

TOITŪ TE WHENUA

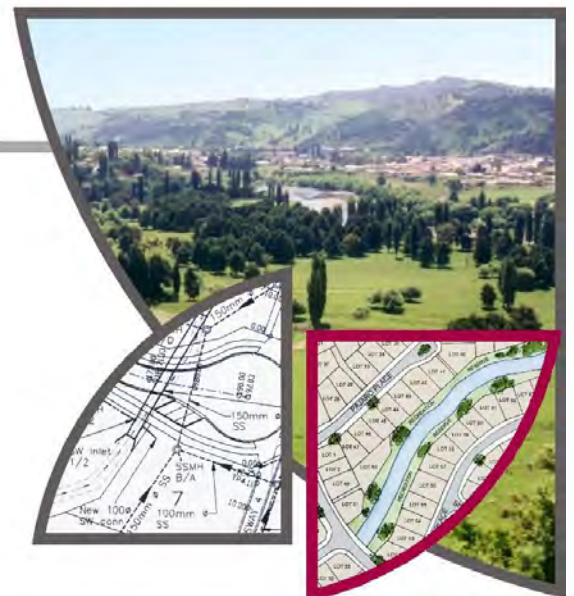
LAND INFORMATION NEW ZEALAND



Fraser Thomas

ENGINEERS • RESOURCE MANAGERS • SURVEYORS

146 TE MAWHAI ROAD,
TE AWAMUTU



FORMER TOKANUI PSYCHIATRIC HOSPITAL
DEMOLITION AND REMEDIATION
COAL TAR INVESTIGATION REPORT

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TOITŪ TE WHENUA – LAND INFORMATION NEW ZEALAND
FORMER TOKANUI PSYCHIATRIC HOSPITAL DEMOLITION AND REMEDIATION
COAL TAR INVESTIGATION REPORT

EXECUTIVE SUMMARY

The closed Tokanui Hospital (the Site) is a former psychiatric hospital approximately 80 hectares (ha) in area, located approximately 14km southeast of Te Awamutu, Waikato, with 74 buildings, a decommissioned wastewater treatment plant, swimming pool, eight substations, closed landfill (also referred to as the 'existing disposal site') and substantial roading and underground infrastructure and services.

The land is presently in a degraded state, arising from the hospital buildings and associated infrastructure still present on it. The roading network servicing these buildings comprises 8.6km in length (6.2ha) across the site. The roading is still in use for site access. It consists of asphalt/chip seal and is generally in an average to poor condition. The pavement itself however, appears to be structurally sound. Through past investigations completed by other consultants, it was concluded that there are some sections of roading that have confirmed or potential coal tar present. Accordingly, Fraser Thomas Limited (FTL) have, on behalf of Toitū te Whenua (Land Information New Zealand (LINZ)), undertaken this Coal Tar Investigation.

This Coal Tar Investigation report covers comprehensive additional road material sampling/lab testing investigations undertaken by FTL in May - July 2024. These additional investigations were undertaken in order to better determine the horizontal and vertical extent of coal tar contamination in roading and paving across the site, with this information then used to determine coal tar removal requirements and quantities.

In total, 457 individual samples from 167 locations at various depths (0-1.25m) were collected by FTL across the site over three rounds of sampling for Polycyclic Aromatic Hydrocarbons (PAHs) analysis of the roading material. These samples comprised 193 surface/pavement samples, 161 basecourse samples and 103 subbase samples. As part of the field assessments undertaken, petroleum distillate spray paint testing was used in all three rounds; ultraviolet (UV) handheld lights to assess material fluorescence was only in the third round; while lab sampling was conducted across all three rounds, increasing in density with each round.

The sampling results identified:

- Surface (paving): 110 of the 193 surface samples contained one or more PAH species, of which 51 samples also exceeded the WasteMINZ coal tar guidelines for Total PAHs and BAP(eq), while 49 samples also indicated a positive response for the paint test and/or UV light test.
- Basecourse: 113 out of the 161 basecourse samples contained one or more PAH species, of which 27 samples also exceeded the WasteMINZ coal tar guidelines for Total PAHs

and/or BAP(eq), while 10 samples also returned positive responses for the paint and/or UV light test.

- Subbase: 54 out of the 103 subbase samples contained one or more PAH species, of which 13 samples also exceeded the WasteMINZ coal tar guidelines for Total PAHs and/or BAP(eq), while 2 samples also returned positive responses for the paint and/or UV light test.

Across the site, the roading network has been divided into three sections: red, green and blue, based on proposed remediation works. The intrusive investigation undertaken has found that coal tar is present across all three road network colours and roading layers. The majority of the coal tar, in terms of areal coverage, is in the surface pavement layers, with the areas with coal tar decreasing in the basecourse and further decreasing in the subbase. A conservative approach has been taken here, in that the entire basecourse and subbase depth profile has been assumed to contain coal tar. Given these layers are typically significantly thicker than the paving layer, this results in reasonable quantities of coal tar being calculated to be present in both the basecourse and subbase. Furthermore, there are localised areas of the site where multiple 'top ups' of the basecourse and pavement have been done over the years, forming a "pancake" roading structure.

On this basis, quantities of confirmed coal tar roading materials (all solid measure) are estimated to be:

- Pavement: 1,075m³
- Basecourse: 1,929m³
- Subbase: 1,172m³
- Total: 4,177m³

It may be possible to reduce the basecourse and subbase quantities by close supervision of these works.

Toxicity Characteristic Leaching Procedure (TCLP) extract analytical results found that TCLP extract concentrations in PAHs for only a single species, namely Anthracene, were in exceedance of the Hampton Downs TCLP Waste Acceptance Limits in four (15%) of the 27 samples analysed. The 95th Upper Confidence Level (UCL) TCLP for anthracene was calculated for the combined roading material to be 0.007g/m³ which is within the 0.01g/m³ landfill TCLP waste acceptance limit and hence should be acceptable for disposal to the Hampton Downs landfill based on discussions with the EnviroNZ Environmental Manager.

This investigation has been undertaken in accordance with the WasteMINZ Guidelines for Assessing and Managing Coal Tar Contamination in Roding (December 2023). It has been undertaken, managed, reviewed, and approved by Suitably Qualified and Experienced Practitioners (SQEPs), as defined in these Guidelines. In accordance with these guidelines, roading material is not considered to be soil and is therefore not subject to the National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

**TOITŪ TE WHENUA – LAND INFORMATION NEW ZEALAND
FORMER TOKANUI PSYCHIATRIC HOSPITAL DEMOLITION AND REMEDIATION
COAL TAR INVESTIGATION REPORT**

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TOITŪ TE WHENUA – LAND INFORMATION NEW ZEALAND

FORMER TOKANUI PSYCHIATRIC HOSPITAL DEMOLITION AND REMEDIATION

COAL TAR INVESTIGATION REPORT

1 INTRODUCTION

The closed Tokanui Hospital (the Site) is a former psychiatric hospital approximately 80 hectares (ha) in area, located approximately 14km southeast of Te Awamutu, Waikato, with 74 buildings, a decommissioned wastewater treatment plant, swimming pool, eight substations, closed landfill (also referred to as the 'existing disposal site') and substantial roading and underground infrastructure and services. The site location and extent are shown in Figure 1 below.



Figure 1: Site location and extent

The land is presently in a degraded state, arising from the hospital buildings and associated infrastructure still present on it. The roading network consists of 8.6km in length (6.2ha in area) across the site, including paving around buildings. The roading is still in use for site access. It consists of asphalt/chip seal and is generally in a poor condition. The pavement itself however, appears to be structurally sound. Through past investigations, it has been concluded that there are some sections of roading that have confirmed or potential coal tar present. Accordingly, FTL have, on behalf of Toitū te Whenua (Land Information New Zealand (LINZ)), undertaken this Coal Tar Investigation.

A detailed summary of the demolition and remediation options for the horizontal infrastructure and can be found in the report titled *‘Toitū Te Whenua – Land Information New Zealand, Former Tokanui Psychiatric Hospital Demolition and Remediation, Horizontal Infrastructure Assessment Report’* (henceforth referred to as ‘the HIR’) dated November 2023 and prepared by FTL Limited. In addition, a detailed summary of the GHD coal tar assessment can be found in the report titled *‘Tokaui Hospital - Coal Tar Assessment letter report* dated February 2023 and prepared by GHD Limited. Both these reports should be read in conjunction with this report.

This Coal Tar Investigation Report covers additional intrusive investigations undertaken by FTL during May - July 2024 to better determine the horizontal and vertical extent of coal tar contamination in roading and paving across the site, with this information then used to determine coal tar removal requirements and quantities.

The format of this report is as follows:

- Rationale, objectives and scope of work;
- Investigation methodology;
- Background information;
- Intrusive sampling and results;
- Removal requirements;
- Discussion and Conclusions.
- Site plans, representative photographs and other relevant information in appendix form.

This investigation has been undertaken in accordance with the WasteMINZ Guidelines for Assessing and Managing Coal Tar Contamination in Roading (December 2023). It has been undertaken, managed, reviewed, and approved by Suitably Qualified and Experienced Practitioners (SQEPs), as defined in these Guidelines. In accordance with these guidelines, roading material is not considered to be soil and is therefore not subject to the National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

2 RATIONALE, OBJECTIVES AND SCOPE OF WORK

The main rationale and objectives for this investigation were:

- To better understand the nature of the roading and paving materials (visual observation, soil sampling) at the site;
- Determine the nature and severity of coal tar contamination (if any) in these materials.
- Determine appropriate disposal requirements for these materials.

3 INVESTIGATION METHODOLOGY

The methodology used for this site assessment is summarised below:

1. Desktop study involving review of existing environmental assessments for the subject site;
2. Visual observations and sample collection from the roading/paving profile, using test pitting;
3. Utilisation of a multiple lines of evidence approach involving a combination of petroleum distillate spray paint tests, UV light fluorescence test and laboratory analysis to define the horizontal and vertical extent of coal tar material;
4. Determination of associated quantities of coal tar contamination in surface (paving), basecourse (hardfill) and subbase (hardfill) layers and preparation of coal tar removal plans showing this.
5. Associated reporting, summarising the above process with conclusions and recommendations.
6. Provision of site plans, relevant documentation and representative photographs as appendices to this report.

FTL Health and Safety Management Plan procedures were followed throughout the duration of the investigation.

4 BACKGROUND INFORMATION

The history of the site has been detailed in numerous preceding reports, prepared by FTL and other consultants.

4.1 ROADING ASSESSMENT

Roading and paving around the site will have been present since the hospital's inception in 1916. The earliest aerial photography information available indicates an extensive roading network was developed by 1944, alongside construction of the main hospital buildings. This network expanded up until 1966, when the site was fully developed. Based on available information, the road network is understood to be well over 50 years old. The estimated ages of the roading network are shown in Figure 2.

The roads are generally between 5.4m and 7.0m wide, suitable for two-way traffic. The roads have flat to moderate longitudinal gradients with good dual cross-fall on the main roads and single cross-fall on the side roads.

Limited pavement specification information indicates typical design comprised 25-40mm AC (asphalt concrete), on 125-150mm M4 basecourse on 50mm sand or directly on subgrade, which represents a relatively "skinny" pavement.

WSP undertook a pavement investigation in 2023 with the results being presented in a factual report provided separately. Overall, they found that the existing road network was in a reasonable condition except for some localised failures. Most of the failures were surficial, indicating a good structure pavement. The existing asphalt and chip-seal surfaces was in poor condition and appeared to be at the end of their life, evidenced by potholes, cracks and moss developing. The road generally had good drainage except for some localised issues and around the intersections.

Pavement thickness was found to vary significantly across the site. The total pavement depth ranged between 100mm and 600mm, with a mean of 300mm. The basecourse thickness is between 30mm and 380mm with a mean of 170mm, comprising medium dense to dense well-graded AP40. There is up to 350mm of fill at some locations.

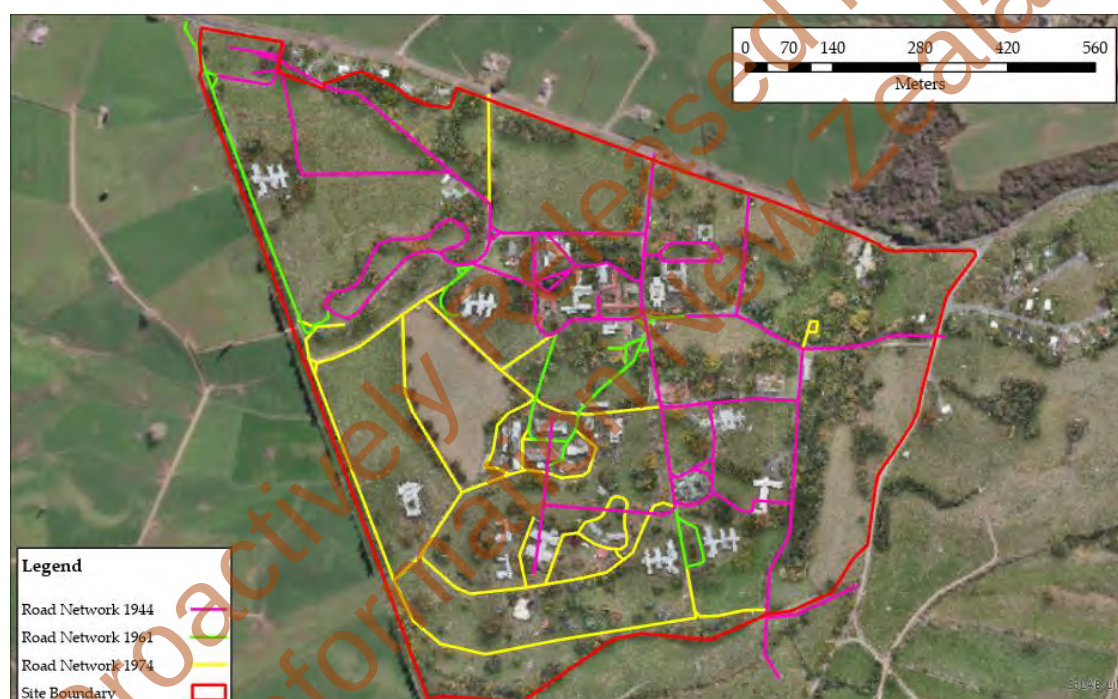


Figure 2: Historical Roading Network Distinction and Extents

4.2 COAL TAR ASSESSMENT LETTER REPORT – GHD (FEBRUARY 2023)

A detailed summary of the GHD coal tar assessment and can be found in the report titled *Tokanui Hospital - Coal Tar Assessment letter report* dated February 2023 and prepared by GHD Limited.

In brief, the purpose of the report was to determine the presence of coal tar in the binding of the pavement and underlying basecourse of the roading at the site. The investigation included the collection of 26 samples, which were analysed for PAHs and 12 asphalt samples analysed for the TCLP. In conclusion, the analysis suggested that samples Asph 01, 02 and 05 are likely

to be sealed with coal tar, with Asph 07 potentially also containing a percentage of coal tar. The leaching of PAHs from all samples was very low. BaP(eq) is a measure of the potential overall PAHs carcinogenicity. The results indicate this is low risk, with the NESCS commercial/industrial sites (outdoor workers), unpaved areas guideline being 35mg/kg. In this case, these results derive from paved areas and hence the PAHs are likely to be tightly bound to the pavement as indicated by the TCLP leaching results, meaning the 35mg/kg guideline will be conservative.

