soil             | Soil             | Soil             |
| Eurofins   mgt Sample No.               |      |       | S17-My15920      | S17-My15921      | S17-My15922      | S17-My15923      |
| Date Sampled                            |      |       | May 15, 2017     | May 15, 2017     | May 15, 2017     | May 15, 2017     |
| Test/Reference                          | LOR  | Unit  |                  |                  |                  |                  |
| <b>Organochlorine Pesticides</b>        |      |       |                  |                  |                  |                  |
| Chlordanes - Total                      | 0.1  | mg/kg | < 0.1            | < 0.1            | < 0.1            | < 0.1            |
| 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                                | 0.05 | mg/kg | < 0.05           | < 0.05           | < 0.05           | < 0.05           |
| a-BHC                                   | 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           |
| 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            |
| Toxaphene                               | 1    | mg/kg | < 1              | < 1              | < 1              | < 1              |
| Dibutylchlorendate (surr.)              | 1    | %     | 130              | 129              | 110              | 93               |
| Tetrachloro-m-xylene (surr.)            | 1    | %     | 94               | 100              | 87               | 93               |
| <b>Acid Herbicides</b>                  |      |       |                  |                  |                  |                  |
| 2,4-D                                   | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| 2,4-DB                                  | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| 2,4,5-T                                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| 2,4,5-TP                                | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Actril (loxynil)                        | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dicamba                                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dichlorprop                             | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dinitro-o-cresol                        | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Dinoseb                                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| MCPA                                    | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| MCPB                                    | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Mecoprop                                | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Warfarin (surr.)                        | 1    | %     | 92               | 86               | 86               | 85               |
| <b>Organophosphorus Pesticides (OP)</b> |      |       |                  |                  |                  |                  |
| Azinphos-methyl                         | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Chlorpyrifos                            | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Coumaphos                               | 2    | mg/kg | < 2              | < 2              | < 2              | < 2              |
| Demeton (total)                         | 1    | mg/kg | < 1              | < 1              | < 1              | < 1              |
| Diazinon                                | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Dichlorvos                              | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Dimethoate                              | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Disulfoton                              | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Ethoprop                                | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Fenitrothion                            | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Fensulfothion                           | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |

| Client Sample ID                        |     |       | TP-015 (0-0.15M) | TP-016 (0-0.15M) | TP-025 (0-0.15M) | TP-026 (0-0.15M) |
|-----------------------------------------|-----|-------|------------------|------------------|------------------|------------------|
| Sample Matrix                           |     |       | Soil             | Soil             | Soil             | Soil             |
| Eurofins   mgt Sample No.               |     |       | S17-My15920      | S17-My15921      | S17-My15922      | S17-My15923      |
| Date Sampled                            |     |       | May 15, 2017     | May 15, 2017     | May 15, 2017     | May 15, 2017     |
| Test/Reference                          | LOR | Unit  |                  |                  |                  |                  |
| <b>Organophosphorus Pesticides (OP)</b> |     |       |                  |                  |                  |                  |
| Fenthion                                | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Malathion                               | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Methyl parathion                        | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Mevinphos                               | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Monocrotophos                           | 2   | mg/kg | < 2              | < 2              | < 2              | < 2              |
| Parathion                               | 0.5 | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Phorate                                 | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Profenofos                              | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Prothiofos                              | 0.5 | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Ronnel                                  | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Stirophos                               | 0.5 | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5            |
| Trichloronate                           | 0.2 | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2            |
| Triphenylphosphate (surr.)              | 1   | %     | 83               | 87               | 89               | 146              |
| <b>Heavy Metals</b>                     |     |       |                  |                  |                  |                  |
| Arsenic                                 | 2   | mg/kg | 5.5              | 3.2              | 3.7              | 4.2              |
| Cadmium                                 | 0.4 | mg/kg | < 0.4            | < 0.4            | < 0.4            | < 0.4            |
| Chromium                                | 5   | mg/kg | < 5              | < 5              | < 5              | < 5              |
| Copper                                  | 5   | mg/kg | < 5              | 11               | 6.7              | < 5              |
| Lead                                    | 5   | mg/kg | 11               | 10               | 9.5              | 6.8              |
| Mercury                                 | 0.1 | mg/kg | < 0.1            | < 0.1            | < 0.1            | < 0.1            |
| Nickel                                  | 5   | mg/kg | < 5              | < 5              | < 5              | < 5              |
| Zinc                                    | 5   | mg/kg | 13               | 20               | 20               | 9.1              |
|                                         |     |       |                  |                  |                  |                  |
| % Moisture                              | 1   | %     | 22               | 19               | 14               | 19               |

| Client Sample ID                 |      |       | TP-067 (0-0.15M) | TP-096 (0-0.15M) | TP-117 (0-0.15M) | QC01         |
|----------------------------------|------|-------|------------------|------------------|------------------|--------------|
| Sample Matrix                    |      |       | Soil             | Soil             | Soil             | Soil         |
| Eurofins   mgt Sample No.        |      |       | S17-My15924      | S17-My15925      | S17-My15926      | S17-My15927  |
| Date Sampled                     |      |       | May 15, 2017     | May 15, 2017     | May 15, 2017     | May 15, 2017 |
| Test/Reference                   | LOR  | Unit  |                  |                  |                  |              |
| <b>Organochlorine Pesticides</b> |      |       |                  |                  |                  |              |
| Chlordanes - Total               | 0.1  | mg/kg | < 0.1            | < 0.1            | < 0.1            | < 0.1        |
| 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                         | 0.05 | mg/kg | < 0.05           | < 0.05           | < 0.05           | < 0.05       |
| a-BHC                            | 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       |

| Client Sample ID                        |      |       | TP-067 (0-0.15M) | TP-096 (0-0.15M) | TP-117 (0-0.15M) | QC01         |
|-----------------------------------------|------|-------|------------------|------------------|------------------|--------------|
| Sample Matrix                           |      |       | Soil             | Soil             | Soil             | Soil         |
| Eurofins   mgt Sample No.               |      |       | S17-My15924      | S17-My15925      | S17-My15926      | S17-My15927  |
| Date Sampled                            |      |       | May 15, 2017     | May 15, 2017     | May 15, 2017     | May 15, 2017 |
| Test/Reference                          | LOR  | Unit  |                  |                  |                  |              |
| <b>Organochlorine Pesticides</b>        |      |       |                  |                  |                  |              |
| 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        |
| Toxaphene                               | 1    | mg/kg | < 1              | < 1              | < 1              | < 1          |
| Dibutylchlorodate (surr.)               | 1    | %     | 109              | 90               | 92               | 94           |
| Tetrachloro-m-xylene (surr.)            | 1    | %     | 95               | 92               | 89               | 92           |
| <b>Acid Herbicides</b>                  |      |       |                  |                  |                  |              |
| 2,4-D                                   | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| 2,4-DB                                  | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| 2,4,5-T                                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| 2,4,5-TP                                | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Actril (loxynil)                        | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Dicamba                                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Dichlorprop                             | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Dinitro-o-cresol                        | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Dinoseb                                 | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| MCPA                                    | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| MCPB                                    | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Mecoprop                                | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Warfarin (surr.)                        | 1    | %     | 79               | 83               | 84               | 89           |
| <b>Organophosphorus Pesticides (OP)</b> |      |       |                  |                  |                  |              |
| Azinphos-methyl                         | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Chlorpyrifos                            | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Coumaphos                               | 2    | mg/kg | < 2              | < 2              | < 2              | < 2          |
| Demeton (total)                         | 1    | mg/kg | < 1              | < 1              | < 1              | < 1          |
| Diazinon                                | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Dichlorvos                              | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Dimethoate                              | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Disulfoton                              | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Ethoprop                                | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Fenitrothion                            | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Fensulfothion                           | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Fenthion                                | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Malathion                               | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Methyl parathion                        | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Mevinphos                               | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Monocrotophos                           | 2    | mg/kg | < 2              | < 2              | < 2              | < 2          |
| Parathion                               | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Phorate                                 | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Profenofos                              | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Prothiofos                              | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Ronnel                                  | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Stirophos                               | 0.5  | mg/kg | < 0.5            | < 0.5            | < 0.5            | < 0.5        |
| Trichloronate                           | 0.2  | mg/kg | < 0.2            | < 0.2            | < 0.2            | < 0.2        |
| Triphenylphosphate (surr.)              | 1    | %     | 112              | 82               | 79               | 86           |

|                                  |     |       |                         |                         |                         |                     |
|----------------------------------|-----|-------|-------------------------|-------------------------|-------------------------|---------------------|
| <b>Client Sample ID</b>          |     |       | <b>TP-067 (0-0.15M)</b> | <b>TP-096 (0-0.15M)</b> | <b>TP-117 (0-0.15M)</b> | <b>QC01</b>         |
| <b>Sample Matrix</b>             |     |       | <b>Soil</b>             | <b>Soil</b>             | <b>Soil</b>             | <b>Soil</b>         |
| <b>Eurofins   mgt Sample No.</b> |     |       | <b>S17-My15924</b>      | <b>S17-My15925</b>      | <b>S17-My15926</b>      | <b>S17-My15927</b>  |
| <b>Date Sampled</b>              |     |       | <b>May 15, 2017</b>     | <b>May 15, 2017</b>     | <b>May 15, 2017</b>     | <b>May 15, 2017</b> |
| Test/Reference                   | LOR | Unit  |                         |                         |                         |                     |
| <b>Heavy Metals</b>              |     |       |                         |                         |                         |                     |
| Arsenic                          | 2   | mg/kg | 9.2                     | 3.4                     | 5.1                     | 7.9                 |
| Cadmium                          | 0.4 | mg/kg | < 0.4                   | < 0.4                   | < 0.4                   | < 0.4               |
| Chromium                         | 5   | mg/kg | 6.7                     | < 5                     | < 5                     | < 5                 |
| Copper                           | 5   | mg/kg | 8.2                     | 5.0                     | 5.7                     | 9.7                 |
| Lead                             | 5   | mg/kg | 44                      | 11                      | 9.8                     | 13                  |
| Mercury                          | 0.1 | mg/kg | < 0.1                   | < 0.1                   | < 0.1                   | < 0.1               |
| Nickel                           | 5   | mg/kg | < 5                     | < 5                     | < 5                     | < 5                 |
| Zinc                             | 5   | mg/kg | 50                      | 27                      | 6.1                     | 17                  |
|                                  |     |       |                         |                         |                         |                     |
| % Moisture                       | 1   | %     | 16                      | 21                      | 19                      | 17                  |

|                                                             |     |       |                     |                     |                     |                     |
|-------------------------------------------------------------|-----|-------|---------------------|---------------------|---------------------|---------------------|
| <b>Client Sample ID</b>                                     |     |       | <b>SS01</b>         | <b>SS02</b>         | <b>SS03</b>         | <b>SS04</b>         |
| <b>Sample Matrix</b>                                        |     |       | <b>Soil</b>         | <b>Soil</b>         | <b>Soil</b>         | <b>Soil</b>         |
| <b>Eurofins   mgt Sample No.</b>                            |     |       | <b>S17-My15929</b>  | <b>S17-My15930</b>  | <b>S17-My15931</b>  | <b>S17-My15932</b>  |
| <b>Date Sampled</b>                                         |     |       | <b>May 15, 2017</b> | <b>May 15, 2017</b> | <b>May 15, 2017</b> | <b>May 15, 2017</b> |
| Test/Reference                                              | LOR | Unit  |                     |                     |                     |                     |
| <b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b> |     |       |                     |                     |                     |                     |
| TRH C6-C9                                                   | 20  | mg/kg | -                   | -                   | < 20                | < 20                |
| TRH C10-C14                                                 | 20  | mg/kg | -                   | -                   | < 20                | < 20                |
| TRH C15-C28                                                 | 50  | mg/kg | -                   | -                   | < 50                | 110                 |
| TRH C29-C36                                                 | 50  | mg/kg | -                   | -                   | < 50                | 100                 |
| TRH C10-36 (Total)                                          | 50  | mg/kg | -                   | -                   | < 50                | 210                 |
| <b>BTEX</b>                                                 |     |       |                     |                     |                     |                     |
| Benzene                                                     | 0.1 | mg/kg | -                   | -                   | < 0.1               | < 0.1               |
| Toluene                                                     | 0.1 | mg/kg | -                   | -                   | < 0.1               | < 0.1               |
| Ethylbenzene                                                | 0.1 | mg/kg | -                   | -                   | < 0.1               | < 0.1               |
| m&p-Xylenes                                                 | 0.2 | mg/kg | -                   | -                   | < 0.2               | < 0.2               |
| o-Xylene                                                    | 0.1 | mg/kg | -                   | -                   | < 0.1               | < 0.1               |
| Xylenes - Total                                             | 0.3 | mg/kg | -                   | -                   | < 0.3               | < 0.3               |
| 4-Bromofluorobenzene (surr.)                                | 1   | %     | -                   | -                   | 62                  | 61                  |
| <b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b> |     |       |                     |                     |                     |                     |
| Naphthalene <sup>N02</sup>                                  | 0.5 | mg/kg | -                   | -                   | < 0.5               | < 0.5               |
| TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>           | 50  | mg/kg | -                   | -                   | < 50                | < 50                |
| TRH C6-C10                                                  | 20  | mg/kg | -                   | -                   | < 20                | < 20                |
| TRH C6-C10 less BTEX (F1) <sup>N04</sup>                    | 20  | mg/kg | -                   | -                   | < 20                | < 20                |
| <b>Polycyclic Aromatic Hydrocarbons</b>                     |     |       |                     |                     |                     |                     |
| Benzo(a)pyrene TEQ (lower bound) *                          | 0.5 | mg/kg | -                   | -                   | < 0.5               | < 0.5               |
| Benzo(a)pyrene TEQ (medium bound) *                         | 0.5 | mg/kg | -                   | -                   | 0.6                 | 0.6                 |
| Benzo(a)pyrene TEQ (upper bound) *                          | 0.5 | mg/kg | -                   | -                   | 1.2                 | 1.2                 |
| Acenaphthene                                                | 0.5 | mg/kg | -                   | -                   | < 0.5               | < 0.5               |
| Acenaphthylene                                              | 0.5 | mg/kg | -                   | -                   | < 0.5               | < 0.5               |
| Anthracene                                                  | 0.5 | mg/kg | -                   | -                   | < 0.5               | < 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&j)fluoranthene <sup>N07</sup>                       | 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               |

| Client Sample ID                        |      |       | SS01         | SS02         | SS03         | SS04         |
|-----------------------------------------|------|-------|--------------|--------------|--------------|--------------|
| Sample Matrix                           |      |       | Soil         | Soil         | Soil         | Soil         |
| Eurofins   mgt Sample No.               |      |       | S17-My15929  | S17-My15930  | S17-My15931  | S17-My15932  |
| Date Sampled                            |      |       | May 15, 2017 | May 15, 2017 | May 15, 2017 | May 15, 2017 |
| Test/Reference                          | LOR  | Unit  |              |              |              |              |
| <b>Polycyclic Aromatic Hydrocarbons</b> |      |       |              |              |              |              |
| 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*                              | 0.5  | mg/kg | -            | -            | < 0.5        | < 0.5        |
| 2-Fluorobiphenyl (surr.)                | 1    | %     | -            | -            | 91           | 85           |
| p-Terphenyl-d14 (surr.)                 | 1    | %     | -            | -            | 78           | 72           |
| <b>Organochlorine Pesticides</b>        |      |       |              |              |              |              |
| Chlordanes - Total                      | 0.1  | mg/kg | < 0.1        | < 0.1        | -            | -            |
| 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       | -            | -            |
| α-BHC                                   | 0.05 | mg/kg | < 0.05       | < 0.05       | -            | -            |
| Aldrin                                  | 0.05 | mg/kg | < 0.05       | < 0.05       | -            | -            |
| β-BHC                                   | 0.05 | mg/kg | < 0.05       | < 0.05       | -            | -            |
| δ-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       | -            | -            |
| γ-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                            | 0.2  | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Toxaphene                               | 1    | mg/kg | < 1          | < 1          | -            | -            |
| Dibutylchloroendate (surr.)             | 1    | %     | 94           | 51           | -            | -            |
| Tetrachloro-m-xylene (surr.)            | 1    | %     | 91           | INT          | -            | -            |
| <b>Acid Herbicides</b>                  |      |       |              |              |              |              |
| 2,4-D                                   | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| 2,4-DB                                  | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| 2,4,5-T                                 | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| 2,4,5-TP                                | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Actril (loxynil)                        | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Dicamba                                 | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Dichlorprop                             | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Dinitro-o-cresol                        | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Dinoseb                                 | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| MCPA                                    | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| MCPB                                    | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Mecoprop                                | 0.5  | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Warfarin (surr.)                        | 1    | %     | 78           | 75           | -            | -            |

| Client Sample ID                        |     |       | SS01         | SS02         | SS03         | SS04         |
|-----------------------------------------|-----|-------|--------------|--------------|--------------|--------------|
| Sample Matrix                           |     |       | Soil         | Soil         | Soil         | Soil         |
| Eurofins   mgt Sample No.               |     |       | S17-My15929  | S17-My15930  | S17-My15931  | S17-My15932  |
| Date Sampled                            |     |       | May 15, 2017 | May 15, 2017 | May 15, 2017 | May 15, 2017 |
| Test/Reference                          | LOR | Unit  |              |              |              |              |
| <b>Phenols (Halogenated)</b>            |     |       |              |              |              |              |
| 2-Chlorophenol                          | 0.5 | mg/kg | -            | -            | < 0.5        | < 0.5        |
| 2,4-Dichlorophenol                      | 0.5 | mg/kg | -            | -            | < 0.5        | < 0.5        |
| 2,4,5-Trichlorophenol                   | 1   | mg/kg | -            | -            | < 1          | < 1          |
| 2,4,6-Trichlorophenol                   | 1.0 | mg/kg | -            | -            | < 1          | < 1          |
| 2,6-Dichlorophenol                      | 0.5 | mg/kg | -            | -            | < 0.5        | < 0.5        |
| 4-Chloro-3-methylphenol                 | 1.0 | mg/kg | -            | -            | < 1          | < 1          |
| Pentachlorophenol                       | 1.0 | mg/kg | -            | -            | < 1          | < 1          |
| Tetrachlorophenols - Total              | 1.0 | mg/kg | -            | -            | < 1          | < 1          |
| Total Halogenated Phenol*               | 1   | mg/kg | -            | -            | < 1          | < 1          |
| <b>Phenols (non-Halogenated)</b>        |     |       |              |              |              |              |
| 2-Cyclohexyl-4,6-dinitrophenol          | 20  | mg/kg | -            | -            | < 20         | < 20         |
| 2-Methyl-4,6-dinitrophenol              | 5   | mg/kg | -            | -            | < 5          | < 5          |
| 2-Methylphenol (o-Cresol)               | 0.2 | mg/kg | -            | -            | < 0.2        | < 0.2        |
| 2-Nitrophenol                           | 1   | mg/kg | -            | -            | < 1          | < 1          |
| 2,4-Dimethylphenol                      | 0.5 | mg/kg | -            | -            | < 0.5        | < 0.5        |
| 2,4-Dinitrophenol                       | 5   | mg/kg | -            | -            | < 5          | < 5          |
| 3&4-Methylphenol (m&p-Cresol)           | 0.4 | mg/kg | -            | -            | < 0.4        | < 0.4        |
| 4-Nitrophenol                           | 5   | mg/kg | -            | -            | < 5          | < 5          |
| Dinoseb                                 | 20  | mg/kg | -            | -            | < 20         | < 20         |
| Phenol                                  | 0.5 | mg/kg | -            | -            | < 0.5        | < 0.5        |
| Total Non-Halogenated Phenol*           | 20  | mg/kg | -            | -            | < 20         | < 20         |
| Phenol-d6 (surr.)                       | 1   | %     | -            | -            | 95           | 97           |
| <b>Organophosphorus Pesticides (OP)</b> |     |       |              |              |              |              |
| Azinphos-methyl                         | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Chlorpyrifos                            | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Coumaphos                               | 2   | mg/kg | < 2          | < 2          | -            | -            |
| Demeton (total)                         | 1   | mg/kg | < 1          | < 1          | -            | -            |
| Diazinon                                | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Dichlorvos                              | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Dimethoate                              | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Disulfoton                              | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Ethoprop                                | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Fenitrothion                            | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Fensulfothion                           | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Fenthion                                | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Malathion                               | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Methyl parathion                        | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Mevinphos                               | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Monocrotophos                           | 2   | mg/kg | < 2          | < 2          | -            | -            |
| Parathion                               | 0.5 | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Phorate                                 | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Profenofos                              | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Prothiofos                              | 0.5 | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Ronnel                                  | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Stirophos                               | 0.5 | mg/kg | < 0.5        | < 0.5        | -            | -            |
| Trichloronate                           | 0.2 | mg/kg | < 0.2        | < 0.2        | -            | -            |
| Triphenylphosphate (surr.)              | 1   | %     | 79           | 104          | -            | -            |

| Client Sample ID<br>Sample Matrix<br>Eurofins   mgt Sample No.<br>Date Sampled<br>Test/Reference | LOR | Unit  | SS01<br>Soil<br>S17-My15929<br>May 15, 2017 | SS02<br>Soil<br>S17-My15930<br>May 15, 2017 | SS03<br>Soil<br>S17-My15931<br>May 15, 2017 | SS04<br>Soil<br>S17-My15932<br>May 15, 2017 |
|--------------------------------------------------------------------------------------------------|-----|-------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| <b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>                                      |     |       |                                             |                                             |                                             |                                             |
| TRH >C10-C16                                                                                     | 50  | mg/kg | -                                           | -                                           | < 50                                        | < 50                                        |
| TRH >C16-C34                                                                                     | 100 | mg/kg | -                                           | -                                           | < 100                                       | 180                                         |
| TRH >C34-C40                                                                                     | 100 | mg/kg | -                                           | -                                           | < 100                                       | < 100                                       |
| <b>Heavy Metals</b>                                                                              |     |       |                                             |                                             |                                             |                                             |
| Arsenic                                                                                          | 2   | mg/kg | 2.8                                         | 12                                          | 4.2                                         | 12                                          |
| Cadmium                                                                                          | 0.4 | mg/kg | < 0.4                                       | < 0.4                                       | < 0.4                                       | < 0.4                                       |
| Chromium                                                                                         | 5   | mg/kg | < 5                                         | < 5                                         | < 5                                         | 6.6                                         |
| Copper                                                                                           | 5   | mg/kg | 14                                          | 12                                          | 8.1                                         | 6.1                                         |
| Lead                                                                                             | 5   | mg/kg | 10                                          | 18                                          | 10                                          | 19                                          |
| Mercury                                                                                          | 0.1 | mg/kg | < 0.1                                       | < 0.1                                       | < 0.1                                       | < 0.1                                       |
| Nickel                                                                                           | 5   | mg/kg | < 5                                         | < 5                                         | < 5                                         | < 5                                         |
| Zinc                                                                                             | 5   | mg/kg | 36                                          | 27                                          | 16                                          | 33                                          |
|                                                                                                  |     |       |                                             |                                             |                                             |                                             |
| % Moisture                                                                                       | 1   | %     | 7.1                                         | 11                                          | 7.9                                         | 14                                          |

| Client Sample ID<br>Sample Matrix<br>Eurofins   mgt Sample No.<br>Date Sampled<br>Test/Reference | LOR  | Unit  | SS05<br>Soil<br>S17-My15933<br>May 15, 2017 | QC03<br>Soil<br>S17-My15934<br>May 15, 2017 |
|--------------------------------------------------------------------------------------------------|------|-------|---------------------------------------------|---------------------------------------------|
| <b>Organochlorine Pesticides</b>                                                                 |      |       |                                             |                                             |
| Chlordanes - Total                                                                               | 0.1  | mg/kg | < 0.1                                       | < 0.1                                       |
| 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                                      |
| 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                                                                                     | 0.2  | mg/kg | < 0.2                                       | < 0.2                                       |
| Toxaphene                                                                                        | 1    | mg/kg | < 1                                         | < 1                                         |
| Dibutylchloroendate (surr.)                                                                      | 1    | %     | 93                                          | 100                                         |
| Tetrachloro-m-xylene (surr.)                                                                     | 1    | %     | 89                                          | 93                                          |

|                                         |     |       |                     |                     |
|-----------------------------------------|-----|-------|---------------------|---------------------|
| <b>Client Sample ID</b>                 |     |       | <b>SS05</b>         | <b>QC03</b>         |
| <b>Sample Matrix</b>                    |     |       | <b>Soil</b>         | <b>Soil</b>         |
| <b>Eurofins   mgt Sample No.</b>        |     |       | <b>S17-My15933</b>  | <b>S17-My15934</b>  |
| <b>Date Sampled</b>                     |     |       | <b>May 15, 2017</b> | <b>May 15, 2017</b> |
| Test/Reference                          | LOR | Unit  |                     |                     |
| <b>Acid Herbicides</b>                  |     |       |                     |                     |
| 2,4-D                                   | 0.5 | mg/kg | < 0.5               | < 0.5               |
| 2,4-DB                                  | 0.5 | mg/kg | < 0.5               | < 0.5               |
| 2,4,5-T                                 | 0.5 | mg/kg | < 0.5               | < 0.5               |
| 2,4,5-TP                                | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Atril (loxynil)                         | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Dicamba                                 | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Dichlorprop                             | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Dinitro-o-cresol                        | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Dinoseb                                 | 0.5 | mg/kg | < 0.5               | < 0.5               |
| MCPA                                    | 0.5 | mg/kg | < 0.5               | < 0.5               |
| MCPB                                    | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Mecoprop                                | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Warfarin (surr.)                        | 1   | %     | 78                  | 78                  |
| <b>Organophosphorus Pesticides (OP)</b> |     |       |                     |                     |
| Azinphos-methyl                         | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Chlorpyrifos                            | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Coumaphos                               | 2   | mg/kg | < 2                 | < 2                 |
| Demeton (total)                         | 1   | mg/kg | < 1                 | < 1                 |
| Diazinon                                | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Dichlorvos                              | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Dimethoate                              | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Disulfoton                              | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Ethoprop                                | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Fenitrothion                            | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Fensulfothion                           | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Fenthion                                | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Malathion                               | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Methyl parathion                        | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Mevinphos                               | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Monocrotophos                           | 2   | mg/kg | < 2                 | < 2                 |
| Parathion                               | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Phorate                                 | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Profenofos                              | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Prothiofos                              | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Ronnel                                  | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Stirophos                               | 0.5 | mg/kg | < 0.5               | < 0.5               |
| Trichloronate                           | 0.2 | mg/kg | < 0.2               | < 0.2               |
| Triphenylphosphate (surr.)              | 1   | %     | 60                  | 86                  |
| <b>Heavy Metals</b>                     |     |       |                     |                     |
| Arsenic                                 | 2   | mg/kg | 2.9                 | 3.6                 |
| Cadmium                                 | 0.4 | mg/kg | < 0.4               | < 0.4               |
| Chromium                                | 5   | mg/kg | 5.5                 | < 5                 |
| Copper                                  | 5   | mg/kg | < 5                 | 5.6                 |
| Lead                                    | 5   | mg/kg | 8.8                 | 7.0                 |
| Mercury                                 | 0.1 | mg/kg | < 0.1               | < 0.1               |
| Nickel                                  | 5   | mg/kg | < 5                 | < 5                 |
| Zinc                                    | 5   | mg/kg | 14                  | 10                  |
|                                         |     |       |                     |                     |
| % Moisture                              | 1   | %     | 17                  | 15                  |

## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.  
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

| Description                                                                                       | Testing Site | Extracted    | Holding Time |
|---------------------------------------------------------------------------------------------------|--------------|--------------|--------------|
| <b>Eurofins   mgt Suite B1</b>                                                                    |              |              |              |
| Total Recoverable Hydrocarbons - 1999 NEPM Fractions<br>- Method: TRH C6-C36 - LTM-ORG-2010       | Sydney       | May 17, 2017 | 14 Day       |
| BTEX<br>- Method: TRH C6-C40 - LTM-ORG-2010                                                       | Sydney       | May 17, 2017 | 14 Day       |
| Total Recoverable Hydrocarbons - 2013 NEPM Fractions<br>- Method: TRH C6-C40 - LTM-ORG-2010       | Sydney       | May 17, 2017 | 14 Day       |
| Total Recoverable Hydrocarbons - 2013 NEPM Fractions<br>- Method: TRH C6-C40 - LTM-ORG-2010       | Sydney       | May 17, 2017 | 14 Day       |
| Polycyclic Aromatic Hydrocarbons<br>- Method: E007 Polyaromatic Hydrocarbons (PAH)                | Sydney       | May 17, 2017 | 14 Day       |
| Phenols (Halogenated)                                                                             | Sydney       | May 17, 2017 | 0 Day        |
| Phenols (non-Halogenated)                                                                         | Sydney       | May 17, 2017 | 0 Day        |
| <b>Eurofins   mgt Suite B14</b>                                                                   |              |              |              |
| Organochlorine Pesticides<br>- Method: LTM-ORG-2220 OCP & PCB in Soil and Water                   | Sydney       | May 17, 2017 | 14 Day       |
| Organophosphorus Pesticides (OP)<br>- Method: E014 Organophosphorus Pesticides (OP)               | Sydney       | May 17, 2017 | 14 Day       |
| Acid Herbicides<br>- Method: LTM-ORG-2180 Phenoxy Acid Herbicides                                 | Melbourne    | May 18, 2017 | 14 Day       |
| Metals M8<br>- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS | Sydney       | May 17, 2017 | 28 Day       |
| % Moisture<br>- Method: LTM-GEN-7080 Moisture                                                     | Sydney       | May 17, 2017 | 14 Day       |

**Company Name:** Coffey Geotechnics Pty Ltd COFFS  
**Address:** Unit 1 18 Hurley Dve  
Coffs Harbour  
NSW 2450  
**Project Name:** SOIL ANALYSIS  
**Project ID:** 754-CFSGE195610