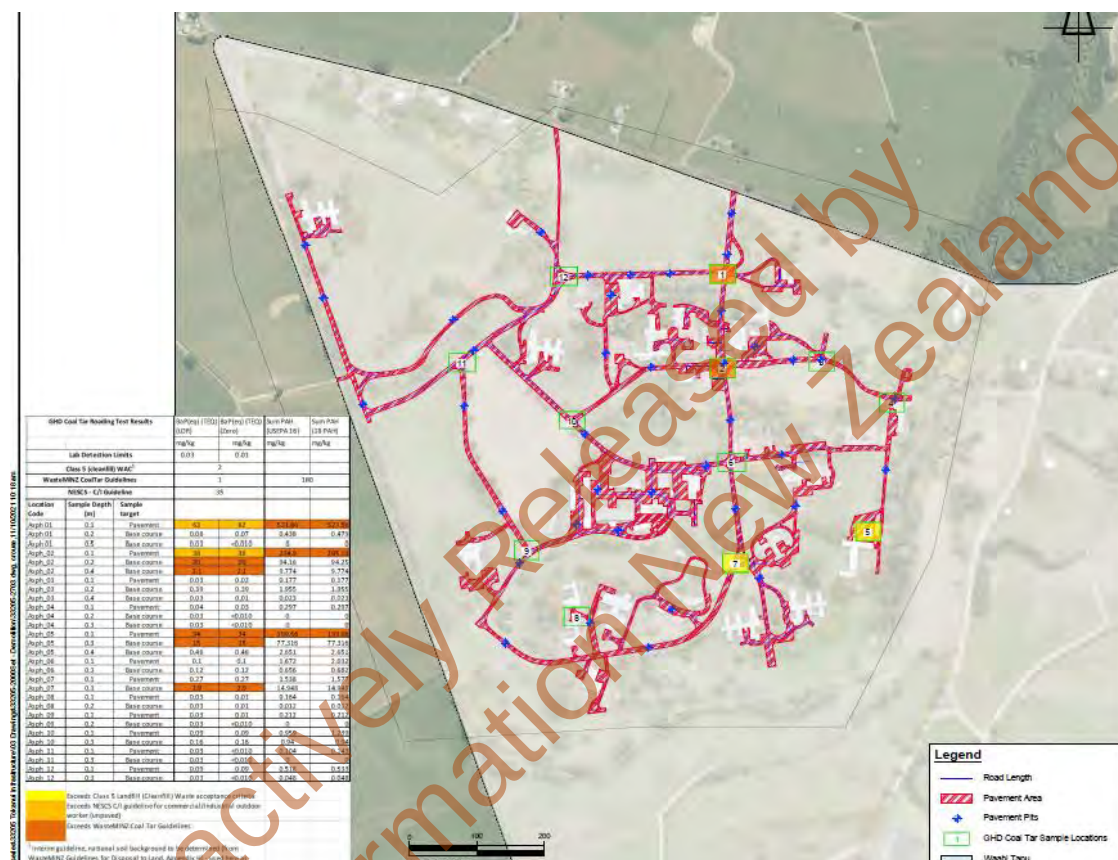


Figure 3: GHD Coal Tar Sampling Results

4.3 HORIZONTAL INFRASTRUCTURE ASSESSMENT REPORT – FTL (NOVEMBER 2023)

A detailed summary of the demolition and remediation options for the horizontal infrastructure and can be found in the report titled *Toitū Te Whenua – Land Information New Zealand, Former Tokanui Psychiatric Hospital Demolition and Remediation, Horizontal Infrastructure Assessment Report* (henceforth referred to as ‘the HIR’) dated November 2023 and prepared by FTL.

In brief, this report assessed different management and remediation options for roading and other horizontal infrastructure as part of the site demolition and remediation process. From this process, the roading network was split into three portions, reflecting different management/removal options considered, primarily based on road function, degree of use and

age. These are identified as the red, green and blue networks, each with their own management/removal requirements. The blue network is essentially minor roading and paving in and around buildings. The red network is the key “spine” roads that provide reasonable access to the main hospital areas, while the green network represents additional secondary access roads that provide extended access around the entire hospital site.

This process determined that the blue network in FTL Drawing 33205/2700 is to be fully removed (surface, basecourse and subbase). The blue network covers an estimated 3.49ha (56% of road network + paving) with an estimated removal volume of 10,424m³. This portion of the road network will be reinstated with clean soils to existing ground level. Backfill requirements involve an average of 150mm subsoils overlain by 150mm topsoil to tie in with the surrounding ground and regrassing.

The remaining portions of the road network (3.26km, 2.71ha) are split into red and green in FTL Drawing 33205/2700. These areas will be partially removed, essentially removing the surface pavement down to basecourse, then topping up the basecourse to existing ground level to form “farm tracks” for ongoing use. The estimated total paving volume to be removed is 1,480m³.

Additional requirements for roading materials containing coal tar were to be determined from future work.

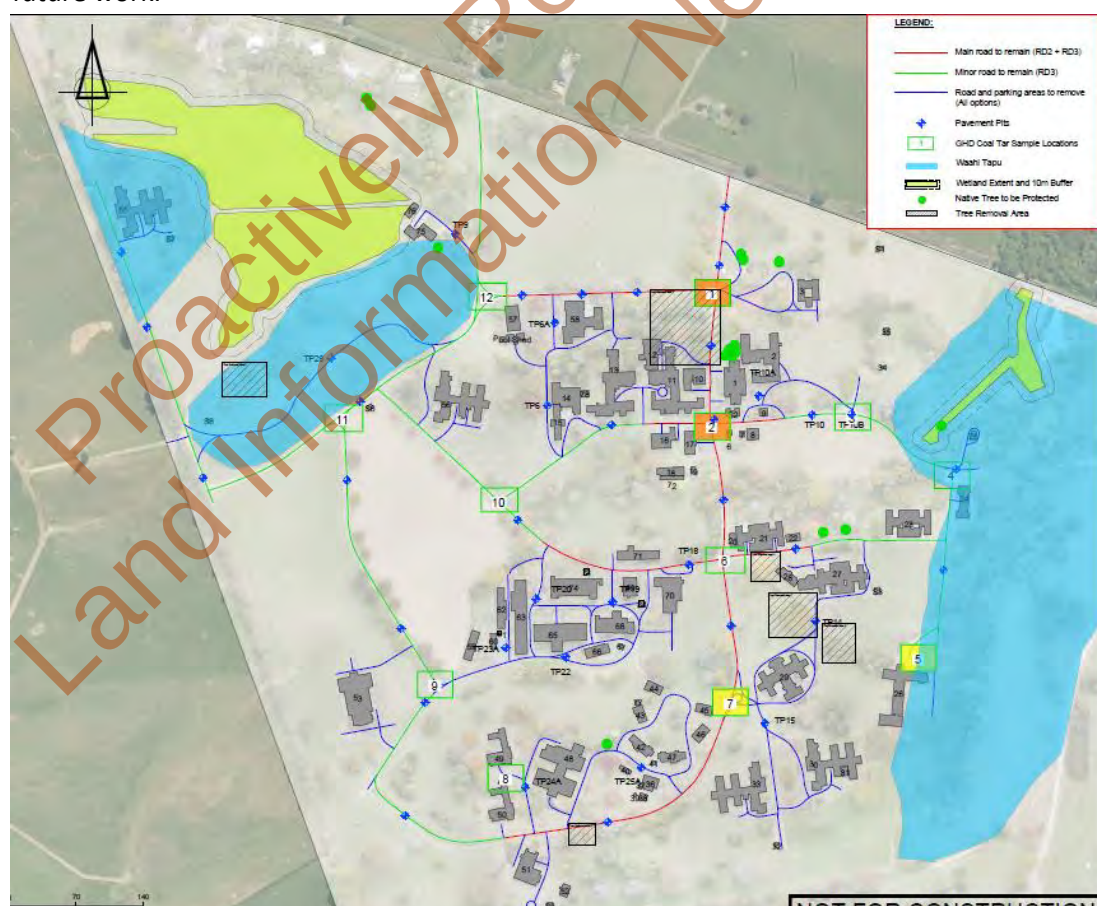


Figure 4: Roading Red, Green and Blue Networks

5 INTRUSIVE SAMPLING

5.1 INTRODUCTION

The targeted intrusive investigation focused on the potential presence of PAHs in roading material. This form of contamination is likely derived from the use of coal tar as the binding agent of the roading/paving.

5.2 DATA QUALITY OBJECTIVES & CONCEPTUAL SITE MODEL

In accordance with MfE Contaminated Land Management Guidelines (CLMG) No 5 the Data Quality Objectives (DQOs) and Conceptual Site Model (CSM) for this investigation are summarized in Table 1.

Table 1: DQOs and CSM

Purpose of Investigation	Determine lateral and vertical extent of coal tar contamination within the roading/paving and assess human health and environmental risks associated with proposed removal of the majority of the roading/paving network.	
Define boundaries	Investigation focused on the materials comprising the roading/paving at the site	
Develop Conceptual Site Model	Known/possible HAIL land use	Not applicable – roading materials are not classified as soil.
	Contaminants of concern	PAHs
	Distribution of contaminants	Lateral – across the roading/paving network Vertical – different paving layers
	Receptors	Site users (long term) and construction workers (short term)
	Potential pathways	Dermal contact, ingestion and inhalation
	Applicable land use scenario	Coal tar roading material, as defined in WasteMINZ Guidelines for Assessing and Managing Coal Tar Contamination in Roding (December 2023)
Additional information required (Sampling and Analysis Plan)	Roding/paving likely to contain coal tar has been targeted as the subject of this investigation, with samples only collected within the roading/paving matrix (hardfill and surface paving). A systematic approach has been taken in sampling the roading network, to obtain an even sampling spread that is representative of the horizontal and vertical extent of coal tar contamination. Sampling	

	was based on approximately 1 test pit location per 50m, to ensure changes in roading network construction were identified and to allow for more accurate estimates of coal tar roading material volume. At each test pit location, at least 1 sample was collected from each roading layer, plus additional samples across large paved areas and at or around specific features such as intersections.
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5.3 EVALUATION BASIS

The sampling results have been compared with:

- The WasteMINZ Guidelines for Assessing and Managing Coal Tar Contamination in Roding (December 2023) and,
- Relevant landfill waste acceptance criteria.

5.4 METHODOLOGY

In total, 457 individual samples from 167 locations at various depths (0-1.25m) were collected across the site over the three rounds. These samples comprised 193 surface/pavement samples, 161 basecourse samples and 103 subbase samples. The investigation methodology evolved over the three sampling rounds, in accordance with changing objectives, as explained below.

During all three sampling rounds, test pits were excavated via mechanical excavator, and ceased at a depth where natural ground was encountered. Samples were collected directly from the excavated face of each layer within the test pit via hand trowel and placed into laboratory supplied glass containers.

Prior to sampling in all three rounds, white spray paint manufactured with petroleum distillate (white spirits) solvent was sprayed on the cross section of the test pit from the pavement down to the natural soil. The paint would react to hydrocarbons in the soil/rock, and the colour of the paint would turn yellow/beige dependent on the type and severity of hydrocarbon contamination. The more yellow the paint test result is, the more likely it is that the soil/roading may contain coal tar, and at likely greater concentrations and mobility, while if it remains white then it is likely bitumen.

For the 3rd round of sampling, a second confirmation test was added to the methodology, and completed following each paint test. UV light was shone from a handheld device along the painted section of the road layers, with fluorescent specks observed on coal tar roading, and not observed on bitumen or other roading materials.

Following sampling results analysis, radar plots were compiled as an additional tool to indicate which hydrocarbon-based materials (coal tar, bitumen, etc) are likely to be present based on the composition of contaminant concentrations within any given sample. A radar plot shows the relative percentage of each of the 16 U.S. Environmental Protection Agency (EPA) priority

PAHs, as shown in Figure 5 below, and thus can provide a fingerprint of PAH source. The profile of the radar plot is not a definitive diagnostic tool but adds to the weight of evidence required to identify the likely source of the PAHs examined. Radar plots have been appended to this report (see Appendix D).

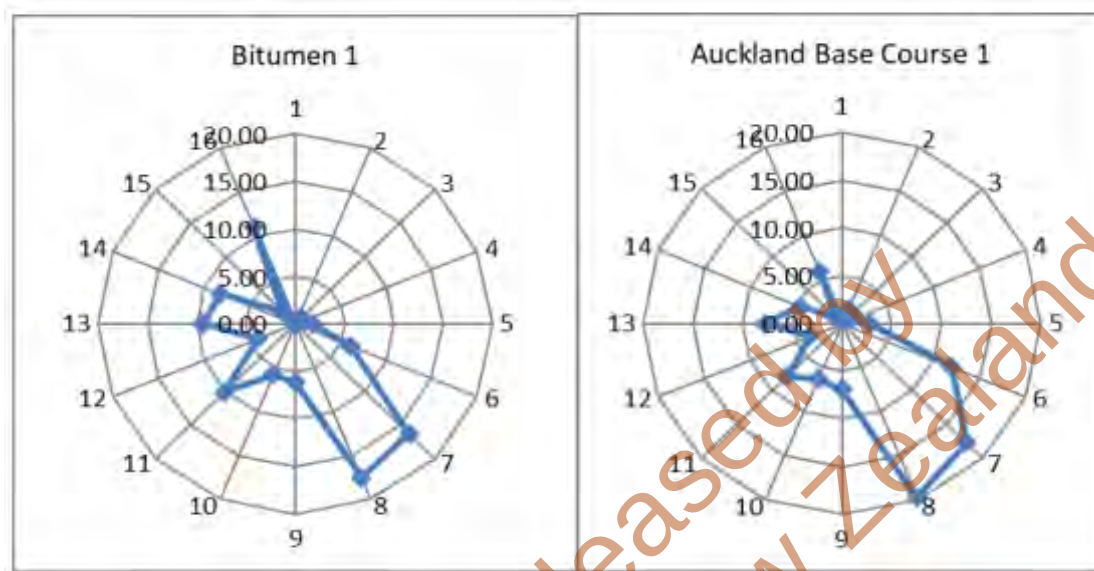


Figure 5: Example Radar Plot Fingerprinting for Bitumen ((left) and coal tar roading material (right) [source: WasteMINZ Coal Tar in Roading Guidelines, December 2023]

All samples collected across the three sampling rounds were submitted to an IANZ accredited laboratory, and select samples were analysed for PAHs to determine the presence of coal tar. The alterations made to sampling and analysis methodology for each round are presented below in Table 2.

Table 2: Sampling and Analysis Methodology

Sampling Round	Samples collected	Paint Test Utilised	UV Light Test Utilised	Sampling Density	Focus
Round 1 – 1/05/2024	16 samples from 9 locations	Y	N	Low	Visual assessment of roading composition at low density across site.
Round 2 – 27-29 May 2024	87 samples from 28 locations	Y	N	Moderate	Understand layering of roading materials and concentrations of coal tar and other contaminants in each layer.
Round 3 – 15-19 July 2024	354 samples (including 5 duplicates from 130 locations)	Y	Y	High (1 Test Pit per ca. 50m of road)	Increased quantity and density of sampling to more accurately delineate coal tar contamination extents.

These samples are representative of the roading materials that might have been impacted by coal tar and which are likely to be disturbed during the proposed roading removal works. The sample breakdown is shown in Table 4 below and laboratory reports from each of the three sampling rounds are included in Appendix B.

5.5 RESULTS SUMMARY

The sampling locations and results are shown on FTL Figures 33205/CT01 – 33205/CT16 appended to this report and in the spreadsheet summary in Appendix B. This includes associated depths of surface paving, basecourse and subbase. Representative photographs are included in Appendix A and laboratory transcripts in Appendix B.

Adopting the multiple lines of evidence approach, for material to be confirmed coal tar, there had to be a positive paint/UV test result, positive UV light test result and/or positive lab result, with a positive paint test alone being considered insufficient to confirm coal tar, as the paint test result was found to not always be clear to interpret (degree of beige/yellow colour change not always clear). In our drawings, three concentric circles were used to illustrate this, with the inner circle showing the paint test result, the middle circle the UV light test result and the outer circle the lab test result. **Any circle with one or more red colours was interpreted to be coal tar.** The legend used on the drawings is explained below.

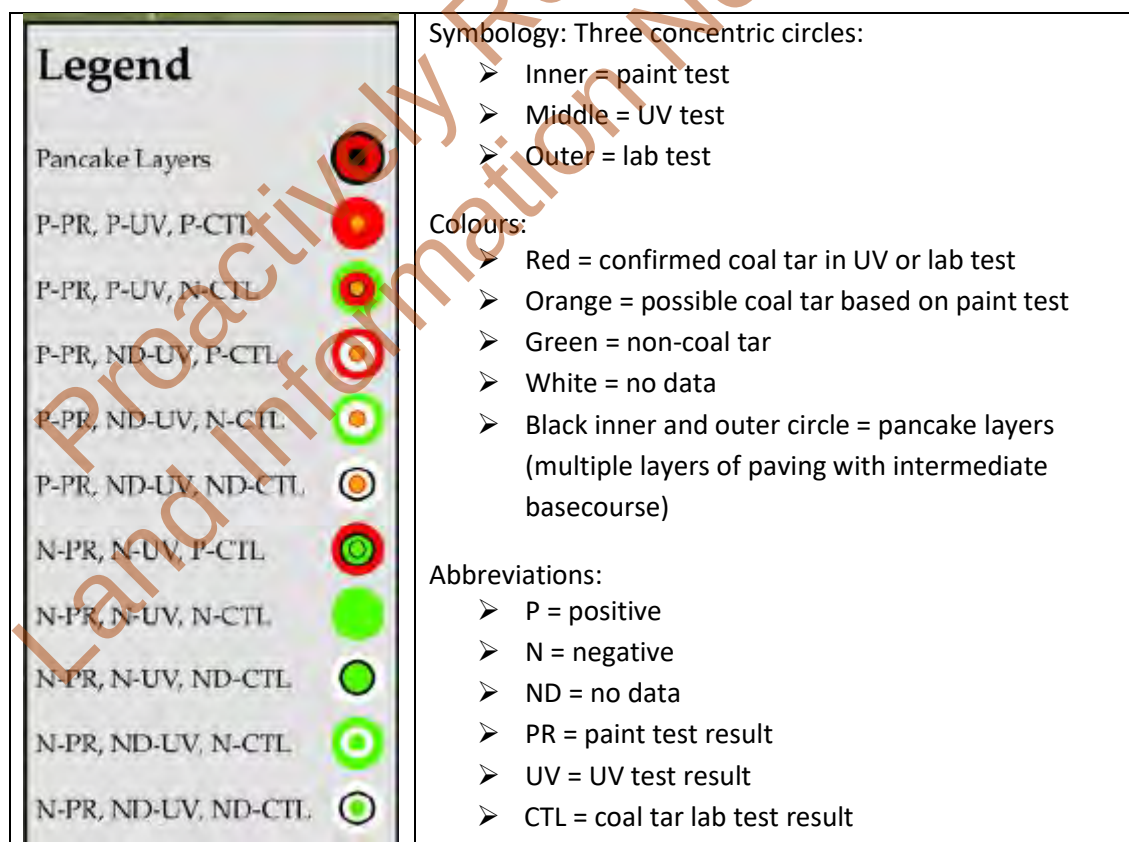


Figure 6: Explaining Coal Tar Drawings Legend

Drawing CT01 provides an overview of all surface paving sampling locations. Subsequent drawings CT02-CT06 provide higher resolution drawings of the surface sampling results at an appropriate scale so that individual sample locations can be seen.