**Order No.:**  
**Report #:** 546414  
**Phone:** 02 6651 3213  
**Fax:** 02 6651 5194

**Received:** May 17, 2017 9:00 AM  
**Due:** May 19, 2017  
**Priority:** 2 Day  
**Contact Name:** Andrew Ballard

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

| Sample Detail                                   |                  |              |               |        |             | Acid Herbicides | Metals M8 | Eurofins   mgt Suite B3 | Eurofins   mgt Suite B14 | Moisture Set | Eurofins   mgt Suite B1 |
|-------------------------------------------------|------------------|--------------|---------------|--------|-------------|-----------------|-----------|-------------------------|--------------------------|--------------|-------------------------|
| Melbourne Laboratory - NATA Site # 1254 & 14271 |                  |              |               |        |             | X               |           |                         |                          |              |                         |
| Sydney Laboratory - NATA Site # 18217           |                  |              |               |        |             |                 | X         | X                       | X                        | X            | X                       |
| Brisbane Laboratory - NATA Site # 20794         |                  |              |               |        |             |                 |           |                         |                          |              |                         |
| Perth Laboratory - NATA Site # 18217            |                  |              |               |        |             |                 |           |                         |                          |              |                         |
| External Laboratory                             |                  |              |               |        |             |                 |           |                         |                          |              |                         |
| No                                              | Sample ID        | Sample Date  | Sampling Time | Matrix | LAB ID      |                 |           |                         |                          |              |                         |
| 1                                               | BH-002 (0-0.15M) | May 15, 2017 |               | Soil   | S17-My15916 | x               | x         |                         | x                        | x            |                         |
| 2                                               | TP-004 (0-0.15M) | May 15, 2017 |               | Soil   | S17-My15917 | x               | x         |                         | x                        | x            |                         |
| 3                                               | TP-009 (0-0.15M) | May 15, 2017 |               | Soil   | S17-My15918 | x               | x         |                         | x                        | x            |                         |
| 4                                               | TP-014 (0-0.15M) | May 15, 2017 |               | Soil   | S17-My15919 | x               | x         |                         | x                        | x            |                         |
| 5                                               | TP-015 (0-0.15M) | May 15, 2017 |               | Soil   | S17-My15920 | x               | x         |                         | x                        | x            |                         |
| 6                                               | TP-016 (0-       | May 15, 2017 |               | Soil   | S17-My15921 | x               | x         |                         | x                        | x            |                         |

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| Sample Detail                                   |                  |              |  |      |             | Acid Herbicides | Metals M8 | Eurofins   mgt Suite B3 | Eurofins   mgt Suite B14 | Moisture Set | Eurofins   mgt Suite B1 |
|-------------------------------------------------|------------------|--------------|--|------|-------------|-----------------|-----------|-------------------------|--------------------------|--------------|-------------------------|
| Melbourne Laboratory - NATA Site # 1254 & 14271 |                  |              |  |      |             | X               |           |                         |                          |              |                         |
| Sydney Laboratory - NATA Site # 18217           |                  |              |  |      |             |                 | X         | X                       | X                        | X            | X                       |
| Brisbane Laboratory - NATA Site # 20794         |                  |              |  |      |             |                 |           |                         |                          |              |                         |
| Perth Laboratory - NATA Site # 18217            |                  |              |  |      |             |                 |           |                         |                          |              |                         |
|                                                 | 0.15M)           |              |  |      |             |                 |           |                         |                          |              |                         |
| 7                                               | TP-025 (0-0.15M) | May 15, 2017 |  | Soil | S17-My15922 | x               | x         |                         | x                        | x            |                         |
| 8                                               | TP-026 (0-0.15M) | May 15, 2017 |  | Soil | S17-My15923 | x               | x         |                         | x                        | x            |                         |
| 9                                               | TP-067 (0-0.15M) | May 15, 2017 |  | Soil | S17-My15924 | x               | x         |                         | x                        | x            |                         |
| 10                                              | TP-096 (0-0.15M) | May 15, 2017 |  | Soil | S17-My15925 | x               | x         |                         | x                        | x            |                         |
| 11                                              | TP-117 (0-0.15M) | May 15, 2017 |  | Soil | S17-My15926 | x               | x         |                         | x                        | x            |                         |
| 12                                              | QC01             | May 15, 2017 |  | Soil | S17-My15927 | x               | x         |                         | x                        | x            |                         |
| 13                                              | SS01             | May 15, 2017 |  | Soil | S17-My15929 | x               | x         |                         | x                        | x            |                         |
| 14                                              | SS02             | May 15, 2017 |  | Soil | S17-My15930 | x               | x         |                         | x                        | x            |                         |

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| Sample Detail                                   |      |              |  |      |             | Acid Herbicides | Metals M8 | Eurofins   mgt Suite B3 | Eurofins   mgt Suite B14 | Moisture Set | Eurofins   mgt Suite B1 |
|-------------------------------------------------|------|--------------|--|------|-------------|-----------------|-----------|-------------------------|--------------------------|--------------|-------------------------|
| Melbourne Laboratory - NATA Site # 1254 & 14271 |      |              |  |      |             | X               |           |                         |                          |              |                         |
| Sydney Laboratory - NATA Site # 18217           |      |              |  |      |             |                 | X         | X                       | X                        | X            | X                       |
| Brisbane Laboratory - NATA Site # 20794         |      |              |  |      |             |                 |           |                         |                          |              |                         |
| Perth Laboratory - NATA Site # 18217            |      |              |  |      |             |                 |           |                         |                          |              |                         |
| 15                                              | SS03 | May 15, 2017 |  | Soil | S17-My15931 |                 | X         | X                       |                          | X            | X                       |
| 16                                              | SS04 | May 15, 2017 |  | Soil | S17-My15932 |                 | X         | X                       |                          | X            | X                       |
| 17                                              | SS05 | May 15, 2017 |  | Soil | S17-My15933 | X               | X         |                         | X                        | X            |                         |
| 18                                              | QC03 | May 15, 2017 |  | Soil | S17-My15934 | X               | X         |                         | X                        | X            |                         |
| Test Counts                                     |      |              |  |      |             | 16              | 18        | 2                       | 16                       | 18           | 2                       |

## Internal Quality Control Review and Glossary

### 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. All biota results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

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

|                                                                         |                                           |
|-------------------------------------------------------------------------|-------------------------------------------|
| <b>mg/kg:</b> milligrams per kilogram                                   | <b>mg/L:</b> milligrams per litre         |
| <b>ug/L:</b> micrograms per litre                                       | <b>ppm:</b> Parts per million             |
| <b>ppb:</b> Parts per billion                                           | <b>%:</b> Percentage                      |
| <b>org/100mL:</b> Organisms per 100 millilitres                         | <b>NTU:</b> Nephelometric Turbidity Units |
| <b>MPN/100mL:</b> Most Probable Number of organisms per 100 millilitres |                                           |

### Terms

|                         |                                                                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dry</b>              | Where a moisture has been determined on a solid sample the result is expressed on a dry basis.                                                                     |
| <b>LOR</b>              | Limit of Reporting.                                                                                                                                                |
| <b>SPIKE</b>            | Addition of the analyte to the sample and reported as percentage recovery.                                                                                         |
| <b>RPD</b>              | Relative Percent Difference between two Duplicate pieces of analysis.                                                                                              |
| <b>LCS</b>              | Laboratory Control Sample - reported as percent recovery.                                                                                                          |
| <b>CRM</b>              | Certified Reference Material - reported as percent recovery.                                                                                                       |
| <b>Method Blank</b>     | In the case of solid samples these are performed on laboratory certified clean sands.<br>In the case of water samples these are performed on de-ionised water.     |
| <b>Surr - Surrogate</b> | The addition of a like compound to the analyte target and reported as percentage recovery.                                                                         |
| <b>Duplicate</b>        | A second piece of analysis from the same sample and reported in the same units as the result to show comparison.                                                   |
| <b>Batch Duplicate</b>  | A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.                                  |
| <b>Batch SPIKE</b>      | Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.                                  |
| <b>USEPA</b>            | United States Environmental Protection Agency                                                                                                                      |
| <b>APHA</b>             | American Public Health Association                                                                                                                                 |
| <b>TCLP</b>             | Toxicity Characteristic Leaching Procedure                                                                                                                         |
| <b>COC</b>              | Chain of Custody                                                                                                                                                   |
| <b>SRA</b>              | Sample Receipt Advice                                                                                                                                              |
| <b>CP</b>               | Client Parent - QC was performed on samples pertaining to this report                                                                                              |
| <b>NCP</b>              | Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within. |
| <b>TEQ</b>              | Toxic Equivalency Quotient                                                                                                                                         |

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 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.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

**Quality Control Results**

| Test                                                        | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|-------------------------------------------------------------|-------|----------|--|--|-------------------|-------------|-----------------|
| <b>Method Blank</b>                                         |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b> |       |          |  |  |                   |             |                 |
| 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        |                 |
| <b>Method Blank</b>                                         |       |          |  |  |                   |             |                 |
| <b>BTEX</b>                                                 |       |          |  |  |                   |             |                 |
| Benzene                                                     | mg/kg | < 0.1    |  |  | 0.1               | Pass        |                 |
| Toluene                                                     | mg/kg | < 0.1    |  |  | 0.1               | Pass        |                 |
| Ethylbenzene                                                | mg/kg | < 0.1    |  |  | 0.1               | Pass        |                 |
| m&p-Xylenes                                                 | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| o-Xylene                                                    | mg/kg | < 0.1    |  |  | 0.1               | Pass        |                 |
| Xylenes - Total                                             | mg/kg | < 0.3    |  |  | 0.3               | Pass        |                 |
| <b>Method Blank</b>                                         |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b> |       |          |  |  |                   |             |                 |
| Naphthalene                                                 | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| TRH C6-C10                                                  | mg/kg | < 20     |  |  | 20                | Pass        |                 |
| <b>Method Blank</b>                                         |       |          |  |  |                   |             |                 |
| <b>Polycyclic Aromatic Hydrocarbons</b>                     |       |          |  |  |                   |             |                 |
| 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&j)fluoranthene                                      | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Benzo(g,h,i)perylene                                        | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Benzo(k)fluoranthene                                        | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Chrysene                                                    | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dibenz(a,h)anthracene                                       | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Fluoranthene                                                | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Fluorene                                                    | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Indeno(1,2,3-cd)pyrene                                      | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Naphthalene                                                 | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Phenanthrene                                                | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Pyrene                                                      | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| <b>Method Blank</b>                                         |       |          |  |  |                   |             |                 |
| <b>Organochlorine Pesticides</b>                            |       |          |  |  |                   |             |                 |
| Chlordanes - Total                                          | mg/kg | < 0.1    |  |  | 0.1               | Pass        |                 |
| 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        |                 |
| 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        |                 |

| Test                                    | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|-----------------------------------------|-------|----------|--|--|-------------------|-------------|-----------------|
| 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 | < 0.2    |  |  | 0.2               | Pass        |                 |
| Toxaphene                               | mg/kg | < 1      |  |  | 1                 | Pass        |                 |
| <b>Method Blank</b>                     |       |          |  |  |                   |             |                 |
| <b>Acid Herbicides</b>                  |       |          |  |  |                   |             |                 |
| 2,4-D                                   | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2,4-DB                                  | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2,4,5-T                                 | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2,4,5-TP                                | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Actril (loxynil)                        | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dicamba                                 | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dichlorprop                             | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dinitro-o-cresol                        | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dinoseb                                 | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| MCPA                                    | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| MCPB                                    | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Mecoprop                                | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| <b>Method Blank</b>                     |       |          |  |  |                   |             |                 |
| <b>Phenols (Halogenated)</b>            |       |          |  |  |                   |             |                 |
| 2-Chlorophenol                          | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2,4-Dichlorophenol                      | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2,4,5-Trichlorophenol                   | mg/kg | < 1      |  |  | 1                 | Pass        |                 |
| 2,4,6-Trichlorophenol                   | mg/kg | < 1      |  |  | 1.0               | Pass        |                 |
| 2,6-Dichlorophenol                      | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 4-Chloro-3-methylphenol                 | mg/kg | < 1      |  |  | 1.0               | Pass        |                 |
| Pentachlorophenol                       | mg/kg | < 1      |  |  | 1.0               | Pass        |                 |
| Tetrachlorophenols - Total              | mg/kg | < 1      |  |  | 1.0               | Pass        |                 |
| <b>Method Blank</b>                     |       |          |  |  |                   |             |                 |
| <b>Phenols (non-Halogenated)</b>        |       |          |  |  |                   |             |                 |
| 2-Cyclohexyl-4,6-dinitrophenol          | mg/kg | < 20     |  |  | 20                | Pass        |                 |
| 2-Methyl-4,6-dinitrophenol              | mg/kg | < 5      |  |  | 5                 | Pass        |                 |
| 2-Methylphenol (o-Cresol)               | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| 2-Nitrophenol                           | mg/kg | < 1      |  |  | 1                 | Pass        |                 |
| 2,4-Dimethylphenol                      | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2,4-Dinitrophenol                       | mg/kg | < 5      |  |  | 5                 | Pass        |                 |
| 3&4-Methylphenol (m&p-Cresol)           | mg/kg | < 0.4    |  |  | 0.4               | Pass        |                 |
| 4-Nitrophenol                           | mg/kg | < 5      |  |  | 5                 | Pass        |                 |
| Dinoseb                                 | mg/kg | < 20     |  |  | 20                | Pass        |                 |
| Phenol                                  | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| <b>Method Blank</b>                     |       |          |  |  |                   |             |                 |
| <b>Organophosphorus Pesticides (OP)</b> |       |          |  |  |                   |             |                 |
| Azinphos-methyl                         | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Chlorpyrifos                            | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Coumaphos                               | mg/kg | < 2      |  |  | 2                 | Pass        |                 |
| Demeton (total)                         | mg/kg | < 1      |  |  | 1                 | Pass        |                 |
| Diazinon                                | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Dichlorvos                              | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Dimethoate                              | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Disulfoton                              | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Ethoprop                                | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |

| Test                                                        | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|-------------------------------------------------------------|-------|----------|--|--|-------------------|-------------|-----------------|
| Fenitrothion                                                | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Fensulfothion                                               | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Fenthion                                                    | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Malathion                                                   | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Methyl parathion                                            | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Mevinphos                                                   | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Monocrotophos                                               | mg/kg | < 2      |  |  | 2                 | Pass        |                 |
| Parathion                                                   | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Phorate                                                     | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Profenofos                                                  | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Prothiofos                                                  | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Ronnel                                                      | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Stirophos                                                   | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Trichloronate                                               | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| <b>Method Blank</b>                                         |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b> |       |          |  |  |                   |             |                 |
| TRH >C10-C16                                                | mg/kg | < 50     |  |  | 50                | Pass        |                 |
| TRH >C16-C34                                                | mg/kg | < 100    |  |  | 100               | Pass        |                 |
| TRH >C34-C40                                                | mg/kg | < 100    |  |  | 100               | Pass        |                 |
| <b>Method Blank</b>                                         |       |          |  |  |                   |             |                 |
| <b>Heavy Metals</b>                                         |       |          |  |  |                   |             |                 |
| 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        |                 |
| <b>LCS - % Recovery</b>                                     |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b> |       |          |  |  |                   |             |                 |
| TRH C6-C9                                                   | %     | 89       |  |  | 70-130            | Pass        |                 |
| TRH C10-C14                                                 | %     | 121      |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>                                     |       |          |  |  |                   |             |                 |
| <b>BTEX</b>                                                 |       |          |  |  |                   |             |                 |
| Benzene                                                     | %     | 95       |  |  | 70-130            | Pass        |                 |
| Toluene                                                     | %     | 94       |  |  | 70-130            | Pass        |                 |
| Ethylbenzene                                                | %     | 99       |  |  | 70-130            | Pass        |                 |
| m&p-Xylenes                                                 | %     | 98       |  |  | 70-130            | Pass        |                 |
| o-Xylene                                                    | %     | 103      |  |  | 70-130            | Pass        |                 |
| Xylenes - Total                                             | %     | 100      |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>                                     |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b> |       |          |  |  |                   |             |                 |
| Naphthalene                                                 | %     | 128      |  |  | 70-130            | Pass        |                 |
| TRH C6-C10                                                  | %     | 90       |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>                                     |       |          |  |  |                   |             |                 |
| <b>Polycyclic Aromatic Hydrocarbons</b>                     |       |          |  |  |                   |             |                 |
| Acenaphthene                                                | %     | 110      |  |  | 70-130            | Pass        |                 |
| Acenaphthylene                                              | %     | 114      |  |  | 70-130            | Pass        |                 |
| Anthracene                                                  | %     | 114      |  |  | 70-130            | Pass        |                 |
| Benz(a)anthracene                                           | %     | 117      |  |  | 70-130            | Pass        |                 |
| Benzo(a)pyrene                                              | %     | 112      |  |  | 70-130            | Pass        |                 |
| Benzo(b&j)fluoranthene                                      | %     | 114      |  |  | 70-130            | Pass        |                 |
| Benzo(g,h,i)perylene                                        | %     | 112      |  |  | 70-130            | Pass        |                 |

| Test                             | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|----------------------------------|-------|----------|--|--|-------------------|-------------|-----------------|
| Benzo(k)fluoranthene             | %     | 118      |  |  | 70-130            | Pass        |                 |
| Chrysene                         | %     | 123      |  |  | 70-130            | Pass        |                 |
| Dibenz(a,h)anthracene            | %     | 105      |  |  | 70-130            | Pass        |                 |
| Fluoranthene                     | %     | 118      |  |  | 70-130            | Pass        |                 |
| Fluorene                         | %     | 115      |  |  | 70-130            | Pass        |                 |
| Indeno(1,2,3-cd)pyrene           | %     | 118      |  |  | 70-130            | Pass        |                 |
| Naphthalene                      | %     | 116      |  |  | 70-130            | Pass        |                 |
| Phenanthrene                     | %     | 108      |  |  | 70-130            | Pass        |                 |
| Pyrene                           | %     | 115      |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>          |       |          |  |  |                   |             |                 |
| <b>Organochlorine Pesticides</b> |       |          |  |  |                   |             |                 |
| Chlordanes - Total               | %     | 114      |  |  | 70-130            | Pass        |                 |
| 4,4'-DDD                         | %     | 106      |  |  | 70-130            | Pass        |                 |
| 4,4'-DDE                         | %     | 116      |  |  | 70-130            | Pass        |                 |
| 4,4'-DDT                         | %     | 98       |  |  | 70-130            | Pass        |                 |
| a-BHC                            | %     | 112      |  |  | 70-130            | Pass        |                 |
| Aldrin                           | %     | 126      |  |  | 70-130            | Pass        |                 |
| b-BHC                            | %     | 105      |  |  | 70-130            | Pass        |                 |
| d-BHC                            | %     | 119      |  |  | 70-130            | Pass        |                 |
| Dieldrin                         | %     | 113      |  |  | 70-130            | Pass        |                 |
| Endosulfan I                     | %     | 113      |  |  | 70-130            | Pass        |                 |
| Endosulfan II                    | %     | 108      |  |  | 70-130            | Pass        |                 |
| Endosulfan sulphate              | %     | 108      |  |  | 70-130            | Pass        |                 |
| Endrin                           | %     | 105      |  |  | 70-130            | Pass        |                 |
| Endrin aldehyde                  | %     | 91       |  |  | 70-130            | Pass        |                 |
| Endrin ketone                    | %     | 95       |  |  | 70-130            | Pass        |                 |
| g-BHC (Lindane)                  | %     | 107      |  |  | 70-130            | Pass        |                 |
| Heptachlor                       | %     | 101      |  |  | 70-130            | Pass        |                 |
| Heptachlor epoxide               | %     | 71       |  |  | 70-130            | Pass        |                 |
| Methoxychlor                     | %     | 98       |  |  | 70-130            | Pass        |                 |
| Toxaphene                        | %     | 109      |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>          |       |          |  |  |                   |             |                 |
| <b>Acid Herbicides</b>           |       |          |  |  |                   |             |                 |
| 2,4-D                            | %     | 127      |  |  | 70-130            | Pass        |                 |
| 2,4-DB                           | %     | 111      |  |  | 70-130            | Pass        |                 |
| 2,4,5-T                          | %     | 127      |  |  | 70-130            | Pass        |                 |
| 2,4,5-TP                         | %     | 83       |  |  | 70-130            | Pass        |                 |
| Actril (loxynil)                 | %     | 101      |  |  | 70-130            | Pass        |                 |
| Dicamba                          | %     | 116      |  |  | 70-130            | Pass        |                 |
| Dichlorprop                      | %     | 116      |  |  | 70-130            | Pass        |                 |
| Dinitro-o-cresol                 | %     | 89       |  |  | 70-130            | Pass        |                 |
| Dinoseb                          | %     | 103      |  |  | 70-130            | Pass        |                 |
| MCPA                             | %     | 130      |  |  | 70-130            | Pass        |                 |
| MCPB                             | %     | 108      |  |  | 70-130            | Pass        |                 |
| Mecoprop                         | %     | 98       |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>          |       |          |  |  |                   |             |                 |
| <b>Phenols (Halogenated)</b>     |       |          |  |  |                   |             |                 |
| 2-Chlorophenol                   | %     | 116      |  |  | 30-130            | Pass        |                 |
| 2,4-Dichlorophenol               | %     | 112      |  |  | 30-130            | Pass        |                 |
| 2,4,5-Trichlorophenol            | %     | 118      |  |  | 30-130            | Pass        |                 |
| 2,4,6-Trichlorophenol            | %     | 103      |  |  | 30-130            | Pass        |                 |
| 2,6-Dichlorophenol               | %     | 115      |  |  | 30-130            | Pass        |                 |
| 4-Chloro-3-methylphenol          | %     | 103      |  |  | 30-130            | Pass        |                 |
| Pentachlorophenol                | %     | 109      |  |  | 30-130            | Pass        |                 |

| Test                                                 |             |               |           | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|------------------------------------------------------|-------------|---------------|-----------|-------|----------|--|--|-------------------|-------------|-----------------|
| Tetrachlorophenols - Total                           |             |               |           | %     | 108      |  |  | 30-130            | Pass        |                 |
| LCS - % Recovery                                     |             |               |           |       |          |  |  |                   |             |                 |
| Phenols (non-Halogenated)                            |             |               |           |       |          |  |  |                   |             |                 |
| 2-Cyclohexyl-4,6-dinitrophenol                       |             |               | %         | 120   |          |  |  | 30-130            | Pass        |                 |
| 2-Methyl-4,6-dinitrophenol                           |             |               | %         | 112   |          |  |  | 30-130            | Pass        |                 |
| 2-Methylphenol (o-Cresol)                            |             |               | %         | 116   |          |  |  | 30-130            | Pass        |                 |
| 2-Nitrophenol                                        |             |               | %         | 101   |          |  |  | 30-130            | Pass        |                 |
| 2,4-Dimethylphenol                                   |             |               | %         | 108   |          |  |  | 30-130            | Pass        |                 |
| 2,4-Dinitrophenol                                    |             |               | %         | 118   |          |  |  | 30-130            | Pass        |                 |
| 3&4-Methylphenol (m&p-Cresol)                        |             |               | %         | 113   |          |  |  | 30-130            | Pass        |                 |
| 4-Nitrophenol                                        |             |               | %         | 71    |          |  |  | 30-130            | Pass        |                 |
| Dinoseb                                              |             |               | %         | 110   |          |  |  | 30-130            | Pass        |                 |
| Phenol                                               |             |               | %         | 113   |          |  |  | 30-130            | Pass        |                 |
| LCS - % Recovery                                     |             |               |           |       |          |  |  |                   |             |                 |
| Organophosphorus Pesticides (OP)                     |             |               |           |       |          |  |  |                   |             |                 |
| Dimethoate                                           |             |               | %         | 97    |          |  |  | 70-130            | Pass        |                 |
| Fenitrothion                                         |             |               | %         | 130   |          |  |  | 70-130            | Pass        |                 |
| Stirophos                                            |             |               | %         | 99    |          |  |  | 70-130            | Pass        |                 |
| LCS - % Recovery                                     |             |               |           |       |          |  |  |                   |             |                 |
| Total Recoverable Hydrocarbons - 2013 NEPM Fractions |             |               |           |       |          |  |  |                   |             |                 |
| TRH >C10-C16                                         |             |               | %         | 123   |          |  |  | 70-130            | Pass        |                 |
| LCS - % Recovery                                     |             |               |           |       |          |  |  |                   |             |                 |
| Heavy Metals                                         |             |               |           |       |          |  |  |                   |             |                 |
| Arsenic                                              |             |               | %         | 77    |          |  |  | 70-130            | Pass        |                 |
| Cadmium                                              |             |               | %         | 78    |          |  |  | 70-130            | Pass        |                 |
| Chromium                                             |             |               | %         | 79    |          |  |  | 70-130            | Pass        |                 |
| Copper                                               |             |               | %         | 78    |          |  |  | 70-130            | Pass        |                 |
| Lead                                                 |             |               | %         | 85    |          |  |  | 70-130            | Pass        |                 |
| Mercury                                              |             |               | %         | 94    |          |  |  | 70-130            | Pass        |                 |
| Nickel                                               |             |               | %         | 76    |          |  |  | 70-130            | Pass        |                 |
| Zinc                                                 |             |               | %         | 75    |          |  |  | 70-130            | Pass        |                 |
| Test                                                 |             | Lab Sample ID | QA Source | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
| Spike - % Recovery                                   |             |               |           |       |          |  |  |                   |             |                 |
| Organochlorine Pesticides                            |             |               |           |       | Result 1 |  |  |                   |             |                 |
| Hexachlorobenzene                                    | S17-My10443 | NCP           | %         | 116   |          |  |  | 70-130            | Pass        |                 |
| Toxaphene                                            | S17-My10443 | NCP           | %         | 89    |          |  |  | 70-130            | Pass        |                 |
| Spike - % Recovery                                   |             |               |           |       |          |  |  |                   |             |                 |
| Acid Herbicides                                      |             |               |           |       | Result 1 |  |  |                   |             |                 |
| 2,4-D                                                | M17-My13411 | NCP           | %         | 96    |          |  |  | 70-130            | Pass        |                 |
| Actril (loxynil)                                     | M17-My13411 | NCP           | %         | 99    |          |  |  | 70-130            | Pass        |                 |
| Dichlorprop                                          | M17-My13411 | NCP           | %         | 110   |          |  |  | 70-130            | Pass        |                 |
| MCPA                                                 | M17-My13411 | NCP           | %         | 105   |          |  |  | 70-130            | Pass        |                 |
| MCPB                                                 | M17-My13411 | NCP           | %         | 80    |          |  |  | 70-130            | Pass        |                 |
| Spike - % Recovery                                   |             |               |           |       |          |  |  |                   |             |                 |
| Organochlorine Pesticides                            |             |               |           |       | Result 1 |  |  |                   |             |                 |
| Chlordanes - Total                                   | S17-My15917 | CP            | %         | 115   |          |  |  | 70-130            | Pass        |                 |
| 4,4'-DDD                                             | S17-My15917 | CP            | %         | 128   |          |  |  | 70-130            | Pass        |                 |
| 4,4'-DDE                                             | S17-My15917 | CP            | %         | 103   |          |  |  | 70-130            | Pass        |                 |
| 4,4'-DDT                                             | S17-My15917 | CP            | %         | 85    |          |  |  | 70-130            | Pass        |                 |
| a-BHC                                                | S17-My15917 | CP            | %         | 93    |          |  |  | 70-130            | Pass        |                 |
| Aldrin                                               | S17-My15917 | CP            | %         | 111   |          |  |  | 70-130            | Pass        |                 |
| b-BHC                                                | S17-My15917 | CP            | %         | 95    |          |  |  | 70-130            | Pass        |                 |
| d-BHC                                                | S17-My15917 | CP            | %         | 125   |          |  |  | 70-130            | Pass        |                 |
| Dieldrin                                             | S17-Mv15917 | CP            | %         | 119   |          |  |  | 70-130            | Pass        |                 |