Similarly, Drawing CT07 provides an overview of all basecourse sampling locations, with higher resolution drawings in drawings CT08-CT12, while Drawing CT13 provides an overview of all subbase sampling locations, with higher resolution drawings in Drawings CT14-CT16.

5.6 DUPLICATE RESULTS ANALYSIS

Relative Percent Difference (RPD) analysis of the individual PAHs was undertaken for the 5 duplicate samples. The analysis indicated that the majority of the results are below 30% RPD (refer to Appendix E). There are some instances where the results are below detection limit, and in these cases the value is unknown and therefore the RPD is not comparable. Three of the duplicate analyses indicate both the original and duplicate samples results were below detection limit (FTL149, 0 - 0.03m; FTL149, 0.03 - 0.13m and; FTL149, 0.13 - 0.3m). Therefore, it is probable that these duplicates are relatively similar.

Duplicate FTL139 (0 – 0.04m) indicated no exceedances of 30% RPD, whereas duplicate FTL139 (0.04 – 0.23m) indicated that a majority of the results exceeded 50% RPD. This however may be due to there being non-homogenous coal tar indication from the paint and UV light test result in the basecourse at this location.

6 DISCUSSION

6.1 SOIL ANALYTICAL RESULTS

The soil sampling results generally do not comply with the WasteMINZ and the NESCS guidelines. In particular:

6.1.1 PAVEMENT/ROADING SAMPLES

- 110 out of the 193 surface samples contained one or more PAH species.
- 51 of these 110 samples exceeded the WasteMINZ coal tar guidelines for Total PAHs and BAP(eq). Of these 51 samples, 49 also indicated positive for the paint and/or UV light test.
- 5 out of the 110 surface samples did not exceed the WasteMINZ coal tar guidelines Total PAHs and/or BAP(eq) but did return a positive result for UV Light test.

6.1.2 BASECOURSE SAMPLES

- 113 out of the 161 basecourse samples contained one or more PAH species.
- 27 out of the 113 basecourse samples exceeded the WasteMINZ coal tar guidelines for Total PAHs and/or BAP(eq). Of these 27 samples, 10 samples returned positive for paint and/or UV Light.

- 1 out of the 113 base course samples did not exceed the WasteMINZ coal tar guidelines Total PAHs and/or BAP(eq), but did return a positive result for UV Light test.

6.1.3 SUBBASE SAMPLES

- 54 out of the 103 subbase samples contained one or more PAH species.
- 13 out of the 54 subbase samples exceeded the WasteMINZ coal tar guidelines for Total PAHs and/or BAP(eq). Of these 13 samples mentioned above, 2 samples returned positive for paint and/or UV Light.
- Subbase sampling indicate that the Total PAHs generally decreased with depth of roading layers. With the exception of FTL91 (due to a coal tar vein detected), FTL125 and 144 where there was an increase in Total PAHs and/or BAP(eq) compared to the surface and basecourse samples.

6.2 COAL TAR PRESENCE

Laboratory analytical results, petroleum distillate paint and UV light fluorescence tests have been utilized as indicators to identify which materials likely contain coal tar. Classifications have been defined as;

- 'Confirmed' coal tar presence was defined as a positive paint/UV test, positive UV test and/or positive lab result.
- 'Non-Coal Tar' was defined as results that were below the WasteMINZ coal tar guidelines, as well as returning a negative UV light test. Where only the paint test was positive, it was considered insufficient enough to determine coal tar. The following tables list the presence of coal tar in the surface, basecourse and subbase samples.

Table 3: Coal Tar Presence in Surface Samples

Coal Tar Presence	Sample Name
Confirmed	FTL06, FTL14, FTL22, FTL27, FTL29, FTL36A, FTL38A, FTL41A, FTL51A, FTL54A, FTL82 (0.11-0.13m), FTL83, FTL83 (0.09-0.13m), FTL84 (0.03-0.06m), FTL86, FTL88 (0.03 – 0.06), FTL89 (0.02-0.05), FTL90, FTL92 (0.13-0.14m), FTL92 (0.24-0.29m), FTL89, FTL96, FTL98, FTL99 (0.23-0.27), FTL110, FTL114 (0.03-0.06m), FTL115, FTL118, FTL133, FTL134, FTL139, FTL141, FTL142 (0.1-0.15m), FTL143, FTL144 (0.1-0.14m), FTL148 (0.02-0.05m), FTL151 (0.04-0.09m), FTL152, FTL153 (0.02-0.07m), FTL154 (0.04-0.08m), FTL157 (0.2-0.23m), FTL158 (0.09-0.15m), FTL160, FTL160 (0.09-0.14m), FTL161, FTL165, FTL174, FTL176, FTL177, FTL189, FTL190, FTL191 (0.2-0.24m), FTL193, FTL193 (0.02-0.05m) FTL196 (0.08 – 0.11m) and FTL197 (0.03 – 0.06m)
Non-Coal Tar	Remaining surface samples

Table 4: Coal Tar Presence in Basecourse Samples

Coal Tar Presence	Sample Name
Confirmed	FTL06, FTL22, FTL27, FTL30, FTL36, FTL37, FTL40, FTL41 FTL50, FTL51, FTL53, FTL82, FTL83, FTL92, FTL98, FTL99, FTL118, FTL125, FTL134, FTL139, FTL141, FTL143, FTL144, FTL165, FTL177, FTL189, FTL191, and FTL196
Non-Coal Tar	Remaining basecourse samples

Table 5: Coal Tar Presence in Subbase Samples

Coal Tar Presence	Sample Name
Confirmed	FTL41, FTL51, FTL58, FTL83, FTL84, FTL91 (0.22 – 0.27), FTL91 (0.27-0.4), FTL93 (0.24-0.37), FTL115, FTL125, FTL141, FTL142 and FTL144
Non-coal Tar	Remaining subbase samples

6.3 CONSENTING REQUIREMENTS

Consenting requirements will be presented by SLR Consulting Limited in a separate planning memorandum or report.

7 COAL TAR REMOVAL REQUIREMENTS

7.1 ANALYSIS APPROACH

The intrusive investigation undertaken has found that Coal tar is present across all three road network groups and roading layers. The majority of the coal tar, in terms of areal coverage, is

in the surface pavement layers, with the areas with coal tar decreasing in the basecourse and further decreasing in the subbase.

A conservative approach has been taken here, in that the entire basecourse and subbase depth profile has been assumed to contain coal tar, based on the multiple lines of evidence approach referred to previously. Given these layers are typically significantly thicker than the paving layer, this results in significant quantities of coal tar being calculated to be present in both the basecourse and subbase. It may be possible to reduce the basecourse and subbase quantities by close supervision of these works.

Furthermore, there are localised areas of the site where multiple ‘top ups’ of the basecourse and pavement have been done over the years, forming a “pancake” roading structure. For these areas, individual samples have been collected from each of the relevant roading layers. For removal purposes, all pancake layers with a positive coal tar result will be removed in their entirety, as separating these layers during removal would be impractical for the contractor.

7.2 CONFIRMED COAL TAR AREAS

Figures 7, 8 and 9 show the areal distribution of coal tar in the paving, basecourse and subbase layers. Drawings CT17, CT21 and CT26 show the same information but at a larger scale. Drawings CT18-20 and CT22-25 show the same plans for surface paving and basecourse layers respectively with areas and quantities added for each removal polygon.

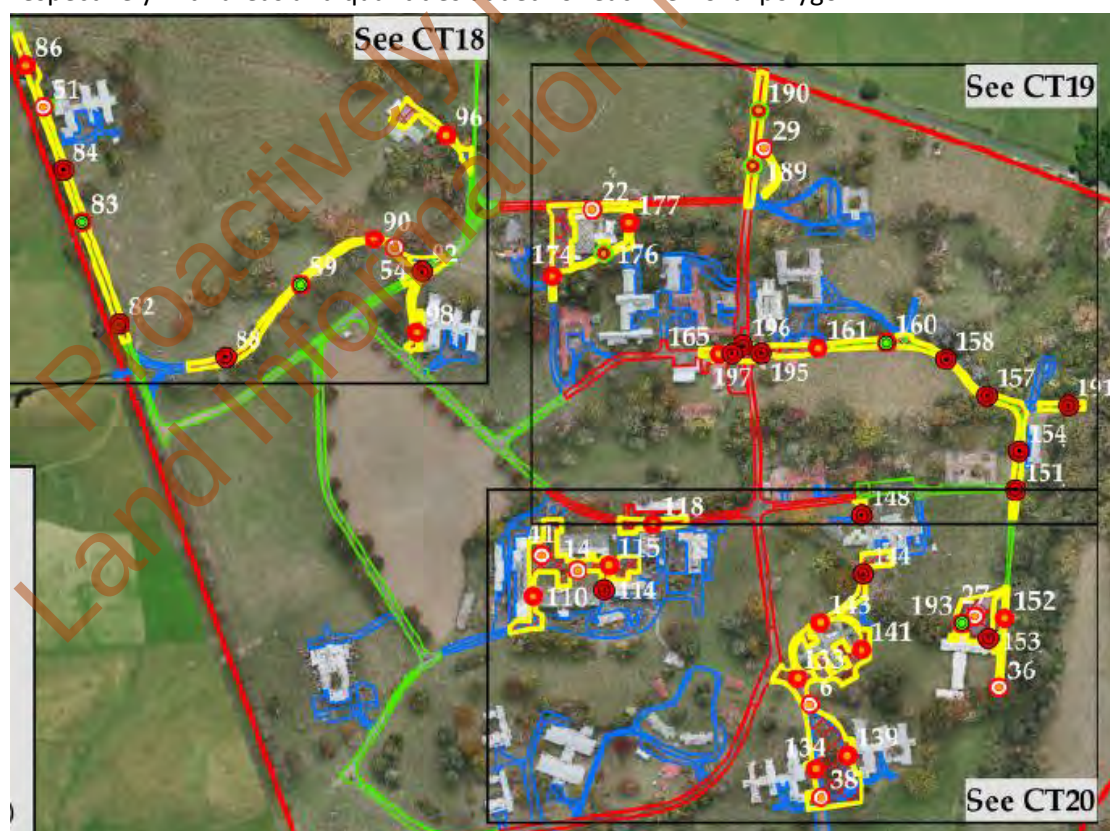


Figure 7: Coal Tar in Roading Surface (Paving) Location Plan – yellow polygons

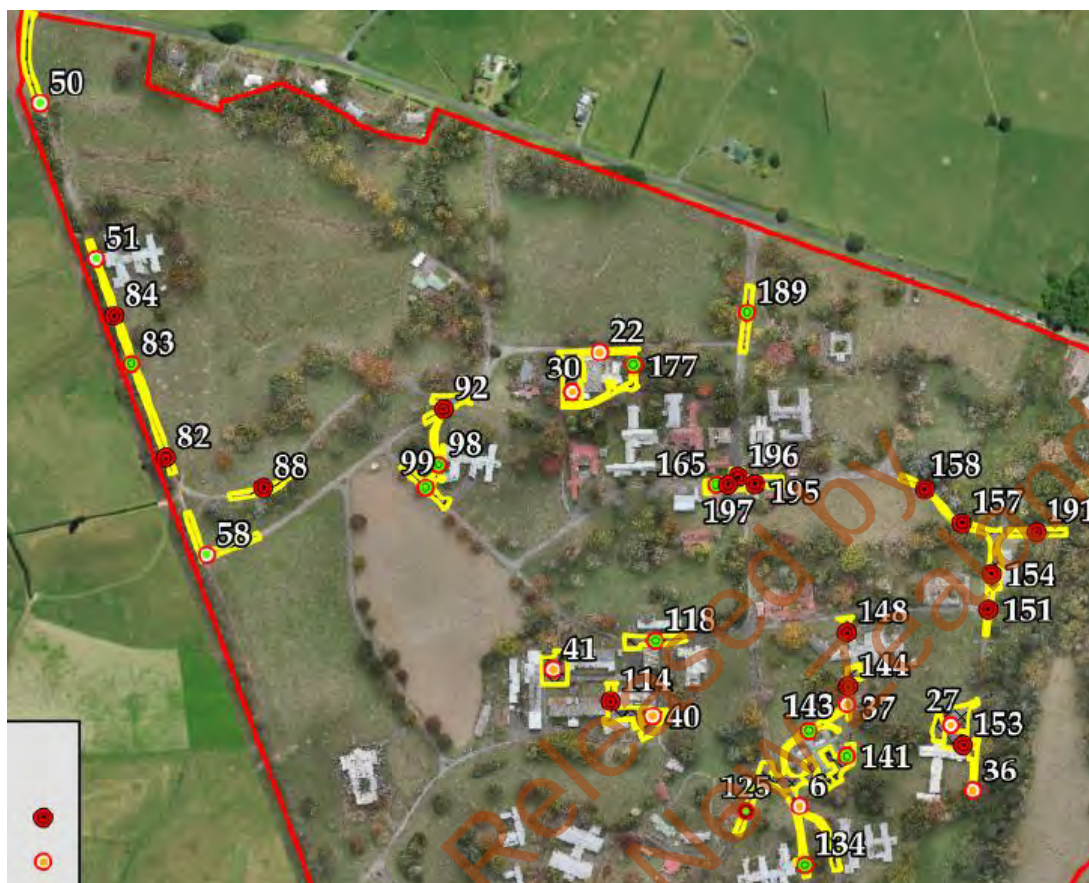


Figure 8: Coal Tar in Roding Basecourse Location Plan – Yellow Polygons

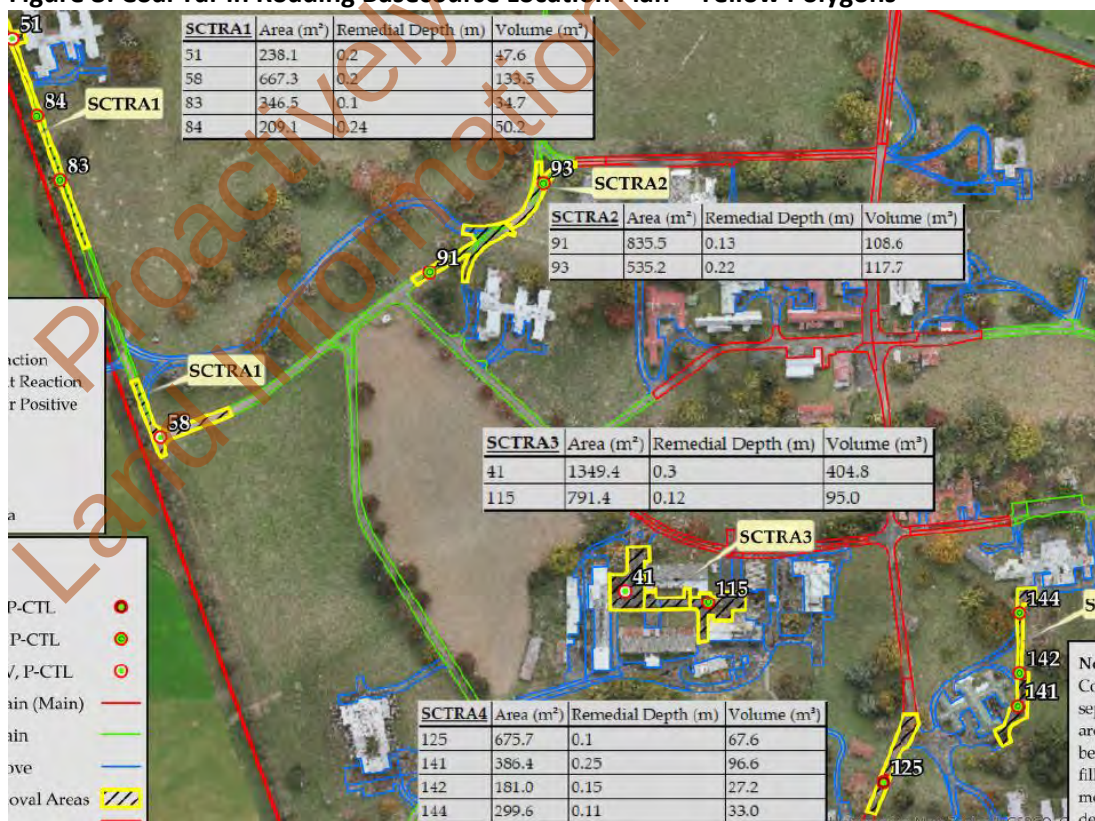


Figure 9: Coal Tar in Roding Subbase Location Plan – Yellow Polygons

7.3 REMOVAL METHODOLOGY

All confirmed coal tar roading materials are to be removed from the site, regardless of depth within the road network. The proposed methodology for this is set out below:

- Remove all surface pavement in up to 50mm increments (to limit cross contamination) in accordance with the FTL Drawings CT17-26, utilising excavators and/or milling plant (if proposed by contractor). Surface material is to be placed directly into bins adjacent to the works area and/or stockpiled in controlled areas until sufficient volume is generated to fill trucks for offsite disposal. All excavated surface material is to be placed in like for like bins or stockpiles, i.e. coal tar into coal tar bins/stockpiles, asphalt into asphalt bins/stockpile and chipseal into chipseal bins/stockpiles;
- In the Red/Green Road network areas, any surface layers that have been identified at depth (Pancake layers/multiple layers of surface material) will also require removal by excavator and/or milling plant. This material is to be handled and placed in bins/stockpiles as detailed above;
- In the Red/Green Road network areas, any material removed will be “topped” up with basecourse using well graded Farm AP40 (FAP40), compacted to tie in with the existing basecourse material and forming rural “hardfill/gravel” farm tracks for ongoing use;
- In the Blue Road network area, all material (surface, basecourse and subbase) will be removed by excavator and/or milling plant. Material is to be handled and placed in bins/stockpiles as detailed above;
- In Blue Road network areas, the entire removal area to be reinstated with soil and returned to grazing land use;
- All roading material removed during this process to be disposed of offsite to a suitably licensed disposal facility, or processing facility for recycling and reuse.
- Some isolated other materials (concrete, coal tar vein) will be similarly removed during this process.

This removal methodology is intended to be flexible and will be discussed and confirmed with LINZ and the removal contractor prior to works beginning. Any significant changes to the proposed removal methodology will be provided to Council for technical certification at least 10 days prior to works beginning at the site.

In-situ screening using the paint and UV tests may be beneficial to further reduce offsite disposal volumes.

Table 6 summarises the estimated quantities of each layer of roading material across the red, green and blue networks. Table 7 summarises the corresponding estimated quantities of coal tar and Table 8 summarises the estimated quantities of roading materials to be removed from site, either due to the presence of coal tar or as part of the planned removal of the entire blue roading network.

Table 6: Total Roding Quantities (m³)

Item	Red	Green	Blue	Total
Pavement	554	926	1,604	3,084
Basecourse	1,711	2,720	4,096	8,527
Subbase	1,159	2,102	4,724	7,985
Total	3,424	5,749	10,424	19,597
Other	Concrete: 118	Coal tar vein: 28	0	146
Revised Total	3,542	5,777	10,424	19,743

Table 7: Coal Tar Roding Quantities (m³)

Item	Red	Green	Blue	Total
Pavement	175	395	506	1,075
Basecourse	437	868	624	1,929
Subbase	68	448	657	1,172
Total	680	1,711	1,787	4,177

Table 8: Total Roding Removal Quantities – Coal tar and Non-coal Tar (m³)

Item	Red	Green	Blue	Total
Pavement				
➤ Coal tar	175	395	506	1,075
➤ Non-coal tar	379	531	1,098	2,008
Basecourse				
➤ Coal tar	437	868	624	1,929
➤ Non-coal tar	N/A	N/A	3,472	3,472
Subbase				
➤ Coal tar	68	448	657	1,172
➤ Non-coal tar	N/A	N/A	4,067	4,067
Total				
➤ Coal tar	680	1,711	1,787	4,177
➤ Non-coal tar	379	531	8,637	9,547

The removal of the coal tar contaminated roding materials should be undertaken by contractors in accordance with the requirements of the Demolition, Deconstruction and Remediation Plan (DDRMP), including associated Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE) as described in that plan.

7.4 LANDFILL WASTE ACCEPTANCE TESTING

Most of the samples tested exceeded the waste acceptance criteria for the Ridge Rd and Gleeson Quarry Managed Fills and the Hampton Downs Class 1 Landfill waste acceptance criteria without TCLP testing. Hence, TCLP testing was undertaken on 10% of the samples collected for each roding layer, comprising 11 surface samples, 11 basecourse samples and 5

subbase samples. Samples selected for testing covered a range of PAH concentrations from low to high.

Analytical results found that only TCLP extract concentrations in PAHs for a single species, namely Anthracene, were in exceedance of the Hampton Downs TCLP Waste Acceptance Limits in four (15%) of the 27 samples analysed (FTL98 0-0.05, FTL98 0.05-0.2, FTL142 0.1-0.15 and FTL165 0-0.04). Three of these samples were collected from the surface/roading layer (FTL98 0-0.05, FTL142 0.1-0.15 and FTL165 0-0.04), and one from the basecourse layer (FTL98 0.05-0.2m).

TCLP extract concentrations in PAHs for all remaining species, in all remaining samples analysed, were within the Hampton Downs TCLP Waste Acceptance Limits, and are therefore considered suitable for disposal to the Hampton Downs Landfill Facility.

The anthracene issue was discussed with the EnviroNZ Environmental Manager (Laurence Dolan, phone conversation 14/11/24) who advised that provided the 95th UCL (upper confidence limit) TCLP concentrations were within their waste acceptance criteria, they should be able to accept this material. The 95th UCL TCLP has been calculated for the combined roading material (i.e. paving, basecourse and subbase together) to be 0.007g/m³ which is within the 0.01g/m³ landfill TCLP waste acceptance limit. Hence, this material should be acceptable for disposal to the Hampton Downs landfill.

8 CONCLUSIONS

This Coal Tar Investigation report covers comprehensive additional road material sampling/lab testing investigations undertaken by FTL in May - July 2024. These additional investigations were undertaken in order to better determine the horizontal and vertical extent of coal tar contamination in roading and paving across the site, with this information then used to determine coal tar removal requirements and quantities.

In total, 457 individual samples from 167 locations at various depths (0-1.25m) were collected by FTL across the site over three rounds of sampling for Polycyclic Aromatic Hydrocarbons (PAHs) analysis of the roading material. These samples comprised 193 surface/pavement samples, 161 basecourse samples and 103 subbase samples. As part of the field assessments undertaken, petroleum distillate spray paint testing was used in all three rounds; ultraviolet (UV) handheld lights to assess fluorescence response was only in the third round; while lab sampling was conducted across all three rounds, increasing in density with each round.

The sampling results identified:

- Surface (paving): 110 of the 193 surface samples contained one or more PAH species, of which 51 samples also exceeded the WasteMINZ coal tar guidelines for Total PAHs and BAP(eq), while 49 samples also indicated a positive response for the paint test and/or UV light test.

- Basecourse: 113 out of the 161 basecourse samples contained one or more PAH species, of which 27 samples also exceeded the WasteMINZ coal tar guidelines for Total PAHs and/or BAP(eq), while 10 samples also returned positive responses for the paint and/or UV light test.
- Subbase: 54 out of the 103 subbase samples contained one or more PAH species, of which 13 samples also exceeded the WasteMINZ coal tar guidelines for Total PAHs and/or BAP(eq), while 2 samples also returned positive responses for the paint and/or UV light test.

Across the site, the roading network has been divided into three sections: red, green and blue, based on proposed remediation works. The intrusive investigation undertaken has found that coal tar is present across all three road network colours and roading layers. The majority of the coal tar, in terms of areal coverage, is in the surface pavement layers, with the areas with coal tar decreasing in the basecourse and further decreasing in the subbase. A conservative approach has been taken here, in that the entire basecourse and subbase depth profile has been assumed to contain coal tar. Given these layers are typically significantly thicker than the paving layer, this results in reasonable quantities of coal tar being calculated to be present in both the basecourse and subbase. Furthermore, there are localised areas of the site where multiple 'top ups' of the basecourse and pavement have been done over the years, forming a "pancake" roading structure.

On this basis, quantities of coal tar roading materials (all solid measure) are estimated to be:

- Pavement: 1,075m³
- Basecourse: 1,929m³
- Subbase: 1,172m³
- Total: 4,177m³

It may be possible to reduce the basecourse and subbase quantities by utilising in-situ screening of material using paint and UV light tests.

Toxicity Characteristic Leaching Procedure (TCLP) extract analytical results found that TCLP extract concentrations in PAHs for only a single species, namely Anthracene, were in exceedance of the Hampton Downs TCLP Waste Acceptance Limits in four (15%) of the 27 samples analysed. The 95th Upper Confidence Level (UCL) TCLP for anthracene was calculated for the combined roading material to be 0.007g/m³ which is within the 0.01g/m³ landfill TCLP waste acceptance limit and hence should be acceptable for disposal to the Hampton Downs landfill based on discussions with the EnviroNZ Environmental Manager.

9 LIMITATIONS

We have performed our services for this project in accordance with current professional standards for an assessment of the nature and extent of any soil contamination on-site, based upon preliminary site assessment investigations and current regulatory standards for site contamination. The scope of the site assessment activities was generally in accordance with the Ministry for Environment Contaminated Land Management Guideline's (Parts 1 (2021), 2

(2011) and 5 (2021)) and the NESCS (2011). Conclusions on actual or potential contamination cannot be applied to areas outside of the site investigation.

We do not assume any liability for misrepresentation or items not visible, accessible or present at the subject site during the time of the site inspection.

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Figures

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FORMER TOKANUI HOSPITAL DEMOLITION AND REMEDIATION

33205

COAL TAR INVESTIGATION REPORT

CONTAMINATED ROADING

25/09/2024

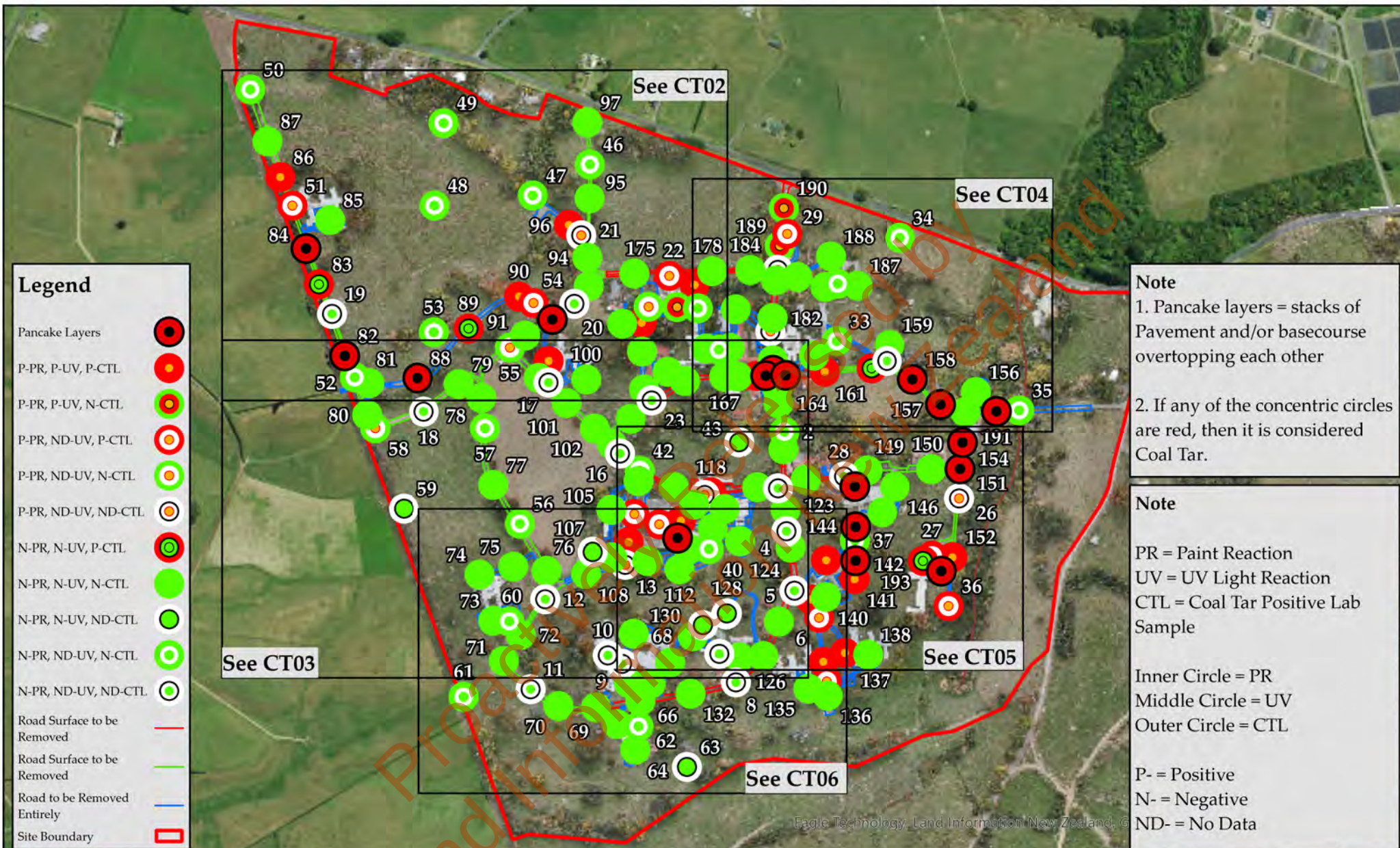


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List of Drawings

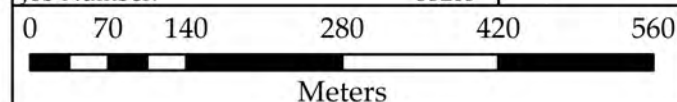
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33205/CT02	Sample Location Plan - Surface	A
33205/CT03	Sample Location Plan - Surface	A
33205/CT04	Sample Location Plan - Surface	A
33205/CT05	Sample Location Plan - Surface	A
33205/CT06	Sample Location Plan - Surface	A
33205/CT07	Sample Location Plan - Basecourse Overview	A
33205/CT08	Sample Location Plan - Basecourse	A
33205/CT09	Sample Location Plan - Basecourse	A
33205/CT10	Sample Location Plan - Basecourse	A
33205/CT11	Sample Location Plan - Basecourse	A
33205/CT12	Sample Location Plan - Basecourse	A
33205/CT13	Sample Location Plan - Subbase Overview	A
33205/CT14	Sample Location Plan - Subbase	A
33205/CT15	Sample Location Plan - Subbase	A
33205/CT16	Sample Location Plan - Subbase	A
33205/CT17	Removal Plan - Surface Overview	A
33205/CT18	Removal Plan - Surface	A
33205/CT19	Removal Plan - Surface	A
33205/CT20	Removal Plan - Surface	A
33205/CT21	Removal Plan - Basecourse Overview	A
33205/CT22	Removal Plan - Basecourse	A
33205/CT23	Removal Plan - Basecourse	A
33205/CT24	Removal Plan - Basecourse	A
33205/CT25	Removal Plan - Subbase Overview	A
33205/CT26	Removal Plan - Subbase	A



CT01: Coal Tar Sample Location Plan - Pavement Overview

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Date: 25/09/2024
 Drawing Reference: 33205/CT01
 Drawn by: EB
 Reviewed by: SF
 Job Number: 33205