| Test                                    | Lab Sample ID | QA Source | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|-----------------------------------------|---------------|-----------|-------|----------|--|--|-------------------|-------------|-----------------|
| Endosulfan I                            | S17-My15917   | CP        | %     | 112      |  |  | 70-130            | Pass        |                 |
| Endosulfan II                           | S17-My15917   | CP        | %     | 117      |  |  | 70-130            | Pass        |                 |
| Endosulfan sulphate                     | S17-My15917   | CP        | %     | 79       |  |  | 70-130            | Pass        |                 |
| Endrin                                  | S17-My15917   | CP        | %     | 121      |  |  | 70-130            | Pass        |                 |
| Endrin aldehyde                         | S17-My15917   | CP        | %     | 96       |  |  | 70-130            | Pass        |                 |
| Endrin ketone                           | S17-My15917   | CP        | %     | 107      |  |  | 70-130            | Pass        |                 |
| g-BHC (Lindane)                         | S17-My15917   | CP        | %     | 89       |  |  | 70-130            | Pass        |                 |
| Heptachlor                              | S17-My15917   | CP        | %     | 113      |  |  | 70-130            | Pass        |                 |
| Heptachlor epoxide                      | S17-My15917   | CP        | %     | 78       |  |  | 70-130            | Pass        |                 |
| Methoxychlor                            | S17-My15917   | CP        | %     | 108      |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>               |               |           |       |          |  |  |                   |             |                 |
| <b>Organophosphorus Pesticides (OP)</b> |               |           |       | Result 1 |  |  |                   |             |                 |
| Dimethoate                              | S17-My15917   | CP        | %     | 89       |  |  | 70-130            | Pass        |                 |
| Fenitrothion                            | S17-My15917   | CP        | %     | 87       |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>               |               |           |       |          |  |  |                   |             |                 |
| <b>Heavy Metals</b>                     |               |           |       | Result 1 |  |  |                   |             |                 |
| Arsenic                                 | S17-My15917   | CP        | %     | 102      |  |  | 70-130            | Pass        |                 |
| Cadmium                                 | S17-My15917   | CP        | %     | 77       |  |  | 70-130            | Pass        |                 |
| Chromium                                | S17-My15917   | CP        | %     | 84       |  |  | 70-130            | Pass        |                 |
| Copper                                  | S17-My15917   | CP        | %     | 72       |  |  | 70-130            | Pass        |                 |
| Lead                                    | S17-My15917   | CP        | %     | 104      |  |  | 70-130            | Pass        |                 |
| Mercury                                 | S17-My15917   | CP        | %     | 95       |  |  | 70-130            | Pass        |                 |
| Nickel                                  | S17-My15917   | CP        | %     | 73       |  |  | 70-130            | Pass        |                 |
| Zinc                                    | S17-My15917   | CP        | %     | 81       |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>               |               |           |       |          |  |  |                   |             |                 |
| <b>Organochlorine Pesticides</b>        |               |           |       | Result 1 |  |  |                   |             |                 |
| Chlordanes - Total                      | S17-My15927   | CP        | %     | 120      |  |  | 70-130            | Pass        |                 |
| 4,4'-DDD                                | S17-My15927   | CP        | %     | 130      |  |  | 70-130            | Pass        |                 |
| 4,4'-DDE                                | S17-My15927   | CP        | %     | 119      |  |  | 70-130            | Pass        |                 |
| 4,4'-DDT                                | S17-My15927   | CP        | %     | 84       |  |  | 70-130            | Pass        |                 |
| a-BHC                                   | S17-My15927   | CP        | %     | 115      |  |  | 70-130            | Pass        |                 |
| Aldrin                                  | S17-My15927   | CP        | %     | 120      |  |  | 70-130            | Pass        |                 |
| b-BHC                                   | S17-My15927   | CP        | %     | 105      |  |  | 70-130            | Pass        |                 |
| d-BHC                                   | S17-My15927   | CP        | %     | 123      |  |  | 70-130            | Pass        |                 |
| Dieldrin                                | S17-My15927   | CP        | %     | 119      |  |  | 70-130            | Pass        |                 |
| Endosulfan I                            | S17-My15927   | CP        | %     | 121      |  |  | 70-130            | Pass        |                 |
| Endosulfan II                           | S17-My15927   | CP        | %     | 114      |  |  | 70-130            | Pass        |                 |
| Endosulfan sulphate                     | S17-My15927   | CP        | %     | 108      |  |  | 70-130            | Pass        |                 |
| Endrin                                  | S17-My15927   | CP        | %     | 106      |  |  | 70-130            | Pass        |                 |
| Endrin aldehyde                         | S17-My15927   | CP        | %     | 95       |  |  | 70-130            | Pass        |                 |
| Endrin ketone                           | S17-My15927   | CP        | %     | 97       |  |  | 70-130            | Pass        |                 |
| g-BHC (Lindane)                         | S17-My15927   | CP        | %     | 99       |  |  | 70-130            | Pass        |                 |
| Heptachlor                              | S17-My15927   | CP        | %     | 93       |  |  | 70-130            | Pass        |                 |
| Heptachlor epoxide                      | S17-My15927   | CP        | %     | 74       |  |  | 70-130            | Pass        |                 |
| Methoxychlor                            | S17-My15927   | CP        | %     | 83       |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>               |               |           |       |          |  |  |                   |             |                 |
| <b>Organophosphorus Pesticides (OP)</b> |               |           |       | Result 1 |  |  |                   |             |                 |
| Dimethoate                              | S17-My15927   | CP        | %     | 127      |  |  | 70-130            | Pass        |                 |
| Fenitrothion                            | S17-My15927   | CP        | %     | 86       |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>               |               |           |       |          |  |  |                   |             |                 |
| <b>Polycyclic Aromatic Hydrocarbons</b> |               |           |       | Result 1 |  |  |                   |             |                 |
| Acenaphthene                            | S17-My11642   | NCP       | %     | 114      |  |  | 70-130            | Pass        |                 |
| Acenaphthylene                          | S17-My11642   | NCP       | %     | 121      |  |  | 70-130            | Pass        |                 |
| Anthracene                              | S17-My11642   | NCP       | %     | 122      |  |  | 70-130            | Pass        |                 |

| Test                                                        | Lab Sample ID | QA Source | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|-------------------------------------------------------------|---------------|-----------|-------|----------|--|--|-------------------|-------------|-----------------|
| Benz(a)anthracene                                           | S17-My11642   | NCP       | %     | 121      |  |  | 70-130            | Pass        |                 |
| Benzo(a)pyrene                                              | S17-My11642   | NCP       | %     | 104      |  |  | 70-130            | Pass        |                 |
| Benzo(b&j)fluoranthene                                      | S17-My11642   | NCP       | %     | 111      |  |  | 70-130            | Pass        |                 |
| Benzo(g,h,i)perylene                                        | S17-My11642   | NCP       | %     | 86       |  |  | 70-130            | Pass        |                 |
| Benzo(k)fluoranthene                                        | S17-My11642   | NCP       | %     | 115      |  |  | 70-130            | Pass        |                 |
| Chrysene                                                    | S17-My11642   | NCP       | %     | 120      |  |  | 70-130            | Pass        |                 |
| Dibenz(a,h)anthracene                                       | S17-My11642   | NCP       | %     | 87       |  |  | 70-130            | Pass        |                 |
| Fluoranthene                                                | S17-My11642   | NCP       | %     | 124      |  |  | 70-130            | Pass        |                 |
| Fluorene                                                    | S17-My11642   | NCP       | %     | 122      |  |  | 70-130            | Pass        |                 |
| Indeno(1,2,3-cd)pyrene                                      | S17-My11642   | NCP       | %     | 90       |  |  | 70-130            | Pass        |                 |
| Naphthalene                                                 | S17-My11642   | NCP       | %     | 121      |  |  | 70-130            | Pass        |                 |
| Phenanthrene                                                | S17-My11642   | NCP       | %     | 117      |  |  | 70-130            | Pass        |                 |
| Pyrene                                                      | S17-My11642   | NCP       | %     | 122      |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>                                   |               |           |       |          |  |  |                   |             |                 |
| <b>Phenols (Halogenated)</b>                                |               |           |       | Result 1 |  |  |                   |             |                 |
| 2-Chlorophenol                                              | S17-My11642   | NCP       | %     | 119      |  |  | 30-130            | Pass        |                 |
| 2,4-Dichlorophenol                                          | S17-My11642   | NCP       | %     | 118      |  |  | 30-130            | Pass        |                 |
| 2,4,5-Trichlorophenol                                       | S17-My11642   | NCP       | %     | 123      |  |  | 30-130            | Pass        |                 |
| 2,4,6-Trichlorophenol                                       | S17-My11642   | NCP       | %     | 113      |  |  | 30-130            | Pass        |                 |
| 2,6-Dichlorophenol                                          | S17-My11642   | NCP       | %     | 118      |  |  | 30-130            | Pass        |                 |
| 4-Chloro-3-methylphenol                                     | S17-My11642   | NCP       | %     | 112      |  |  | 30-130            | Pass        |                 |
| Pentachlorophenol                                           | S17-My11642   | NCP       | %     | 124      |  |  | 30-130            | Pass        |                 |
| Tetrachlorophenols - Total                                  | S17-My11642   | NCP       | %     | 113      |  |  | 30-130            | Pass        |                 |
| <b>Spike - % Recovery</b>                                   |               |           |       |          |  |  |                   |             |                 |
| <b>Phenols (non-Halogenated)</b>                            |               |           |       | Result 1 |  |  |                   |             |                 |
| 2-Methylphenol (o-Cresol)                                   | S17-My11642   | NCP       | %     | 118      |  |  | 30-130            | Pass        |                 |
| 2-Nitrophenol                                               | S17-My11642   | NCP       | %     | 108      |  |  | 30-130            | Pass        |                 |
| 2,4-Dimethylphenol                                          | S17-My11642   | NCP       | %     | 94       |  |  | 30-130            | Pass        |                 |
| 3&4-Methylphenol (m&p-Cresol)                               | S17-My11642   | NCP       | %     | 116      |  |  | 30-130            | Pass        |                 |
| 4-Nitrophenol                                               | S17-My11642   | NCP       | %     | 126      |  |  | 30-130            | Pass        |                 |
| Phenol                                                      | S17-My11642   | NCP       | %     | 114      |  |  | 30-130            | Pass        |                 |
| <b>Spike - % Recovery</b>                                   |               |           |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b> |               |           |       | Result 1 |  |  |                   |             |                 |
| TRH C6-C9                                                   | S17-My15932   | CP        | %     | 72       |  |  | 70-130            | Pass        |                 |
| TRH C10-C14                                                 | S17-My15932   | CP        | %     | 125      |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>                                   |               |           |       |          |  |  |                   |             |                 |
| <b>BTEX</b>                                                 |               |           |       | Result 1 |  |  |                   |             |                 |
| Benzene                                                     | S17-My15932   | CP        | %     | 89       |  |  | 70-130            | Pass        |                 |
| Toluene                                                     | S17-My15932   | CP        | %     | 97       |  |  | 70-130            | Pass        |                 |
| Ethylbenzene                                                | S17-My15932   | CP        | %     | 116      |  |  | 70-130            | Pass        |                 |
| m&p-Xylenes                                                 | S17-My15932   | CP        | %     | 114      |  |  | 70-130            | Pass        |                 |
| o-Xylene                                                    | S17-My15932   | CP        | %     | 126      |  |  | 70-130            | Pass        |                 |
| Xylenes - Total                                             | S17-My15932   | CP        | %     | 118      |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>                                   |               |           |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b> |               |           |       | Result 1 |  |  |                   |             |                 |
| Naphthalene                                                 | S17-My15932   | CP        | %     | 79       |  |  | 70-130            | Pass        |                 |
| TRH C6-C10                                                  | S17-My15932   | CP        | %     | 85       |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>                                   |               |           |       |          |  |  |                   |             |                 |
| <b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b> |               |           |       | Result 1 |  |  |                   |             |                 |
| TRH >C10-C16                                                | S17-My15932   | CP        | %     | 125      |  |  | 70-130            | Pass        |                 |

| Test                                    | Lab Sample ID | QA Source | Units | Result 1 | Result 2 | RPD | Acceptance Limits | Pass Limits | Qualifying Code |
|-----------------------------------------|---------------|-----------|-------|----------|----------|-----|-------------------|-------------|-----------------|
| <b>Duplicate</b>                        |               |           |       |          |          |     |                   |             |                 |
| <b>Organochlorine Pesticides</b>        |               |           |       | Result 1 | Result 2 | RPD |                   |             |                 |
| Chlordanes - Total                      | S17-My15916   | CP        | mg/kg | < 0.1    | < 0.1    | <1  | 30%               | Pass        |                 |
| 4.4'-DDD                                | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| 4.4'-DDE                                | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| 4.4'-DDT                                | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| a-BHC                                   | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Aldrin                                  | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| b-BHC                                   | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| d-BHC                                   | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Dieldrin                                | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endosulfan I                            | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endosulfan II                           | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endosulfan sulphate                     | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endrin                                  | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endrin aldehyde                         | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endrin ketone                           | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| g-BHC (Lindane)                         | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Heptachlor                              | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Heptachlor epoxide                      | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Hexachlorobenzene                       | S17-My15916   | CP        | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Methoxychlor                            | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Toxaphene                               | S17-My15916   | CP        | mg/kg | < 1      | < 1      | <1  | 30%               | Pass        |                 |
| <b>Duplicate</b>                        |               |           |       |          |          |     |                   |             |                 |
| <b>Acid Herbicides</b>                  |               |           |       | Result 1 | Result 2 | RPD |                   |             |                 |
| 2.4-D                                   | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| 2.4-DB                                  | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| 2.4.5-T                                 | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| 2.4.5-TP                                | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| Actril (loxylin)                        | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| Dicamba                                 | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| Dichlorprop                             | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| Dinitro-o-cresol                        | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| Dinoseb                                 | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| MCPA                                    | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| MCPB                                    | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| Mecoprop                                | S17-My15916   | CP        | mg/kg | < 0.5    | < 0.5    | <1  | 30%               | Pass        |                 |
| <b>Duplicate</b>                        |               |           |       |          |          |     |                   |             |                 |
| <b>Organophosphorus Pesticides (OP)</b> |               |           |       | Result 1 | Result 2 | RPD |                   |             |                 |
| Azinphos-methyl                         | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Chlorpyrifos                            | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Coumaphos                               | S17-My15916   | CP        | mg/kg | < 2      | < 2      | <1  | 30%               | Pass        |                 |
| Demeton (total)                         | S17-My15916   | CP        | mg/kg | < 1      | < 1      | <1  | 30%               | Pass        |                 |
| Diazinon                                | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Dichlorvos                              | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Dimethoate                              | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Disulfoton                              | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Ethoprop                                | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Fenitrothion                            | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Fensulfothion                           | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Fenthion                                | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Malathion                               | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Methyl parathion                        | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Mevinphos                               | S17-My15916   | CP        | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |

| Duplicate                        |             |     |       |          |          |     |     |      |
|----------------------------------|-------------|-----|-------|----------|----------|-----|-----|------|
| Organophosphorus Pesticides (OP) |             |     |       | Result 1 | Result 2 | RPD |     |      |
| Monocrotophos                    | S17-My15916 | CP  | mg/kg | < 2      | < 2      | <1  | 30% | Pass |
| Parathion                        | S17-My15916 | CP  | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Phorate                          | S17-My15916 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Profenofos                       | S17-My15916 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Prothiofos                       | S17-My15916 | CP  | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Ronnel                           | S17-My15916 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Stirophos                        | S17-My15916 | CP  | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Trichloronate                    | S17-My15916 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Duplicate                        |             |     |       |          |          |     |     |      |
| Heavy Metals                     |             |     |       | Result 1 | Result 2 | RPD |     |      |
| Arsenic                          | S17-My15289 | NCP | mg/kg | < 2      | < 2      | <1  | 30% | Pass |
| Cadmium                          | S17-My15289 | NCP | mg/kg | < 0.4    | < 0.4    | <1  | 30% | Pass |
| Chromium                         | S17-My15289 | NCP | mg/kg | < 5      | < 5      | <1  | 30% | Pass |
| Copper                           | S17-My15289 | NCP | mg/kg | 41       | 37       | 12  | 30% | Pass |
| Lead                             | S17-My15289 | NCP | mg/kg | 24       | 20       | 17  | 30% | Pass |
| Mercury                          | S17-My15289 | NCP | mg/kg | < 0.1    | < 0.1    | <1  | 30% | Pass |
| Nickel                           | S17-My15289 | NCP | mg/kg | 18       | 16       | 13  | 30% | Pass |
| Zinc                             | S17-My15289 | NCP | mg/kg | 72       | 75       | 4.0 | 30% | Pass |
| Duplicate                        |             |     |       |          |          |     |     |      |
|                                  |             |     |       | Result 1 | Result 2 | RPD |     |      |
| % Moisture                       | S17-My15916 | CP  | %     | 17       | 17       | 1.0 | 30% | Pass |
| Duplicate                        |             |     |       |          |          |     |     |      |
| Organochlorine Pesticides        |             |     |       | Result 1 | Result 2 | RPD |     |      |
| Chlordanes - Total               | S17-My15926 | CP  | mg/kg | < 0.1    | < 0.1    | <1  | 30% | Pass |
| 4,4'-DDD                         | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| 4,4'-DDE                         | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| 4,4'-DDT                         | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| a-BHC                            | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Aldrin                           | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| b-BHC                            | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| d-BHC                            | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Dieldrin                         | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Endosulfan I                     | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Endosulfan II                    | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Endosulfan sulphate              | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Endrin                           | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Endrin aldehyde                  | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Endrin ketone                    | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| g-BHC (Lindane)                  | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Heptachlor                       | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Heptachlor epoxide               | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Hexachlorobenzene                | S17-My15926 | CP  | mg/kg | < 0.05   | < 0.05   | <1  | 30% | Pass |
| Methoxychlor                     | S17-My15926 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Toxaphene                        | S17-My15926 | CP  | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| Duplicate                        |             |     |       |          |          |     |     |      |
| Organophosphorus Pesticides (OP) |             |     |       | Result 1 | Result 2 | RPD |     |      |
| Azinphos-methyl                  | S17-My15926 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Chlorpyrifos                     | S17-My15926 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Coumaphos                        | S17-My15926 | CP  | mg/kg | < 2      | < 2      | <1  | 30% | Pass |
| Demeton (total)                  | S17-My15926 | CP  | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| Diazinon                         | S17-My15926 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Dichlorvos                       | S17-My15926 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Dimethoate                       | S17-My15926 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Disulfoton                       | S17-My15926 | CP  | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |

| Duplicate                                            |             |    |       |          |          |     |     |      |
|------------------------------------------------------|-------------|----|-------|----------|----------|-----|-----|------|
| Organophosphorus Pesticides (OP)                     |             |    |       | Result 1 | Result 2 | RPD |     |      |
| Ethoprop                                             | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Fenitrothion                                         | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Fensulfothion                                        | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Fenthion                                             | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Malathion                                            | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Methyl parathion                                     | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Mevinphos                                            | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Monocrotophos                                        | S17-My15926 | CP | mg/kg | < 2      | < 2      | <1  | 30% | Pass |
| Parathion                                            | S17-My15926 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Phorate                                              | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Profenofos                                           | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Prothiofos                                           | S17-My15926 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Ronnel                                               | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Stirophos                                            | S17-My15926 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Trichloronate                                        | S17-My15926 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Duplicate                                            |             |    |       |          |          |     |     |      |
|                                                      |             |    |       | Result 1 | Result 2 | RPD |     |      |
| % Moisture                                           | S17-My15926 | CP | %     | 19       | 19       | 1.0 | 30% | Pass |
| Duplicate                                            |             |    |       |          |          |     |     |      |
| Total Recoverable Hydrocarbons - 1999 NEPM Fractions |             |    |       | Result 1 | Result 2 | RPD |     |      |
| TRH C6-C9                                            | S17-My15931 | CP | mg/kg | < 20     | < 20     | <1  | 30% | Pass |
| TRH C10-C14                                          | S17-My15931 | CP | mg/kg | < 20     | < 20     | <1  | 30% | Pass |
| TRH C15-C28                                          | S17-My15931 | CP | mg/kg | < 50     | < 50     | <1  | 30% | Pass |
| TRH C29-C36                                          | S17-My15931 | CP | mg/kg | < 50     | < 50     | <1  | 30% | Pass |
| Duplicate                                            |             |    |       |          |          |     |     |      |
| BTEX                                                 |             |    |       | Result 1 | Result 2 | RPD |     |      |
| Benzene                                              | S17-My15931 | CP | mg/kg | < 0.1    | < 0.1    | <1  | 30% | Pass |
| Toluene                                              | S17-My15931 | CP | mg/kg | < 0.1    | < 0.1    | <1  | 30% | Pass |
| Ethylbenzene                                         | S17-My15931 | CP | mg/kg | < 0.1    | < 0.1    | <1  | 30% | Pass |
| m&p-Xylenes                                          | S17-My15931 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| o-Xylene                                             | S17-My15931 | CP | mg/kg | < 0.1    | < 0.1    | <1  | 30% | Pass |
| Xylenes - Total                                      | S17-My15931 | CP | mg/kg | < 0.3    | < 0.3    | <1  | 30% | Pass |
| Duplicate                                            |             |    |       |          |          |     |     |      |
| Total Recoverable Hydrocarbons - 2013 NEPM Fractions |             |    |       | Result 1 | Result 2 | RPD |     |      |
| Naphthalene                                          | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| TRH C6-C10                                           | S17-My15931 | CP | mg/kg | < 20     | < 20     | <1  | 30% | Pass |
| Duplicate                                            |             |    |       |          |          |     |     |      |
| Polycyclic Aromatic Hydrocarbons                     |             |    |       | Result 1 | Result 2 | RPD |     |      |
| Acenaphthene                                         | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Acenaphthylene                                       | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Anthracene                                           | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Benz(a)anthracene                                    | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Benzo(a)pyrene                                       | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Benzo(b&j)fluoranthene                               | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Benzo(g,h,i)perylene                                 | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Benzo(k)fluoranthene                                 | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Chrysene                                             | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Dibenz(a,h)anthracene                                | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Fluoranthene                                         | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Fluorene                                             | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Indeno(1,2,3-cd)pyrene                               | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Naphthalene                                          | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Phenanthrene                                         | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Pyrene                                               | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |

| Duplicate                                            |             |    |       |          |          |     |     |      |
|------------------------------------------------------|-------------|----|-------|----------|----------|-----|-----|------|
| Phenols (Halogenated)                                |             |    |       | Result 1 | Result 2 | RPD |     |      |
| 2-Chlorophenol                                       | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| 2,4-Dichlorophenol                                   | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| 2,4,5-Trichlorophenol                                | S17-My15931 | CP | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| 2,4,6-Trichlorophenol                                | S17-My15931 | CP | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| 2,6-Dichlorophenol                                   | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| 4-Chloro-3-methylphenol                              | S17-My15931 | CP | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| Pentachlorophenol                                    | S17-My15931 | CP | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| Tetrachlorophenols - Total                           | S17-My15931 | CP | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| Duplicate                                            |             |    |       |          |          |     |     |      |
| Phenols (non-Halogenated)                            |             |    |       | Result 1 | Result 2 | RPD |     |      |
| 2-Cyclohexyl-4,6-dinitrophenol                       | S17-My15931 | CP | mg/kg | < 20     | < 20     | <1  | 30% | Pass |
| 2-Methyl-4,6-dinitrophenol                           | S17-My15931 | CP | mg/kg | < 5      | < 5      | <1  | 30% | Pass |
| 2-Methylphenol (o-Cresol)                            | S17-My15931 | CP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| 2-Nitrophenol                                        | S17-My15931 | CP | mg/kg | < 1      | < 1      | <1  | 30% | Pass |
| 2,4-Dimethylphenol                                   | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| 2,4-Dinitrophenol                                    | S17-My15931 | CP | mg/kg | < 5      | < 5      | <1  | 30% | Pass |
| 3&4-Methylphenol (m&p-Cresol)                        | S17-My15931 | CP | mg/kg | < 0.4    | < 0.4    | <1  | 30% | Pass |
| 4-Nitrophenol                                        | S17-My15931 | CP | mg/kg | < 5      | < 5      | <1  | 30% | Pass |
| Dinoseb                                              | S17-My15931 | CP | mg/kg | < 20     | < 20     | <1  | 30% | Pass |
| Phenol                                               | S17-My15931 | CP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Duplicate                                            |             |    |       |          |          |     |     |      |
| Total Recoverable Hydrocarbons - 2013 NEPM Fractions |             |    |       | Result 1 | Result 2 | RPD |     |      |
| TRH >C10-C16                                         | S17-My15931 | CP | mg/kg | < 50     | < 50     | <1  | 30% | Pass |
| TRH >C16-C34                                         | S17-My15931 | CP | mg/kg | < 100    | < 100    | <1  | 30% | Pass |
| TRH >C34-C40                                         | S17-My15931 | CP | mg/kg | < 100    | < 100    | <1  | 30% | Pass |

## Comments

This report has been revised to remove sample QC02 from the report.

## Sample Integrity

|                                                                         |     |
|-------------------------------------------------------------------------|-----|
| Custody Seals Intact (if used)                                          | N/A |
| Attempt to Chill was evident                                            | Yes |
| Sample correctly preserved                                              | Yes |
| Appropriate sample containers have been used                            | Yes |
| Sample containers for volatile analysis received with minimal headspace | Yes |
| Samples received within HoldingTime                                     | Yes |
| Some samples have been subcontracted                                    | No  |

## Qualifier Codes/Comments

| Code | Description                                                                                                                                                                                                                                                                                                                                                                                                            |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| N01  | F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).                                                                                                                                                                                                                   |
| N02  | Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid. |
| N04  | F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.                                                                                                                              |
| N07  | Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs                                                                                                                                                                                                       |

## Authorised By

|                |                                |
|----------------|--------------------------------|
| Nibha Vaidya   | Analytical Services Manager    |
| Alex Petridis  | Senior Analyst-Organic (VIC)   |
| Joseph Edouard | Senior Analyst-Organic (VIC)   |
| Ryan Hamilton  | Senior Analyst-Inorganic (NSW) |
| Ryan Hamilton  | Senior Analyst-Metal (NSW)     |
| Ryan Hamilton  | Senior Analyst-Organic (NSW)   |
| Ryan Hamilton  | Senior Analyst-Volatile (NSW)  |



**Glenn Jackson**

**National Operations Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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## Sample Receipt Advice

Company name: **Coffey Geotechnics Pty Ltd COFFS**

Contact name: **Andrew Ballard**

Project name: **SOIL ANALYSIS**

Project ID: **754-CFSGE195610**

COC number: **Not provided**

Turn around time: **2 Day**

Date/Time received: **May 17, 2017 9:00 AM**

Eurofins | mgt reference: **546414**

### 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 Eurofins | mgt  
Sample Receipt : 13 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.
- ☒ Appropriate sample containers have been used.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

### Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone : +61 (2) 9900 8400 or by e.mail: NibhaVaidya@eurofins.com

Results will be delivered electronically via e.mail to Andrew Ballard - Andrew\_Ballard@coffey.com.

| Chain of Custody                                                                              |               |                               |                                                                                                                                                                                     |                  | Laboratory Quotation/ Order No. |                   | Project No.: 754-CFSGE195610 |                               | Sheet 1 of 1        |                         |  |  |  |  |   |  |                   |                             |
|-----------------------------------------------------------------------------------------------|---------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|-------------------|------------------------------|-------------------------------|---------------------|-------------------------|--|--|--|--|---|--|-------------------|-----------------------------|
| Dispatch to: Eurofin/mgt                                                                      |               |                               | Sampled By: Darren Swift, Joel Parkin                                                                                                                                               |                  | Consigning Officer: Joel Parkin |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Attention: Sample receipt                                                                     |               |                               | Project Manager: (report results to) <a href="mailto:andrew.ballard@coffey.com">andrew.ballard@coffey.com</a><br><a href="mailto:joel.parkin@coffey.com">joel.parkin@coffey.com</a> |                  | Date Dispatched: 16/05/2017     |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Relinquished By: Coffey, Coffs Harbour                                                        |               |                               | Date: 16/05/2017 Time: 13:00                                                                                                                                                        |                  | Received By:                    |                   | Date:                        |                               | Time:               |                         |  |  |  |  |   |  |                   |                             |
|                                                                                               |               |                               |                                                                                                                                                                                     |                  |                                 |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Comments:                                                                                     | Sample Matrix | Container Type & Preservative | Sample No.                                                                                                                                                                          | Sample Depth (m) | Date Sampled:                   | Analyses Required |                              |                               |                     |                         |  |  |  |  |   |  |                   | Sample Condition on Receipt |
|                                                                                               |               |                               |                                                                                                                                                                                     |                  |                                 | Metals 8          | Suite B1 - TRH / BTEX        | Suite B3 - PAH/Phenol (total) | Suite B14 - OCP/OPP | Phenoxy Acid Herbicides |  |  |  |  |   |  | Send to Melbourne |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | BH-002                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-004                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-009                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-014                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-015                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-016                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-025                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-026                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-067                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-096                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-117                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | QC01                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | QC02                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  | X |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS01                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS02                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS03                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 | X                            | X                             |                     |                         |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS04                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 | X                            | X                             |                     |                         |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS05                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | QC03                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
| Special Laboratory Instructions:                                                              |               |                               |                                                                                                                                                                                     |                  |                                 |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Detection Limits: Standard LOR      Turnaround Required: <b>PRIORITY - 1 DAY TAT REQUIRED</b> |               |                               |                                                                                                                                                                                     |                  |                                 |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |

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## Certificate of Analysis

**Coffey Geotechnics Pty Ltd**  
**Unit 1 18 Hurley Dve**  
**Coffs Harbour**  
**NSW 2450**



**NATA Accredited**  
**Accreditation Number 1261**  
**Site Number 18217**

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

**Attention:** **Andrew Ballard**

**Report** **546992-S**  
Project name **SOIL ANALYSIS**  
Project ID **754-CFSGE195610**  
Received Date **May 17, 2017**

|                                    |      |       |                     |
|------------------------------------|------|-------|---------------------|
| <b>Client Sample ID</b>            |      |       | <b>QC02</b>         |
| <b>Sample Matrix</b>               |      |       | <b>Soil</b>         |
| <b>Eurofins   mgt Sample No.</b>   |      |       | <b>S17-My15928</b>  |
| <b>Date Sampled</b>                |      |       | <b>May 15, 2017</b> |
| Test/Reference                     | LOR  | Unit  |                     |
| <b>Organochlorine Pesticides</b>   |      |       |                     |
| Chlordanes - Total                 | 0.1  | mg/kg | < 0.1               |
| 4,4'-DDD                           | 0.05 | mg/kg | < 0.05              |
| 4,4'-DDE                           | 0.05 | mg/kg | < 0.05              |
| 4,4'-DDT                           | 0.05 | mg/kg | < 0.05              |
| a-BHC                              | 0.05 | mg/kg | < 0.05              |
| Aldrin                             | 0.05 | mg/kg | < 0.05              |
| b-BHC                              | 0.05 | mg/kg | < 0.05              |
| d-BHC                              | 0.05 | mg/kg | < 0.05              |
| Dieldrin                           | 0.05 | mg/kg | < 0.05              |
| Endosulfan I                       | 0.05 | mg/kg | < 0.05              |
| Endosulfan II                      | 0.05 | mg/kg | < 0.05              |
| Endosulfan sulphate                | 0.05 | mg/kg | < 0.05              |
| Endrin                             | 0.05 | mg/kg | < 0.05              |
| Endrin aldehyde                    | 0.05 | mg/kg | < 0.05              |
| Endrin ketone                      | 0.05 | mg/kg | < 0.05              |
| g-BHC (Lindane)                    | 0.05 | mg/kg | < 0.05              |
| Heptachlor                         | 0.05 | mg/kg | < 0.05              |
| Heptachlor epoxide                 | 0.05 | mg/kg | < 0.05              |
| Hexachlorobenzene                  | 0.05 | mg/kg | < 0.05              |
| Methoxychlor                       | 0.05 | mg/kg | < 0.05              |
| Toxaphene                          | 1    | mg/kg | < 1                 |
| Dibutylchloredate (surr.)          | 1    | %     | 111                 |
| Tetrachloro-m-xylene (surr.)       | 1    | %     | 92                  |
| <b>Organophosphorus Pesticides</b> |      |       |                     |
| Azinphos-methyl                    | 0.2  | mg/kg | < 0.2               |
| Bolstar                            | 0.2  | mg/kg | < 0.2               |
| Chlorfenvinphos                    | 0.2  | mg/kg | < 0.2               |
| Chlorpyrifos                       | 0.2  | mg/kg | < 0.2               |
| Chlorpyrifos-methyl                | 0.2  | mg/kg | < 0.2               |
| Coumaphos                          | 2    | mg/kg | < 2                 |
| Demeton-S                          | 0.2  | mg/kg | < 0.2               |
| Demeton-O                          | 0.2  | mg/kg | < 0.2               |
| Diazinon                           | 0.2  | mg/kg | < 0.2               |
| Dichlorvos                         | 0.2  | mg/kg | < 0.2               |
| Dimethoate                         | 0.2  | mg/kg | < 0.2               |