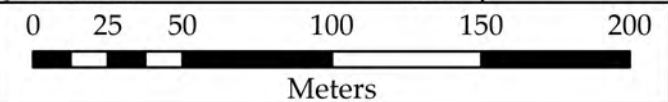


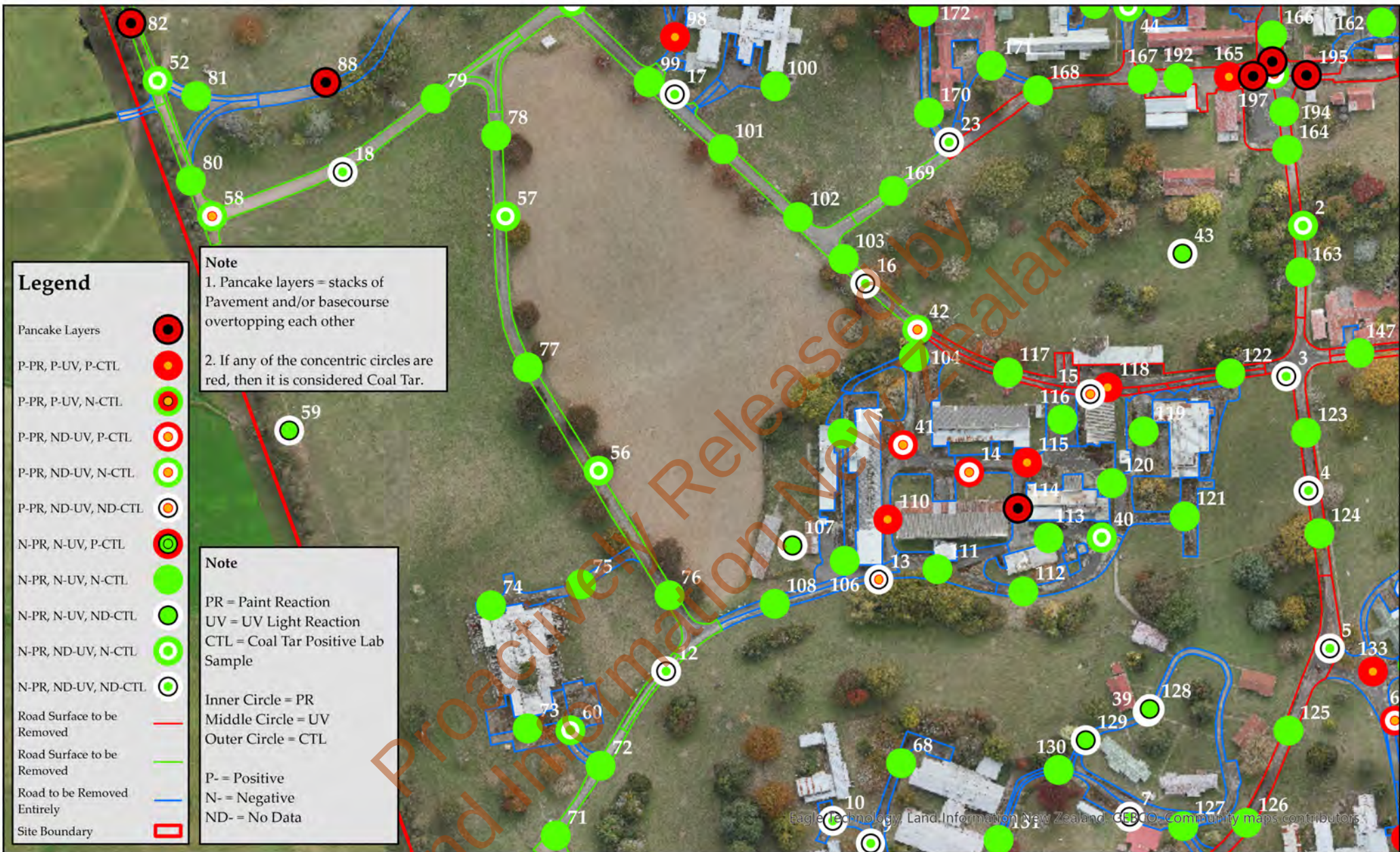


CT02: Coal Tar Sample Location Plan - Surface

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Tokanui

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Drawing Reference: 33205/CT02
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Reviewed by: SF
Job Number: 33205



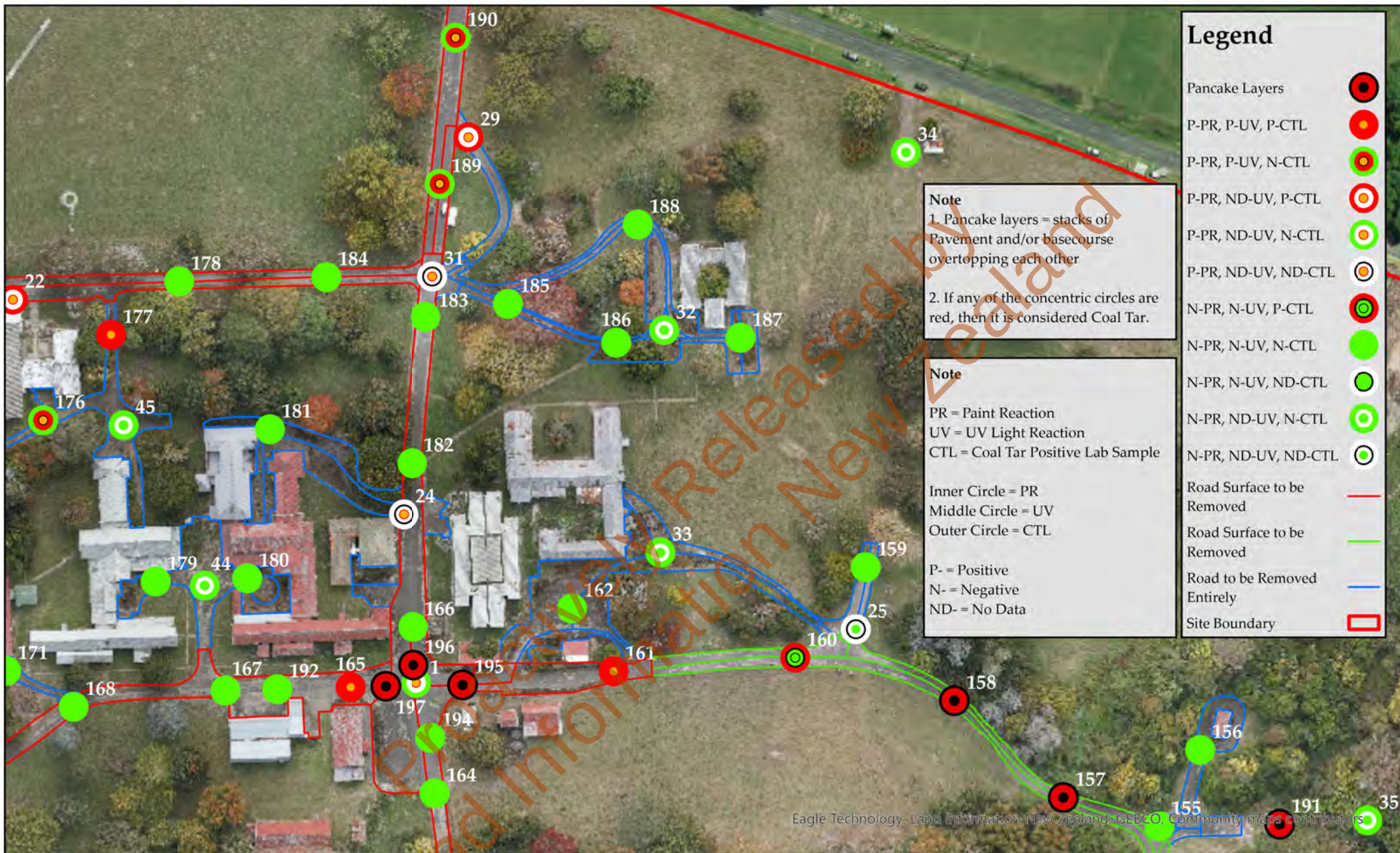


CT03: Coal Tar Sample Location Plan - Surface

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Tokanui

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Reviewed by: SF
Job Number: 33205

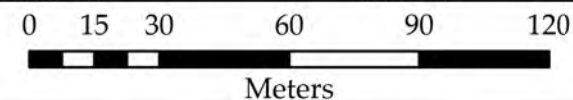




CT04: Coal Tar Sample Location Plan - Surface

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Tokaui

Date: 25/09/2024
Drawing Reference: 33205/CT04
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Reviewed by: SF
Job Number: 33205



Legend

Pancake Layers

P-PR, P-UV, P-CTL

P-PR, P-UV, N-CTL

P-PR, ND-UV, P-CTL

P-PR, ND-UV, N-CTL

P-PR, ND-UV, ND-CTL

N-PR, N-UV, P-CTL

N-PR, N-UV, N-CTL

N-PR, N-UV, ND-CTL

N-PR, ND-UV, N-CTL

N-PR, ND-UV, ND-CTL

Road Surface to be
Removed

Road Surface to be
Removed

Road to be Removed
Entirely

Site Boundary

Note

1. Pancake layers = stacks of
Pavement and/or basecourse
overtopping each other

2. If any of the concentric circles are
red, then it is considered Coal Tar.

Note

PR = Paint Reaction

UV = UV Light Reaction

CTL = Coal Tar Positive Lab Sample

Inner Circle = PR

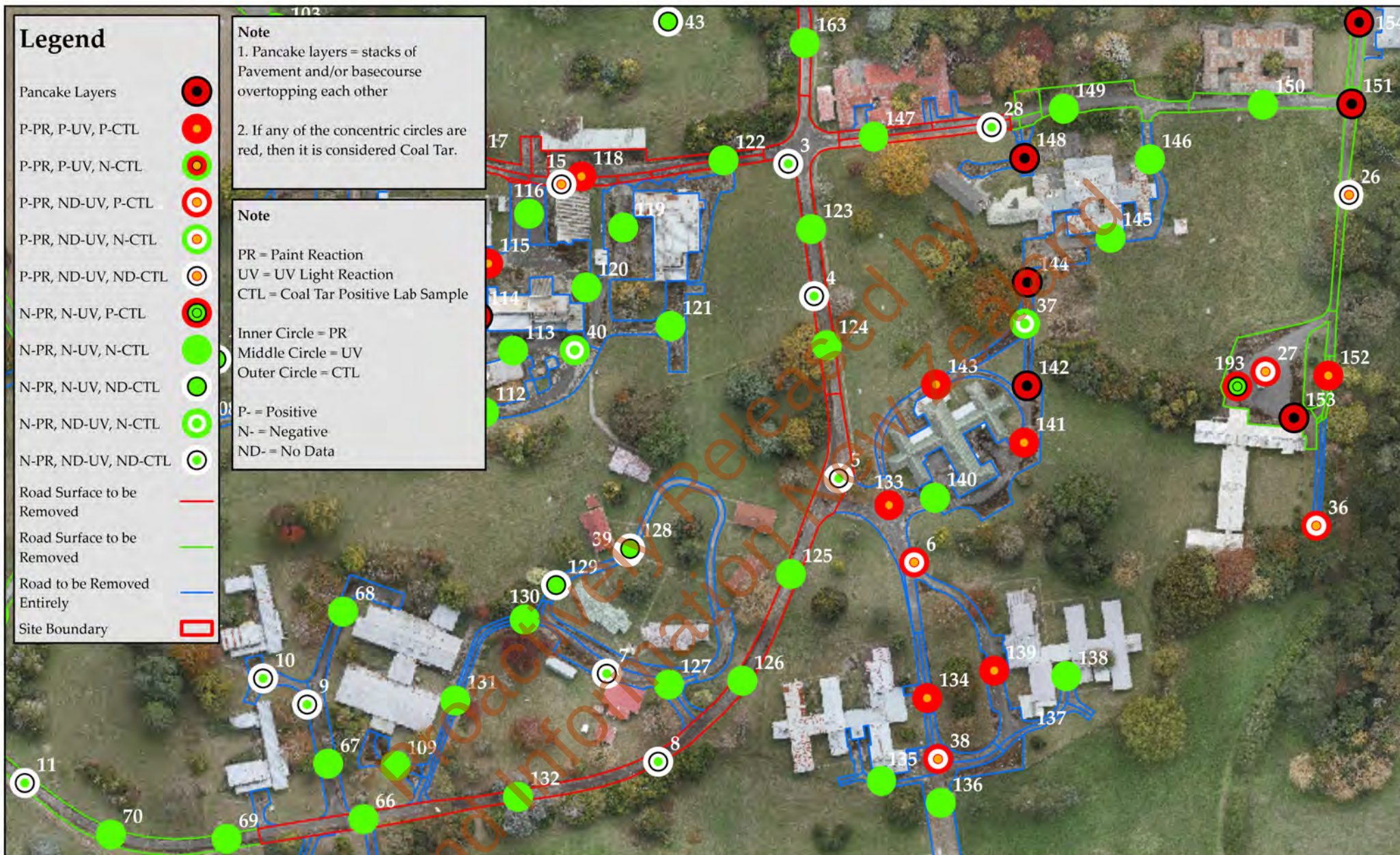
Middle Circle = UV

Outer Circle = CTL

P- = Positive

N- = Negative

ND- = No Data



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CT05: Coal Tar Sample Location Plan - Surface