|                                    |     |       |                     |
|------------------------------------|-----|-------|---------------------|
| <b>Client Sample ID</b>            |     |       | <b>QC02</b>         |
| <b>Sample Matrix</b>               |     |       | <b>Soil</b>         |
| <b>Eurofins   mgt Sample No.</b>   |     |       | <b>S17-My15928</b>  |
| <b>Date Sampled</b>                |     |       | <b>May 15, 2017</b> |
| Test/Reference                     | LOR | Unit  |                     |
| <b>Organophosphorus Pesticides</b> |     |       |                     |
| Disulfoton                         | 0.2 | mg/kg | < 0.2               |
| EPN                                | 0.2 | mg/kg | < 0.2               |
| Ethion                             | 0.2 | mg/kg | < 0.2               |
| Ethoprop                           | 0.2 | mg/kg | < 0.2               |
| Ethyl parathion                    | 0.2 | mg/kg | < 0.2               |
| Fenitrothion                       | 0.2 | mg/kg | < 0.2               |
| Fensulfothion                      | 0.2 | mg/kg | < 0.2               |
| Fenthion                           | 0.2 | mg/kg | < 0.2               |
| Malathion                          | 0.2 | mg/kg | < 0.2               |
| Merphos                            | 0.2 | mg/kg | < 0.2               |
| Methyl parathion                   | 0.2 | mg/kg | < 0.2               |
| Mevinphos                          | 0.2 | mg/kg | < 0.2               |
| Monocrotophos                      | 2   | mg/kg | < 2                 |
| Naled                              | 0.2 | mg/kg | < 0.2               |
| Omethoate                          | 2   | mg/kg | < 2                 |
| Phorate                            | 0.2 | mg/kg | < 0.2               |
| Pirimiphos-methyl                  | 0.2 | mg/kg | < 0.2               |
| Pyrazophos                         | 0.2 | mg/kg | < 0.2               |
| Ronnel                             | 0.2 | mg/kg | < 0.2               |
| Terbufos                           | 0.2 | mg/kg | < 0.2               |
| Tetrachlorvinphos                  | 0.2 | mg/kg | < 0.2               |
| Tokuthion                          | 0.2 | mg/kg | < 0.2               |
| Trichloronate                      | 0.2 | mg/kg | < 0.2               |
| Triphenylphosphate (surr.)         | 1   | %     | 92                  |
| <b>Acid Herbicides</b>             |     |       |                     |
| 2,4-D                              | 0.5 | mg/kg | < 0.5               |
| 2,4-DB                             | 0.5 | mg/kg | < 0.5               |
| 2,4,5-T                            | 0.5 | mg/kg | < 0.5               |
| 2,4,5-TP                           | 0.5 | mg/kg | < 0.5               |
| Actril (loxynil)                   | 0.5 | mg/kg | < 0.5               |
| Dicamba                            | 0.5 | mg/kg | < 0.5               |
| Dichlorprop                        | 0.5 | mg/kg | < 0.5               |
| Dinitro-o-cresol                   | 0.5 | mg/kg | < 0.5               |
| Dinoseb                            | 0.5 | mg/kg | < 0.5               |
| MCPA                               | 0.5 | mg/kg | < 0.5               |
| MCPB                               | 0.5 | mg/kg | < 0.5               |
| Mecoprop                           | 0.5 | mg/kg | < 0.5               |
| Warfarin (surr.)                   | 1   | %     | 88                  |
| <b>Heavy Metals</b>                |     |       |                     |
| Arsenic                            | 2   | mg/kg | 13                  |
| Cadmium                            | 0.4 | mg/kg | < 0.4               |
| Chromium                           | 5   | mg/kg | 34                  |
| Copper                             | 5   | mg/kg | 34                  |
| Lead                               | 5   | mg/kg | 36                  |
| Mercury                            | 0.1 | mg/kg | < 0.1               |
| Nickel                             | 5   | mg/kg | 47                  |
| Zinc                               | 5   | mg/kg | 110                 |
|                                    |     |       |                     |
| % Moisture                         | 1   | %     | 18                  |

## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

| Description                                                     | Testing Site | Extracted    | Holding Time |
|-----------------------------------------------------------------|--------------|--------------|--------------|
| <b>Eurofins   mgt Suite B14</b>                                 |              |              |              |
| Organochlorine Pesticides                                       | Melbourne    | May 18, 2017 | 14 Day       |
| - Method: LTM-ORG-2220 OCP & PCB in Soil and Water              |              |              |              |
| Organophosphorus Pesticides                                     | Melbourne    | May 18, 2017 | 14 Day       |
| - Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS     |              |              |              |
| Acid Herbicides                                                 | Melbourne    | May 18, 2017 | 14 Day       |
| - Method: LTM-ORG-2180 Phenoxy Acid Herbicides                  |              |              |              |
| Metals M8                                                       | Melbourne    | May 18, 2017 | 28 Days      |
| - Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury) |              |              |              |
| % Moisture                                                      | Melbourne    | May 17, 2017 | 14 Day       |
| - Method: LTM-GEN-7080 Moisture                                 |              |              |              |

**Company Name:** Coffey Geotechnics Pty Ltd COFFS  
**Address:** Unit 1 18 Hurley Dve  
Coffs Harbour  
NSW 2450  
**Project Name:** SOIL ANALYSIS  
**Project ID:** 754-CFSGE195610

**Order No.:**  
**Report #:** 546992  
**Phone:** 02 6651 3213  
**Fax:** 02 6651 5194

**Received:** May 17, 2017 9:00 AM  
**Due:** May 19, 2017  
**Priority:** 2 Day  
**Contact Name:** Andrew Ballard

**Eurofins | mgt Analytical Services Manager : Nibha Vaidya**

| Sample Detail                                   |           |              |               |        |             | Acid Herbicides | Metals M8 | Eurofins   mgt Suite B14 | Moisture Set |
|-------------------------------------------------|-----------|--------------|---------------|--------|-------------|-----------------|-----------|--------------------------|--------------|
| Melbourne Laboratory - NATA Site # 1254 & 14271 |           |              |               |        |             | X               | X         | X                        | X            |
| Sydney Laboratory - NATA Site # 18217           |           |              |               |        |             |                 |           |                          |              |
| Brisbane Laboratory - NATA Site # 20794         |           |              |               |        |             |                 |           |                          |              |
| Perth Laboratory - NATA Site # 18217            |           |              |               |        |             |                 |           |                          |              |
| External Laboratory                             |           |              |               |        |             |                 |           |                          |              |
| No                                              | Sample ID | Sample Date  | Sampling Time | Matrix | LAB ID      |                 |           |                          |              |
| 1                                               | QC02      | May 15, 2017 |               | Soil   | S17-My15928 | X               | X         | X                        | X            |
| Test Counts                                     |           |              |               |        |             | 1               | 1         | 1                        | 1            |

## Internal Quality Control Review and Glossary

### 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. All biota results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

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

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

|                         |                                                                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dry</b>              | Where a moisture has been determined on a solid sample the result is expressed on a dry basis.                                                                     |
| <b>LOR</b>              | Limit of Reporting.                                                                                                                                                |
| <b>SPIKE</b>            | Addition of the analyte to the sample and reported as percentage recovery.                                                                                         |
| <b>RPD</b>              | Relative Percent Difference between two Duplicate pieces of analysis.                                                                                              |
| <b>LCS</b>              | Laboratory Control Sample - reported as percent recovery.                                                                                                          |
| <b>CRM</b>              | Certified Reference Material - reported as percent recovery.                                                                                                       |
| <b>Method Blank</b>     | In the case of solid samples these are performed on laboratory certified clean sands.<br>In the case of water samples these are performed on de-ionised water.     |
| <b>Surr - Surrogate</b> | The addition of a like compound to the analyte target and reported as percentage recovery.                                                                         |
| <b>Duplicate</b>        | A second piece of analysis from the same sample and reported in the same units as the result to show comparison.                                                   |
| <b>Batch Duplicate</b>  | A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.                                  |
| <b>Batch SPIKE</b>      | Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.                                  |
| <b>USEPA</b>            | United States Environmental Protection Agency                                                                                                                      |
| <b>APHA</b>             | American Public Health Association                                                                                                                                 |
| <b>TCLP</b>             | Toxicity Characteristic Leaching Procedure                                                                                                                         |
| <b>COC</b>              | Chain of Custody                                                                                                                                                   |
| <b>SRA</b>              | Sample Receipt Advice                                                                                                                                              |
| <b>CP</b>               | Client Parent - QC was performed on samples pertaining to this report                                                                                              |
| <b>NCP</b>              | Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within. |
| <b>TEQ</b>              | Toxic Equivalency Quotient                                                                                                                                         |

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 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.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

## Quality Control Results

| Test                               | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|------------------------------------|-------|----------|--|--|-------------------|-------------|-----------------|
| <b>Method Blank</b>                |       |          |  |  |                   |             |                 |
| <b>Organochlorine Pesticides</b>   |       |          |  |  |                   |             |                 |
| Chlordanes - Total                 | mg/kg | < 0.1    |  |  | 0.1               | Pass        |                 |
| 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        |                 |
| 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        |                 |
| 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 | < 1      |  |  | 1                 | Pass        |                 |
| <b>Method Blank</b>                |       |          |  |  |                   |             |                 |
| <b>Organophosphorus Pesticides</b> |       |          |  |  |                   |             |                 |
| Azinphos-methyl                    | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Bolstar                            | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Chlorfenvinphos                    | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Chlorpyrifos                       | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Chlorpyrifos-methyl                | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Coumaphos                          | mg/kg | < 2      |  |  | 2                 | Pass        |                 |
| Demeton-S                          | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Demeton-O                          | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Diazinon                           | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Dichlorvos                         | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Dimethoate                         | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Disulfoton                         | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| EPN                                | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Ethion                             | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Ethoprop                           | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Ethyl parathion                    | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Fenitrothion                       | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Fensulfothion                      | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Fenthion                           | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Malathion                          | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Merphos                            | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Methyl parathion                   | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Mevinphos                          | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Monocrotophos                      | mg/kg | < 2      |  |  | 2                 | Pass        |                 |
| Naled                              | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Omethoate                          | mg/kg | < 2      |  |  | 2                 | Pass        |                 |
| Phorate                            | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |

| Test                               | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|------------------------------------|-------|----------|--|--|-------------------|-------------|-----------------|
| Pirimiphos-methyl                  | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Pyrazophos                         | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Ronnel                             | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Terbufos                           | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Tetrachlorvinphos                  | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Tokuthion                          | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| Trichloronate                      | mg/kg | < 0.2    |  |  | 0.2               | Pass        |                 |
| <b>Method Blank</b>                |       |          |  |  |                   |             |                 |
| <b>Acid Herbicides</b>             |       |          |  |  |                   |             |                 |
| 2.4-D                              | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2.4-DB                             | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2.4.5-T                            | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| 2.4.5-TP                           | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Actril (loxynil)                   | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dicamba                            | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dichlorprop                        | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dinitro-o-cresol                   | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Dinoseb                            | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| MCPA                               | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| MCPB                               | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| Mecoprop                           | mg/kg | < 0.5    |  |  | 0.5               | Pass        |                 |
| <b>Method Blank</b>                |       |          |  |  |                   |             |                 |
| <b>Heavy Metals</b>                |       |          |  |  |                   |             |                 |
| 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        |                 |
| <b>LCS - % Recovery</b>            |       |          |  |  |                   |             |                 |
| <b>Organochlorine Pesticides</b>   |       |          |  |  |                   |             |                 |
| 4.4'-DDD                           | %     | 95       |  |  | 70-130            | Pass        |                 |
| 4.4'-DDE                           | %     | 92       |  |  | 70-130            | Pass        |                 |
| 4.4'-DDT                           | %     | 91       |  |  | 70-130            | Pass        |                 |
| α-BHC                              | %     | 87       |  |  | 70-130            | Pass        |                 |
| Aldrin                             | %     | 87       |  |  | 70-130            | Pass        |                 |
| β-BHC                              | %     | 91       |  |  | 70-130            | Pass        |                 |
| δ-BHC                              | %     | 92       |  |  | 70-130            | Pass        |                 |
| Dieldrin                           | %     | 85       |  |  | 70-130            | Pass        |                 |
| Endosulfan I                       | %     | 87       |  |  | 70-130            | Pass        |                 |
| Endosulfan II                      | %     | 89       |  |  | 70-130            | Pass        |                 |
| Endosulfan sulphate                | %     | 89       |  |  | 70-130            | Pass        |                 |
| Endrin                             | %     | 95       |  |  | 70-130            | Pass        |                 |
| Endrin aldehyde                    | %     | 90       |  |  | 70-130            | Pass        |                 |
| Endrin ketone                      | %     | 85       |  |  | 70-130            | Pass        |                 |
| γ-BHC (Lindane)                    | %     | 87       |  |  | 70-130            | Pass        |                 |
| Heptachlor                         | %     | 88       |  |  | 70-130            | Pass        |                 |
| Heptachlor epoxide                 | %     | 89       |  |  | 70-130            | Pass        |                 |
| Hexachlorobenzene                  | %     | 88       |  |  | 70-130            | Pass        |                 |
| Methoxychlor                       | %     | 111      |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>            |       |          |  |  |                   |             |                 |
| <b>Organophosphorus Pesticides</b> |       |          |  |  |                   |             |                 |