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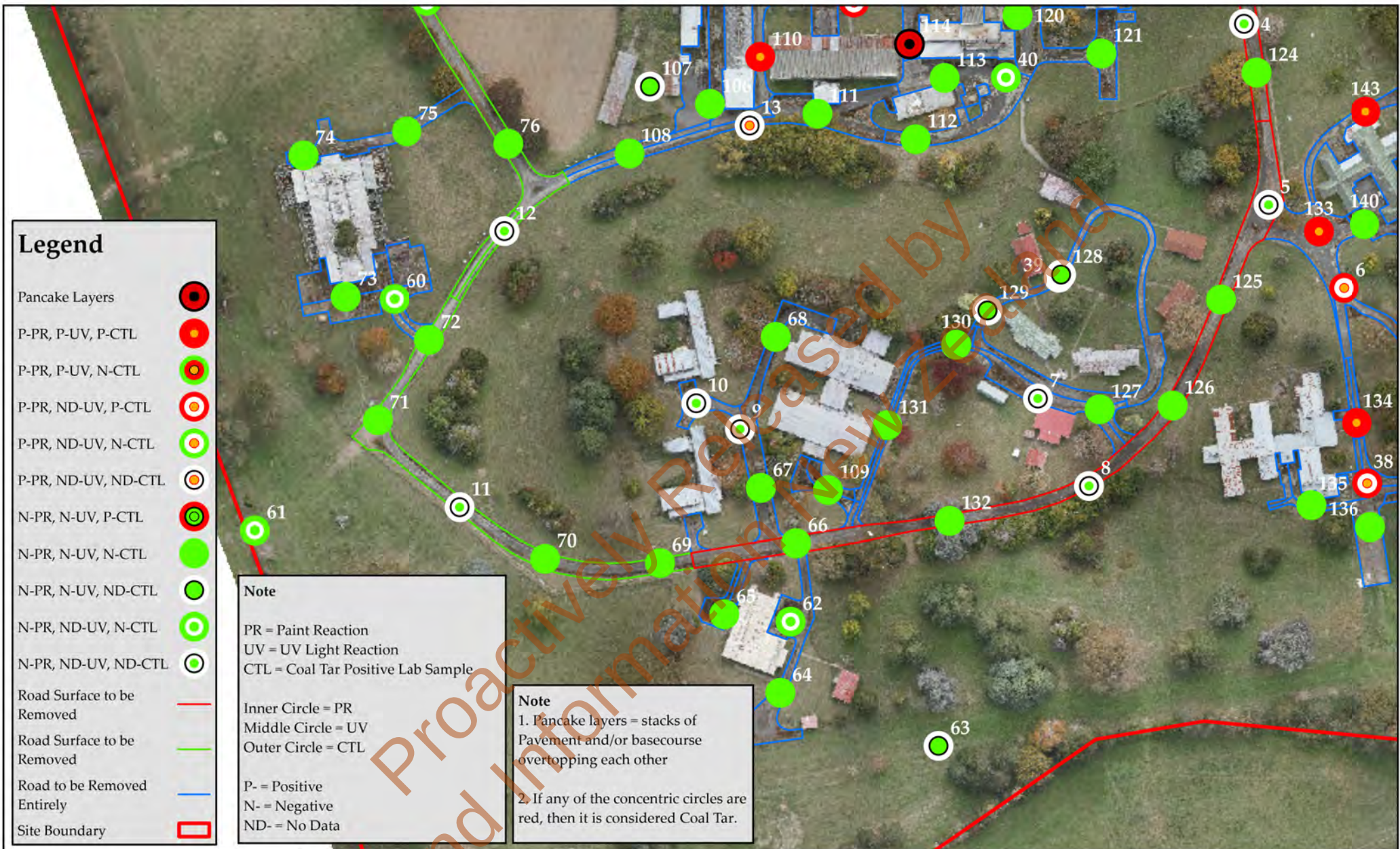
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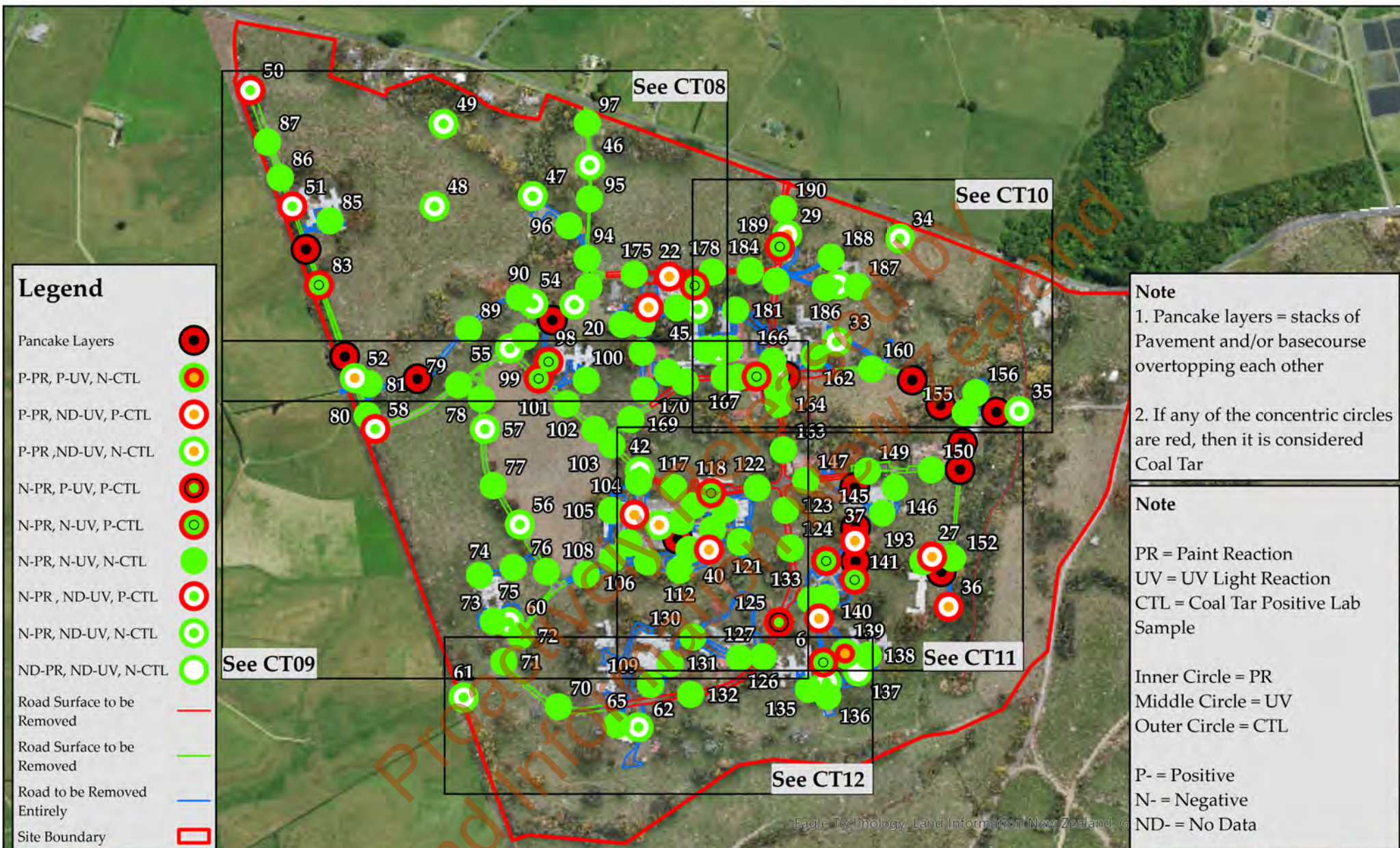


0 20 40 80 120 160



Meters





CT07: Coal Tar Sample Location Plan - Basecourse Overview

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Date: 25/09/2024
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 Drawn by: EB
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 Job Number: 33205

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 Meters

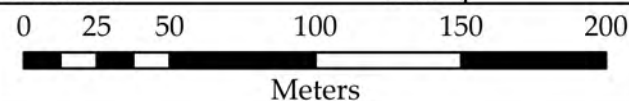




CT08: Coal Tar Sample Location Plan - Basecourse

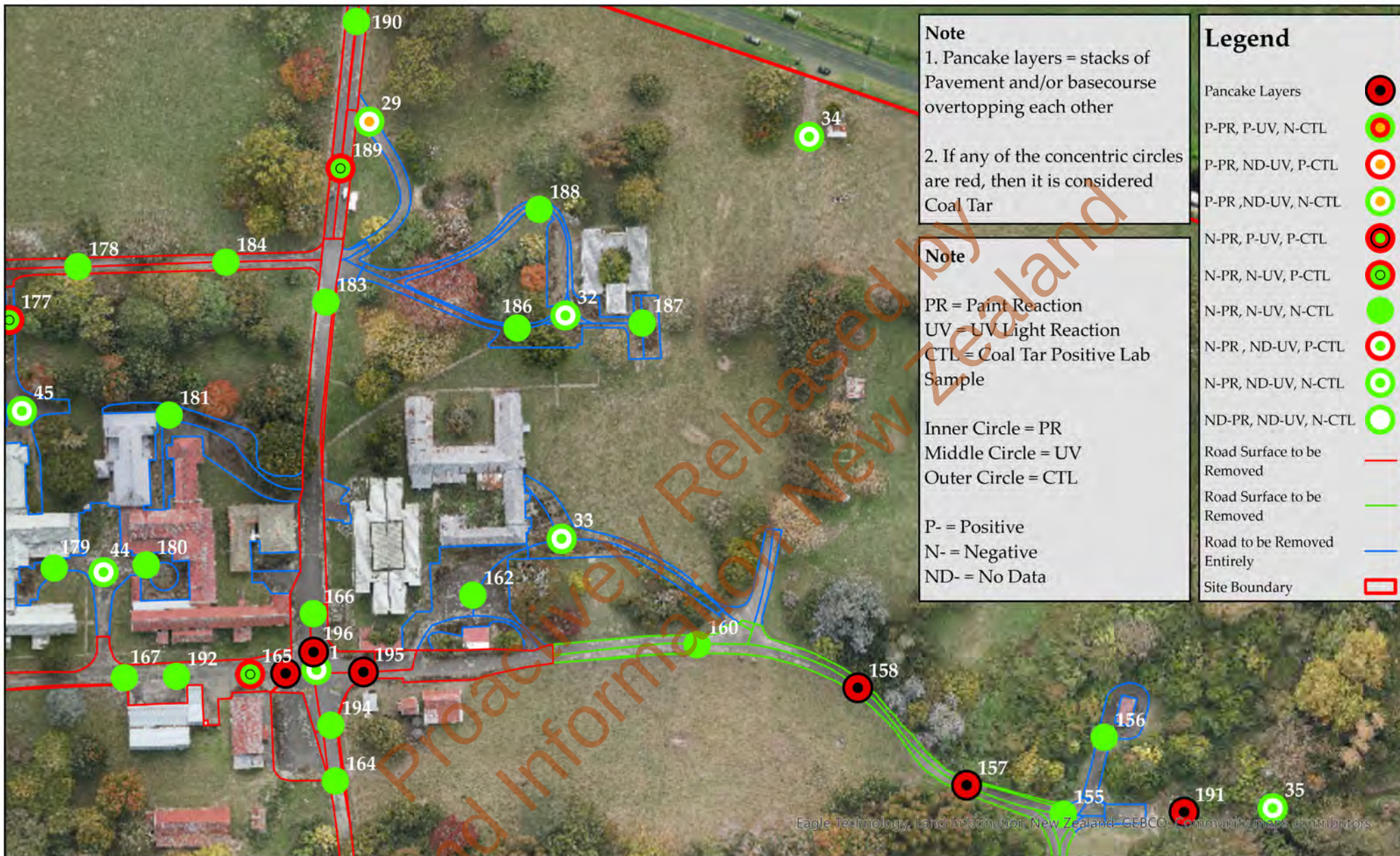
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 Tokanui

Date: 25/09/2024
 Drawing Reference: 33205/CT08
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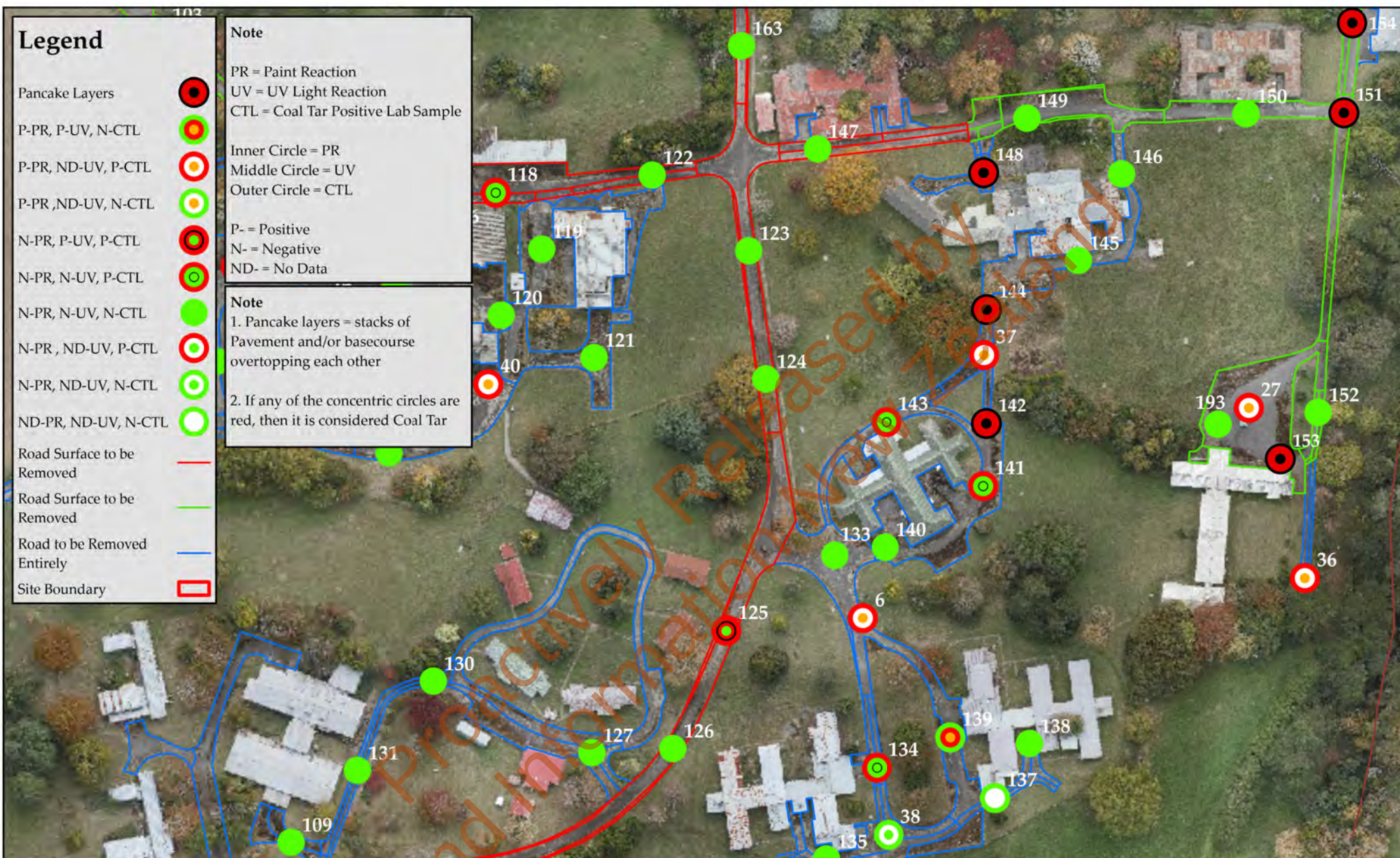




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	Toitū Te Whenua Land Information New Zealand Addendum Detailed Site Investigation - Coal Tar Former Tokanui Hospital Demolition and Remediation Project Tokanui		



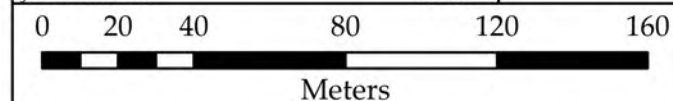
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	Toitū Te Whenua Land Information New Zealand Addendum Detailed Site Investigation - Coal Tar Former Tokanui Hospital Demolition and Remediation Project Tokanui		



CT11: Coal Tar Sample Location Plan - Basecourse

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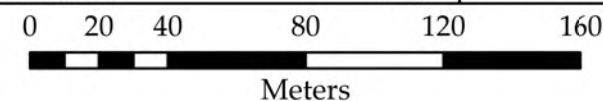


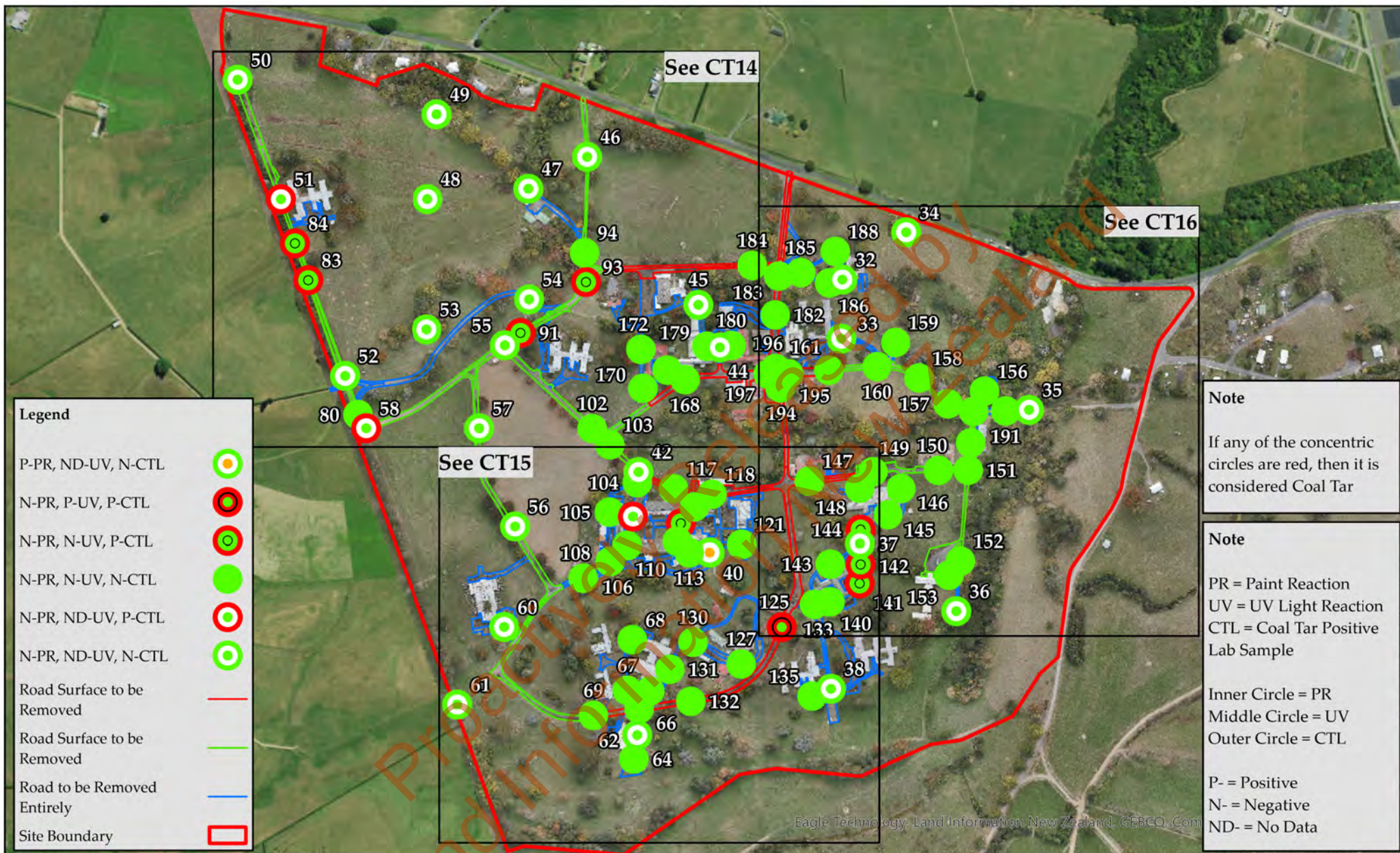


CT12: Coal Tar Sample Location Plan - Basecourse

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Date: 25/09/2024
 Drawing Reference: 33205/CT12
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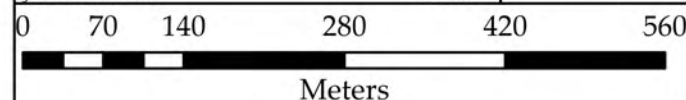




CT13: Coal Tar Sample Location Plan - Subbase Overview

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Former Tokanui Hospital Demolition and Remediation Project
Tokanui

Date: 25/09/2024
Drawing Reference: 33205/CT13
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Reviewed by: SF
Job Number: 33205



Note

PR = Paint Reaction
UV = UV Light Reaction
CTL = Coal Tar Positive Lab Sample

Inner Circle = PR
Middle Circle = UV
Outer Circle = CTL

P- = Positive
N- = Negative
ND- = No Data

Legend

P-PR, ND-UV, N-CTL



N-PR, P-UV, P-CTL



N-PR, N-UV, P-CTL



N-PR, N-UV, N-CTL



N-PR, ND-UV, P-CTL



N-PR, ND-UV, N-CTL



Road Surface to be
Removed



Road Surface to be
Removed



Road to be Removed
Entirely

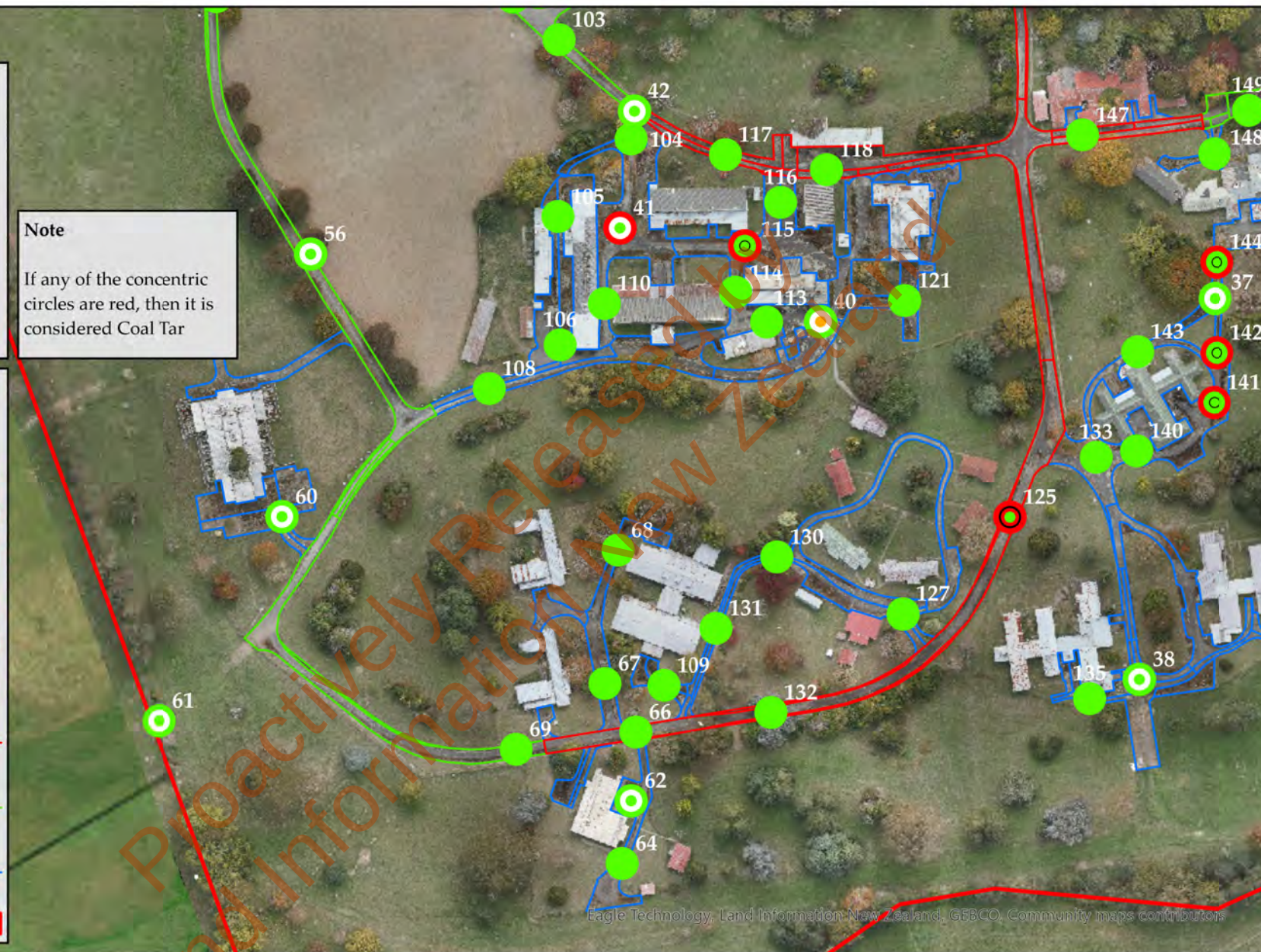


Site Boundary



Note

If any of the concentric
circles are red, then it is
considered Coal Tar



Eagle Technology, Land Information New Zealand, GEBCO, Community maps contributors



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CT14: Coal Tar Sample Location Plan - Subbase

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Date: 25/09/2024
Drawing Reference: 33205/CT14
Drawn by: EB
Reviewed by: SF
Job Number: 33205



0 25 50 100 150 200



Meters

Note

PR = Paint Reaction
UV = UV Light Reaction
CTL = Coal Tar Positive Lab Sample

Inner Circle = PR
Middle Circle = UV
Outer Circle = CTL

P- = Positive
N- = Negative
ND- = No Data

Legend

P-PR, ND-UV, N-CTL



N-PR, P-UV, P-CTL



N-PR, N-UV, P-CTL



N-PR, N-UV, N-CTL



N-PR, ND-UV, P-CTL



N-PR, ND-UV, N-CTL



Road Surface to be
Removed



Road Surface to be
Removed



Road to be Removed
Entirely

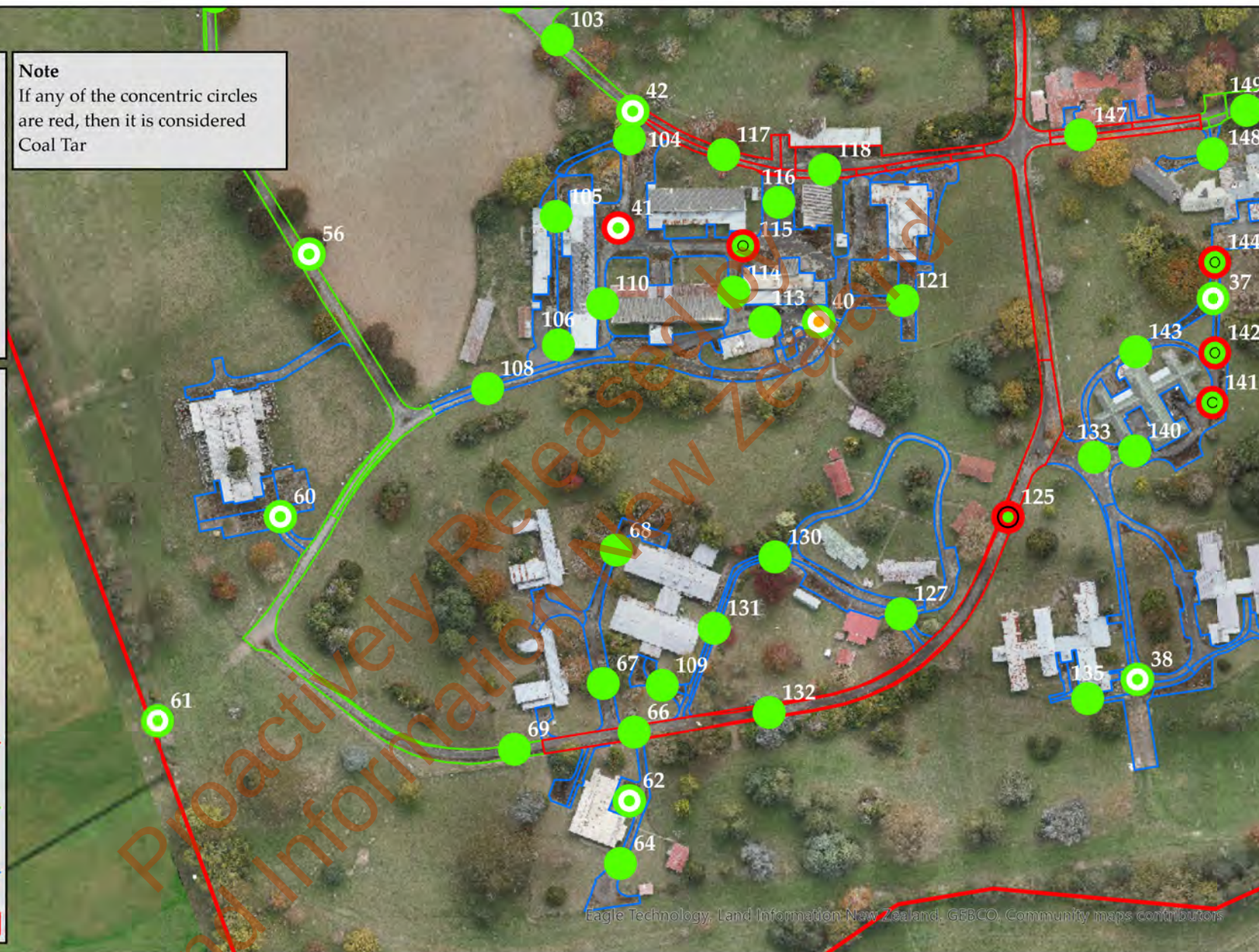


Site Boundary



Note

If any of the concentric circles
are red, then it is considered
Coal Tar



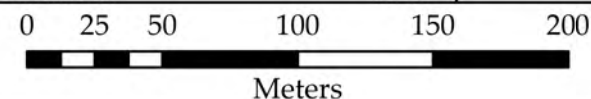
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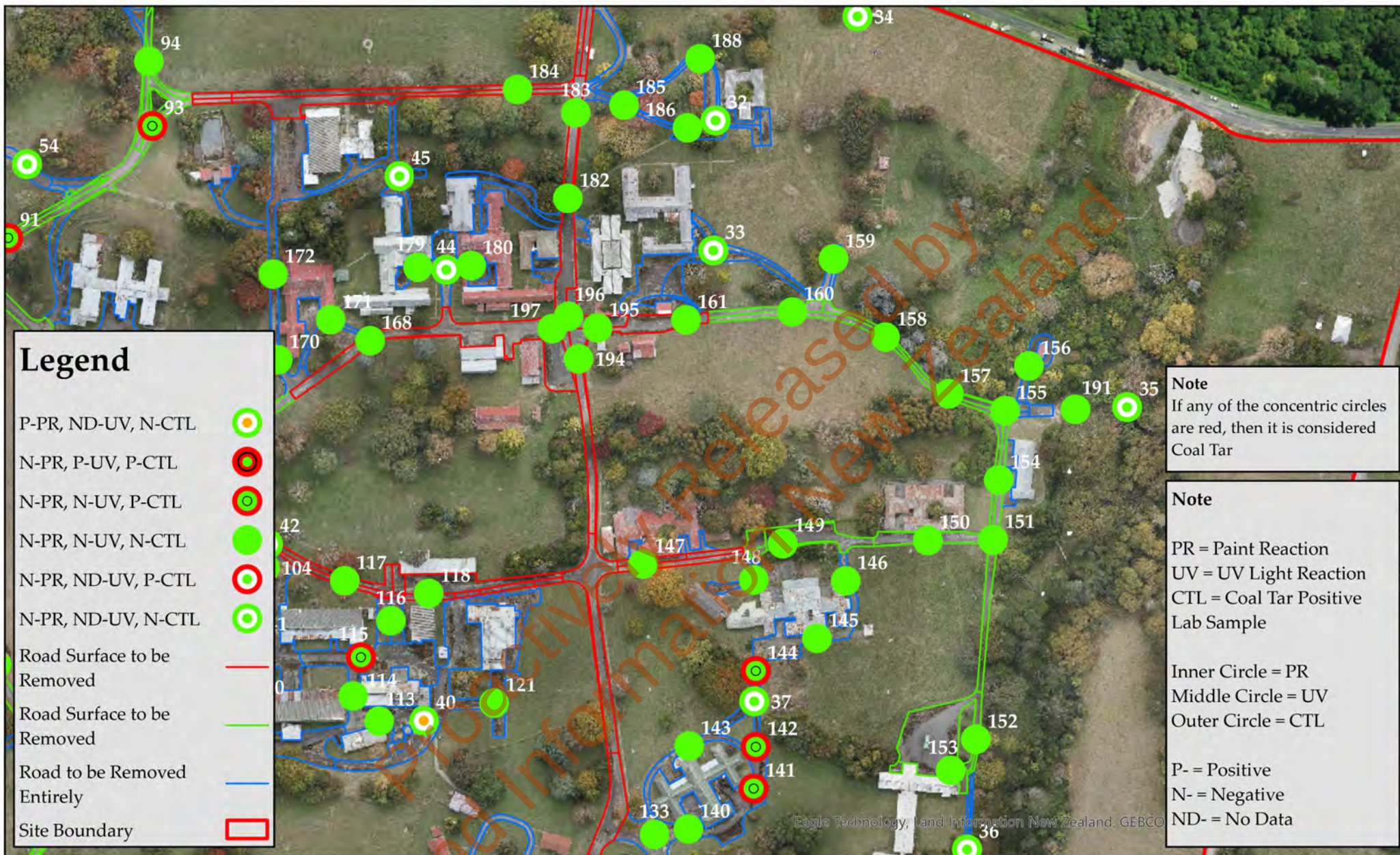
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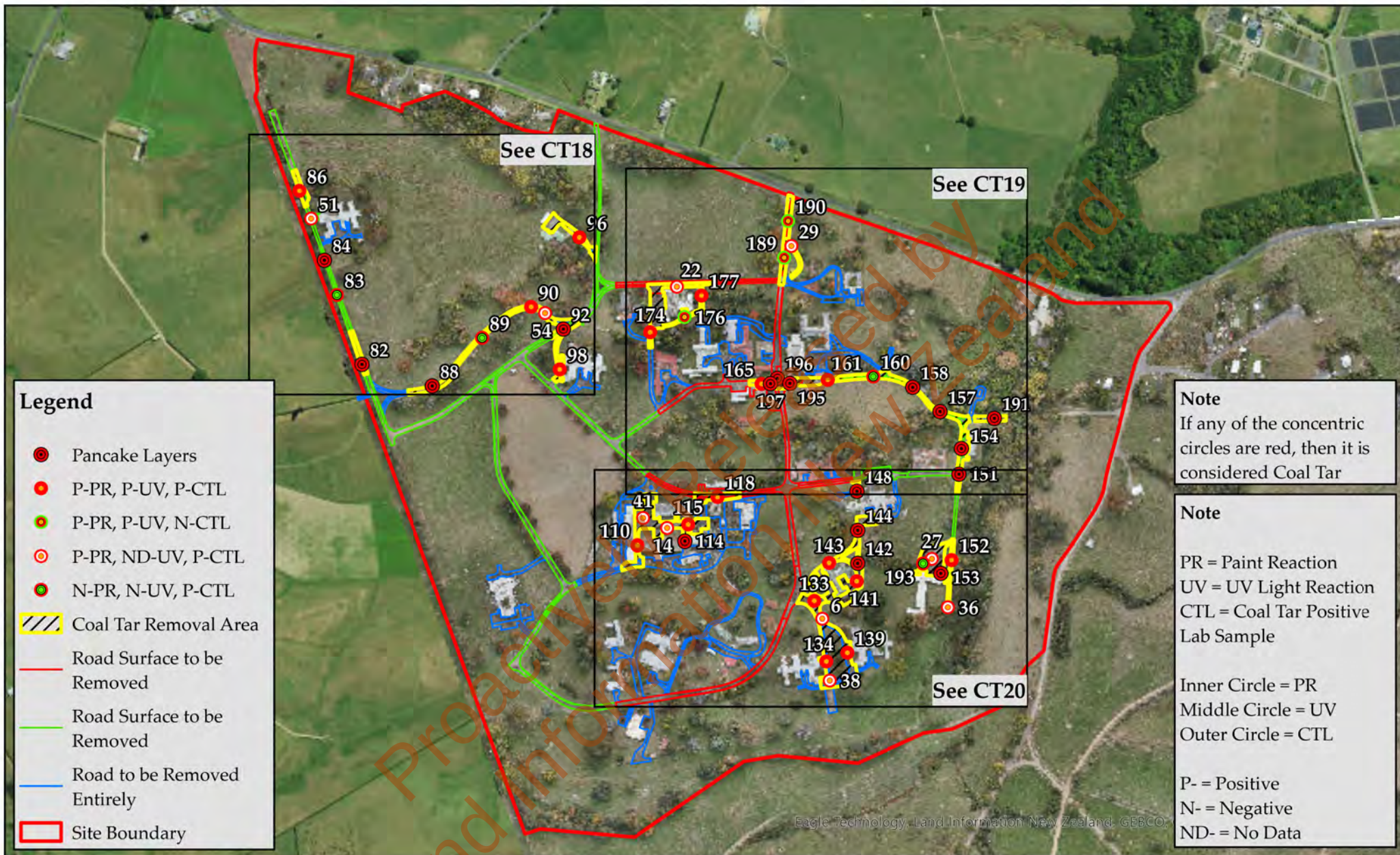
CT15: Coal Tar Sample Location Plan - Subbase