| Test                               |               |           | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
|------------------------------------|---------------|-----------|-------|----------|--|--|-------------------|-------------|-----------------|
| Diazinon                           |               |           | %     | 85       |  |  | 70-130            | Pass        |                 |
| Dimethoate                         |               |           | %     | 73       |  |  | 70-130            | Pass        |                 |
| Ethion                             |               |           | %     | 121      |  |  | 70-130            | Pass        |                 |
| Fenitrothion                       |               |           | %     | 83       |  |  | 70-130            | Pass        |                 |
| Methyl parathion                   |               |           | %     | 96       |  |  | 70-130            | Pass        |                 |
| Mevinphos                          |               |           | %     | 102      |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>            |               |           |       |          |  |  |                   |             |                 |
| <b>Acid Herbicides</b>             |               |           |       |          |  |  |                   |             |                 |
| 2.4-D                              |               |           | %     | 127      |  |  | 70-130            | Pass        |                 |
| 2.4-DB                             |               |           | %     | 111      |  |  | 70-130            | Pass        |                 |
| 2.4.5-T                            |               |           | %     | 127      |  |  | 70-130            | Pass        |                 |
| 2.4.5-TP                           |               |           | %     | 83       |  |  | 70-130            | Pass        |                 |
| Actril (loxynil)                   |               |           | %     | 101      |  |  | 70-130            | Pass        |                 |
| Dicamba                            |               |           | %     | 116      |  |  | 70-130            | Pass        |                 |
| Dichlorprop                        |               |           | %     | 116      |  |  | 70-130            | Pass        |                 |
| Dinitro-o-cresol                   |               |           | %     | 89       |  |  | 70-130            | Pass        |                 |
| Dinoseb                            |               |           | %     | 103      |  |  | 70-130            | Pass        |                 |
| MCPA                               |               |           | %     | 130      |  |  | 70-130            | Pass        |                 |
| MCPB                               |               |           | %     | 108      |  |  | 70-130            | Pass        |                 |
| Mecoprop                           |               |           | %     | 98       |  |  | 70-130            | Pass        |                 |
| <b>LCS - % Recovery</b>            |               |           |       |          |  |  |                   |             |                 |
| <b>Heavy Metals</b>                |               |           |       |          |  |  |                   |             |                 |
| Mercury                            |               |           | %     | 113      |  |  | 75-125            | Pass        |                 |
| Zinc                               |               |           | %     | 117      |  |  | 80-120            | Pass        |                 |
| Test                               | Lab Sample ID | QA Source | Units | Result 1 |  |  | Acceptance Limits | Pass Limits | Qualifying Code |
| <b>Spike - % Recovery</b>          |               |           |       |          |  |  |                   |             |                 |
| <b>Organochlorine Pesticides</b>   |               |           |       | Result 1 |  |  |                   |             |                 |
| 4.4'-DDD                           | B17-My12611   | NCP       | %     | 121      |  |  | 70-130            | Pass        |                 |
| 4.4'-DDE                           | M17-My14744   | NCP       | %     | 120      |  |  | 70-130            | Pass        |                 |
| 4.4'-DDT                           | B17-My12611   | NCP       | %     | 119      |  |  | 70-130            | Pass        |                 |
| a-BHC                              | B17-My12611   | NCP       | %     | 95       |  |  | 70-130            | Pass        |                 |
| Aldrin                             | B17-My12611   | NCP       | %     | 82       |  |  | 70-130            | Pass        |                 |
| b-BHC                              | B17-My12611   | NCP       | %     | 105      |  |  | 70-130            | Pass        |                 |
| d-BHC                              | B17-My12611   | NCP       | %     | 85       |  |  | 70-130            | Pass        |                 |
| Dieldrin                           | B17-My12611   | NCP       | %     | 123      |  |  | 70-130            | Pass        |                 |
| Endosulfan I                       | B17-My12611   | NCP       | %     | 97       |  |  | 70-130            | Pass        |                 |
| Endosulfan II                      | B17-My12611   | NCP       | %     | 101      |  |  | 70-130            | Pass        |                 |
| Endosulfan sulphate                | B17-My12611   | NCP       | %     | 103      |  |  | 70-130            | Pass        |                 |
| Endrin                             | B17-My12611   | NCP       | %     | 119      |  |  | 70-130            | Pass        |                 |
| Endrin aldehyde                    | B17-My12611   | NCP       | %     | 75       |  |  | 70-130            | Pass        |                 |
| Endrin ketone                      | B17-My12611   | NCP       | %     | 97       |  |  | 70-130            | Pass        |                 |
| g-BHC (Lindane)                    | B17-My12611   | NCP       | %     | 100      |  |  | 70-130            | Pass        |                 |
| Heptachlor                         | B17-My12611   | NCP       | %     | 91       |  |  | 70-130            | Pass        |                 |
| Heptachlor epoxide                 | B17-My12611   | NCP       | %     | 96       |  |  | 70-130            | Pass        |                 |
| Hexachlorobenzene                  | B17-My12611   | NCP       | %     | 100      |  |  | 70-130            | Pass        |                 |
| Methoxychlor                       | B17-My12611   | NCP       | %     | 125      |  |  | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>          |               |           |       |          |  |  |                   |             |                 |
| <b>Organophosphorus Pesticides</b> |               |           |       | Result 1 |  |  |                   |             |                 |
| Diazinon                           | M17-My14236   | NCP       | %     | 100      |  |  | 70-130            | Pass        |                 |
| Dimethoate                         | M17-My14236   | NCP       | %     | 83       |  |  | 70-130            | Pass        |                 |
| Ethion                             | M17-My14236   | NCP       | %     | 120      |  |  | 70-130            | Pass        |                 |
| Fenitrothion                       | M17-My14236   | NCP       | %     | 92       |  |  | 70-130            | Pass        |                 |
| Methyl parathion                   | M17-My14236   | NCP       | %     | 98       |  |  | 70-130            | Pass        |                 |
| Mevinphos                          | M17-My14236   | NCP       | %     | 121      |  |  | 70-130            | Pass        |                 |

| Test                               | Lab Sample ID | QA Source | Units | Result 1 |          |     | Acceptance Limits | Pass Limits | Qualifying Code |
|------------------------------------|---------------|-----------|-------|----------|----------|-----|-------------------|-------------|-----------------|
| <b>Spike - % Recovery</b>          |               |           |       |          |          |     |                   |             |                 |
| <b>Acid Herbicides</b>             |               |           |       | Result 1 |          |     |                   |             |                 |
| 2,4-D                              | M17-My01019   | NCP       | %     | 79       |          |     | 70-130            | Pass        |                 |
| Actril (loxylnil)                  | S17-My00744   | NCP       | %     | 121      |          |     | 70-130            | Pass        |                 |
| Dichlorprop                        | S17-My00744   | NCP       | %     | 116      |          |     | 70-130            | Pass        |                 |
| MCPA                               | S17-My00744   | NCP       | %     | 113      |          |     | 70-130            | Pass        |                 |
| MCPB                               | S17-My00744   | NCP       | %     | 96       |          |     | 70-130            | Pass        |                 |
| <b>Spike - % Recovery</b>          |               |           |       |          |          |     |                   |             |                 |
| <b>Heavy Metals</b>                |               |           |       | Result 1 |          |     |                   |             |                 |
| Lead                               | M17-My16129   | NCP       | %     | 81       |          |     | 75-125            | Pass        |                 |
| Mercury                            | P17-My15082   | NCP       | %     | 92       |          |     | 70-130            | Pass        |                 |
| Test                               | Lab Sample ID | QA Source | Units | Result 1 |          |     | Acceptance Limits | Pass Limits | Qualifying Code |
| <b>Duplicate</b>                   |               |           |       |          |          |     |                   |             |                 |
| <b>Organochlorine Pesticides</b>   |               |           |       | Result 1 | Result 2 | RPD |                   |             |                 |
| Chlordanes - Total                 | B17-My14905   | NCP       | mg/kg | < 0.1    | < 0.1    | <1  | 30%               | Pass        |                 |
| 4,4'-DDD                           | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| 4,4'-DDE                           | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| 4,4'-DDT                           | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| a-BHC                              | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Aldrin                             | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| b-BHC                              | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| d-BHC                              | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Dieldrin                           | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endosulfan I                       | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endosulfan II                      | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endosulfan sulphate                | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endrin                             | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endrin aldehyde                    | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Endrin ketone                      | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| g-BHC (Lindane)                    | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Heptachlor                         | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Heptachlor epoxide                 | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Hexachlorobenzene                  | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Methoxychlor                       | B17-My14905   | NCP       | mg/kg | < 0.05   | < 0.05   | <1  | 30%               | Pass        |                 |
| Toxaphene                          | B17-My14905   | NCP       | mg/kg | < 1      | < 1      | <1  | 30%               | Pass        |                 |
| <b>Duplicate</b>                   |               |           |       |          |          |     |                   |             |                 |
| <b>Organophosphorus Pesticides</b> |               |           |       | Result 1 | Result 2 | RPD |                   |             |                 |
| Azinphos-methyl                    | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Bolstar                            | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Chlorfenvinphos                    | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Chlorpyrifos                       | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Chlorpyrifos-methyl                | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Coumaphos                          | M17-My15847   | NCP       | mg/kg | < 2      | < 2      | <1  | 30%               | Pass        |                 |
| Demeton-S                          | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Demeton-O                          | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Diazinon                           | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Dichlorvos                         | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Dimethoate                         | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Disulfoton                         | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| EPN                                | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Ethion                             | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Ethoprop                           | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Ethyl parathion                    | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |
| Fenitrothion                       | M17-My15847   | NCP       | mg/kg | < 0.2    | < 0.2    | <1  | 30%               | Pass        |                 |

| Duplicate                   |             |     |       |          |          |     |     |      |
|-----------------------------|-------------|-----|-------|----------|----------|-----|-----|------|
| Organophosphorus Pesticides |             |     |       | Result 1 | Result 2 | RPD |     |      |
| Fensulfothion               | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Fenthion                    | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Malathion                   | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Merphos                     | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Methyl parathion            | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Mevinphos                   | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Monocrotophos               | M17-My15847 | NCP | mg/kg | < 2      | < 2      | <1  | 30% | Pass |
| Naled                       | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Omethoate                   | M17-My15847 | NCP | mg/kg | < 2      | < 2      | <1  | 30% | Pass |
| Phorate                     | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Pirimiphos-methyl           | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Pyrazophos                  | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Ronnel                      | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Terbufos                    | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Tetrachlorvinphos           | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Tokuthion                   | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Trichloronate               | M17-My15847 | NCP | mg/kg | < 0.2    | < 0.2    | <1  | 30% | Pass |
| Duplicate                   |             |     |       |          |          |     |     |      |
| Acid Herbicides             |             |     |       | Result 1 | Result 2 | RPD |     |      |
| 2,4-D                       | M17-My01018 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| 2,4-DB                      | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| 2,4,5-T                     | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| 2,4,5-TP                    | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Actril (loxynil)            | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Dicamba                     | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Dichlorprop                 | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Dinitro-o-cresol            | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Dinoseb                     | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| MCPA                        | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| MCPB                        | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Mecoprop                    | S17-My00743 | NCP | mg/kg | < 0.5    | < 0.5    | <1  | 30% | Pass |
| Duplicate                   |             |     |       |          |          |     |     |      |
| Heavy Metals                |             |     |       | Result 1 | Result 2 | RPD |     |      |
| Lead                        | M17-My16406 | NCP | mg/kg | 20       | 20       | 1.0 | 30% | Pass |
| Mercury                     | P17-My15082 | NCP | mg/kg | < 0.1    | < 0.1    | <1  | 30% | Pass |

## Comments

### Sample Integrity

|                                                                         |     |
|-------------------------------------------------------------------------|-----|
| Custody Seals Intact (if used)                                          | N/A |
| Attempt to Chill was evident                                            | Yes |
| Sample correctly preserved                                              | Yes |
| Appropriate sample containers have been used                            | Yes |
| Sample containers for volatile analysis received with minimal headspace | Yes |
| Samples received within HoldingTime                                     | Yes |
| Some samples have been subcontracted                                    | No  |

## Authorised By

|                |                                |
|----------------|--------------------------------|
| Nibha Vaidya   | Analytical Services Manager    |
| Alex Petridis  | Senior Analyst-Metal (VIC)     |
| Alex Petridis  | Senior Analyst-Organic (VIC)   |
| Huong Le       | Senior Analyst-Inorganic (VIC) |
| Joseph Edouard | Senior Analyst-Organic (VIC)   |



**Glenn Jackson**

### National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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## Sample Receipt Advice

Company name: **Coffey Geotechnics Pty Ltd COFFS**

Contact name: **Andrew Ballard**

Project name: **SOIL ANALYSIS**

Project ID: **754-CFSGE195610**

COC number: **Not provided**

Turn around time: **2 Day**

Date/Time received: **May 17, 2017 9:00 AM**

Eurofins | mgt reference: **546992**

### 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 Eurofins | mgt  
Sample Receipt : 13 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.
- ☒ Appropriate sample containers have been used.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

### Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone : +61 (2) 9900 8400 or by e.mail: NibhaVaidya@eurofins.com

Results will be delivered electronically via e.mail to Andrew Ballard - andrew.ballard@coffey.com.

| Chain of Custody                                                                              |               |                               |                                                                                                                                                                                     |                  | Laboratory Quotation/ Order No. |                   | Project No.: 754-CFSGE195610 |                               | Sheet 1 of 1        |                         |  |  |  |  |   |  |                   |                             |
|-----------------------------------------------------------------------------------------------|---------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------------|-------------------|------------------------------|-------------------------------|---------------------|-------------------------|--|--|--|--|---|--|-------------------|-----------------------------|
| Dispatch to: Eurofin/mgt                                                                      |               |                               | Sampled By: Darren Swift, Joel Parkin                                                                                                                                               |                  | Consigning Officer: Joel Parkin |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Attention: Sample receipt                                                                     |               |                               | Project Manager: (report results to) <a href="mailto:andrew.ballard@coffey.com">andrew.ballard@coffey.com</a><br><a href="mailto:joel.parkin@coffey.com">joel.parkin@coffey.com</a> |                  | Date Dispatched: 16/05/2017     |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Relinquished By: Coffey, Coffs Harbour                                                        |               |                               | Date: 16/05/2017 Time: 13:00                                                                                                                                                        |                  | Received By:                    |                   | Date:                        |                               | Time:               |                         |  |  |  |  |   |  |                   |                             |
|                                                                                               |               |                               |                                                                                                                                                                                     |                  |                                 |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Comments:                                                                                     | Sample Matrix | Container Type & Preservative | Sample No.                                                                                                                                                                          | Sample Depth (m) | Date Sampled:                   | Analyses Required |                              |                               |                     |                         |  |  |  |  |   |  |                   | Sample Condition on Receipt |
|                                                                                               |               |                               |                                                                                                                                                                                     |                  |                                 | Metals 8          | Suite B1 - TRH / BTEX        | Suite B3 - PAH/Phenol (total) | Suite B14 - OCP/OPP | Phenoxy Acid Herbicides |  |  |  |  |   |  | Send to Melbourne |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | BH-002                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-004                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-009                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-014                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-015                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-016                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-025                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-026                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-067                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-096                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | TP-117                                                                                                                                                                              | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | QC01                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | QC02                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  | X |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS01                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS02                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS03                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 | X                            | X                             |                     |                         |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS04                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 | X                            | X                             |                     |                         |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | SS05                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
|                                                                                               | Soil          | 250gsm Glass Jar              | QC03                                                                                                                                                                                | (0-0.15m)        | 15-May-17                       | X                 |                              |                               | X                   | X                       |  |  |  |  |   |  |                   |                             |
| Special Laboratory Instructions:                                                              |               |                               |                                                                                                                                                                                     |                  |                                 |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |
| Detection Limits: Standard LOR      Turnaround Required: <b>PRIORITY - 1 DAY TAT REQUIRED</b> |               |                               |                                                                                                                                                                                     |                  |                                 |                   |                              |                               |                     |                         |  |  |  |  |   |  |                   |                             |

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