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Addendum Detailed Site Investigation - Coal Tar
Former Tokanui Hospital Demolition and Remediation Project
Tokaui

Date: 25/09/2024
Drawing Reference: 33205/CT15
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Reviewed by: SF
Job Number: 33205



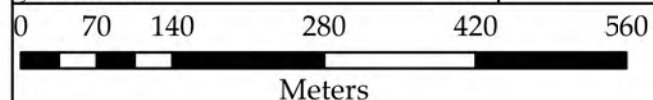




CT17: Coal Tar Removal Plan - Surface Overview

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Addendum Detailed Site Investigation - Coal Tar
Former Tokanui Hospital Demolition and Remediation Project
Tokaui

Date: 25/09/2024
Drawing Reference: 33205/CT17
Drawn by: EB
Reviewed by: SF
Job Number: 33205



SCTRA1	Area (m ²)	Remedial Depth (m)	Volume (m ³)
82	343.2	0.07	24.0
83	346.5	0.09	31.2
84	213.9	0.06	12.8
51	238.1	0.1	23.8
86	361.3	0.05	18.1

SCTRA2	Area (m ²)	Remedial Depth (m)	Volume (m ³)
96	641.3	0.02	12.8

Note

PR = Paint Reaction
UV = UV Light Reaction
CTL = Coal Tar Positive
Lab Sample

Inner Circle = PR
Middle Circle = UV
Outer Circle = CTL

P- = Positive
N- = Negative
ND- = No Data

Legend

- Pancake Layers
- P-PR, P-UV, P-CTL
- P-PR, P-UV, N-CTL
- P-PR, ND-UV, P-CTL
- N-PR, N-UV, P-CTL
- ▨ Coal Tar Removal Area
- ▭ Site Boundary

SCTRA3	Area (m ²)	Remedial Depth (m)	Volume (m ³)
88	513.9	0.06	30.8
89	361.3	0.05	18.1
90	240.3	0.05	12.0
54	193.3	0.1	19.3
92	589.7	0.13	76.7
98	268.8	0.05	13.4

Note

1. Contractors must take separate photos of each area where roading has been removed to licensed fill facility. Include tape measure for scale and depth please

2. If any of the concentric circles are red, then it is considered Coal Tar



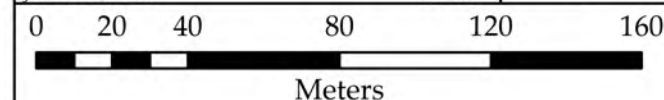
**Fraser
Thomas**

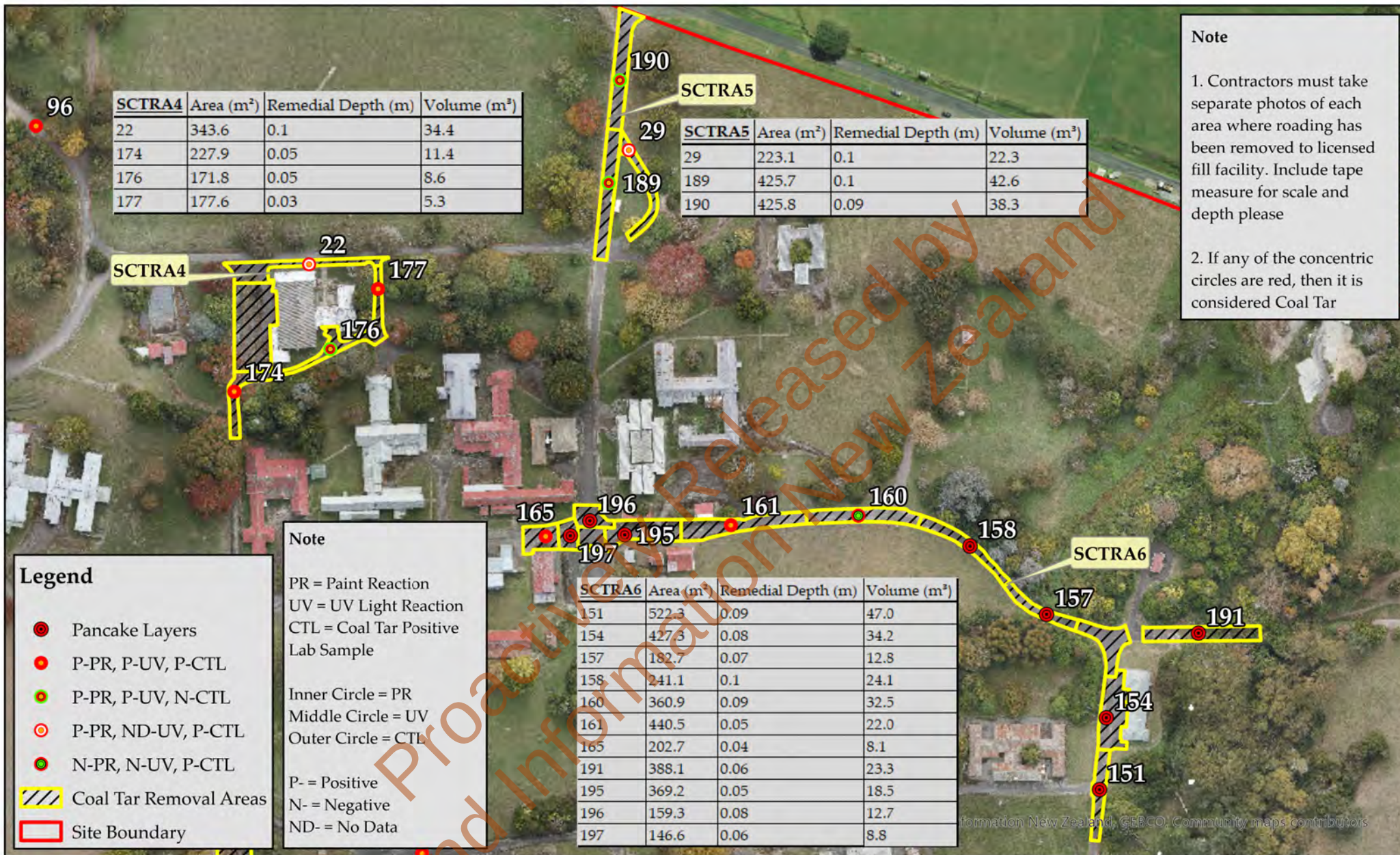
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CT18: Coal Tar Removal Plan - Surface

Toitū Te Whenua Land Information New Zealand
Addendum Detailed Site Investigation - Coal Tar
Former Tokanui Hospital Demolition and Remediation Project
Tokuai

Date: 25/09/2024
Drawing Reference: 33205/CT18
Drawn by: EB
Reviewed by: SF
Job Number: 33205





SCTRA7	Area (m ²)	Remedial Depth (m)	Volume (m ³)
14	529.9	0.1	53.0
41	979.8	0.05	49.0
110	476.5	0.03	14.3
114	174.2	0.06	10.5
115	658.7	0.05	32.9
118	565.8	0.02	11.3

SCTRA9	Area (m ²)	Remedial Depth (m)	Volume (m ³)
27	643.6	0.1	64.4
36	227.6	0.05	11.4
152	214.0	0.05	10.7
153	410.2	0.05	20.5
193	294.0	0.05	14.7

Note

PR = Paint Reaction
UV = UV Light Reaction
CTL = Coal Tar Positive
Lab Sample

Inner Circle = PR
Middle Circle = UV
Outer Circle = CTL

P- = Positive
N- = Negative
ND- = No Data

Legend

- Pancake Layers
- P-PR, P-UV, P-CTL
- P-PR, P-UV, N-CTL
- P-PR, ND-UV, P-CTL
- N-PR, N-UV, P-CTL
- XXXX Coal Tar Removal Areas
- Site Boundary

SCTRA8	Area (m ²)	Remedial Depth (m)	Volume (m ³)
6	406.2	0.1	40.6
38	446.8	0.05	22.3
133	563.2	0.04	22.5
134	199.0	0.04	8.0
139	365.9	0.04	14.6
141	461.0	0.04	18.4
142	107.5	0.05	5.4
143	253.8	0.04	10.2
144	233.2	0.07	16.3
148	234.8	0.02	4.7

Note

- Contractors must take separate photos of each area where roading has been removed to licensed fill facility. Include tape measure for scale and depth please
- If any of the concentric circles are red, then it is considered Coal Tar



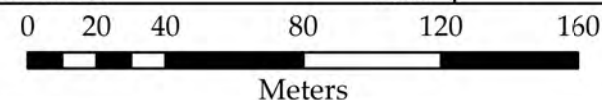
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Thomas**

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CT20: Coal Tar Removal Plan - Surface

Toitū Te Whenua Land Information New Zealand
Addendum Detailed Site Investigation - Coal Tar
Former Tokanui Hospital Demolition and Remediation Project
Tokanui

Date: 25/09/2024
Drawing Reference: 33205/CT20
Drawn by: EB
Reviewed by: SF
Job Number: 33205



See CT22

See CT24

See CT23

Note

1. Contractors must take separate photos of each area where roading has been removed to licensed fill facility. Include tape measure for scale and depth please
2. If any of the concentric circles are red, then it is considered Coal Tar

Legend

- Pancake Layers ●
- P-PR, ND-UV, P-CTL ○
- N-PR, P-UV, P-CTL ●
- N-PR, N-UV, P-CTL ●
- N-PR, ND-UV, P-CTL ○
- Road to Remain (Main) —
- Road to Remain —
- Road to Remove —
- Coal Tar Removal Areas //
- Site Boundary □

Note

PR = Paint Reaction
UV = UV Light Reaction
CTL = Coal Tar Positive
Lab Sample

Inner Circle = PR
Middle Circle = UV
Outer Circle = CTL

P- = Positive
N- = Negative
ND- = No Data

Eagle Technology, Land Information New Zealand, GEBCO, Cor



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CT21: Coal Tar Removal Plan - Basecourse Overview

Toitū Te Whenua Land Information New Zealand
Addendum Detailed Site Investigation - Coal Tar
Former Tokanui Hospital Demolition and Remediation Project
Tokuai

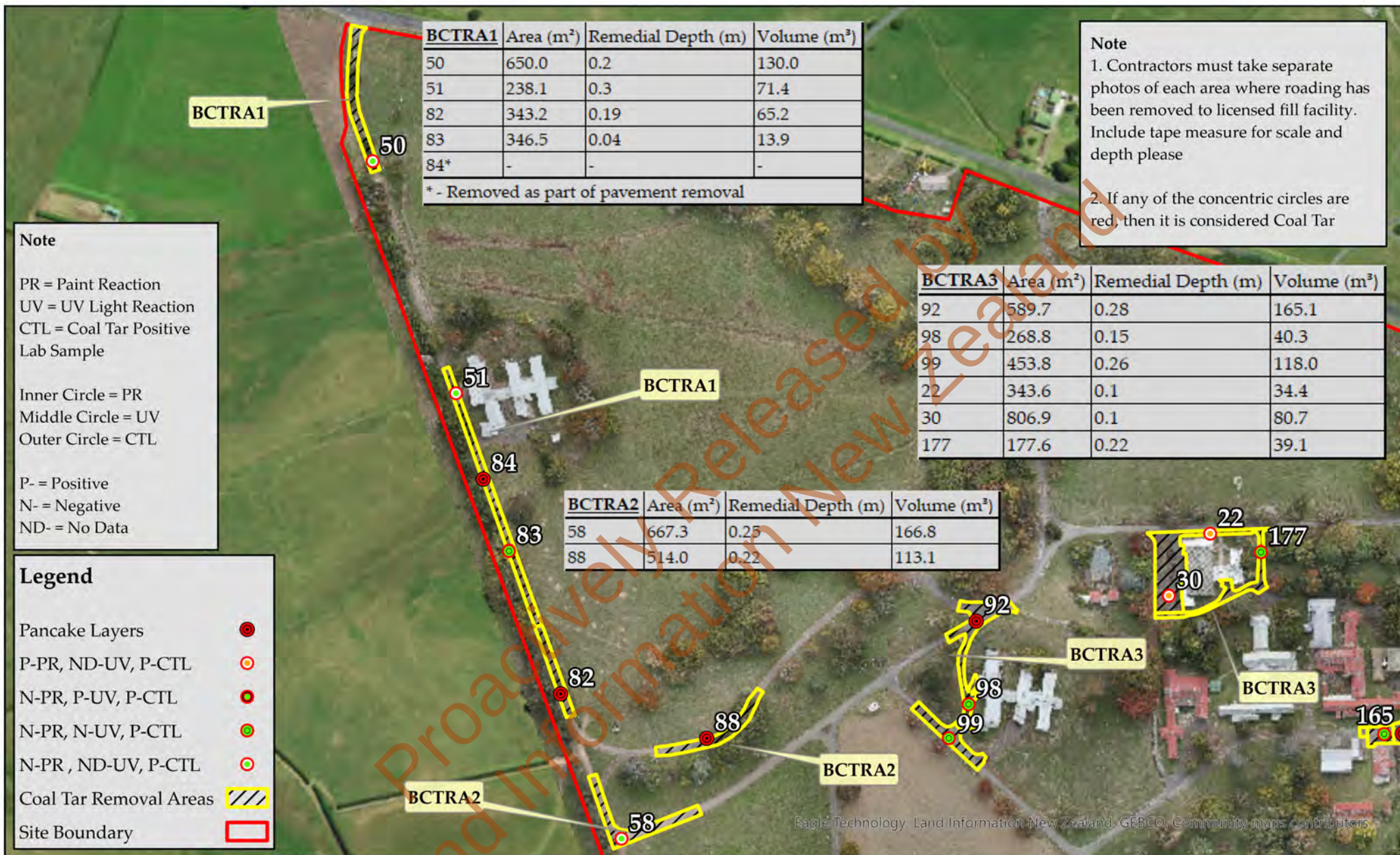
Date: 25/09/2024
Drawing Reference: 33205/CT21
Drawn by: EB
Reviewed by: SF
Job Number: 33205



0 55 110 220 330 440



Meters



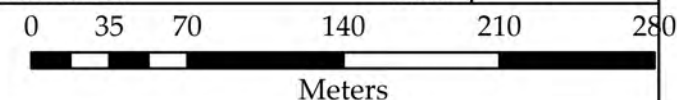
**Fraser
Thomas**

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CT22: Coal Tar Removal Plan - Basecourse

Toitū Te Whenua Land Information New Zealand
 Addendum Detailed Site Investigation - Coal Tar
 Former Tokanui Hospital Demolition and Remediation Project
 Tokanui

Date: 25/09/2024
 Drawing Reference: 33205/CT22
 Drawn by: EB
 Reviewed by: SF
 Job Number: 33205



BCTRA4	Area (m ²)	Remedial Depth (m)	Volume (m ³)
40	522.1	0.1	52.2
41	758.1	0.05	37.9
114*	-	-	-
118	656.3	0.06	39.4

* - Removed as part of pavement removal

Note

PR = Paint Reaction
UV = UV Light Reaction
CTL = Coal Tar Positive
Lab Sample

Inner Circle = PR
Middle Circle = UV
Outer Circle = CTL

P- = Positive
N- = Negative
ND- = No Data

Legend

Pancake Layers

P-PR, ND-UV, P-CTL

N-PR, P-UV, P-CTL

N-PR, N-UV, P-CTL

N-PR, ND-UV, P-CTL

Coal Tar Removal Areas

Site Boundary

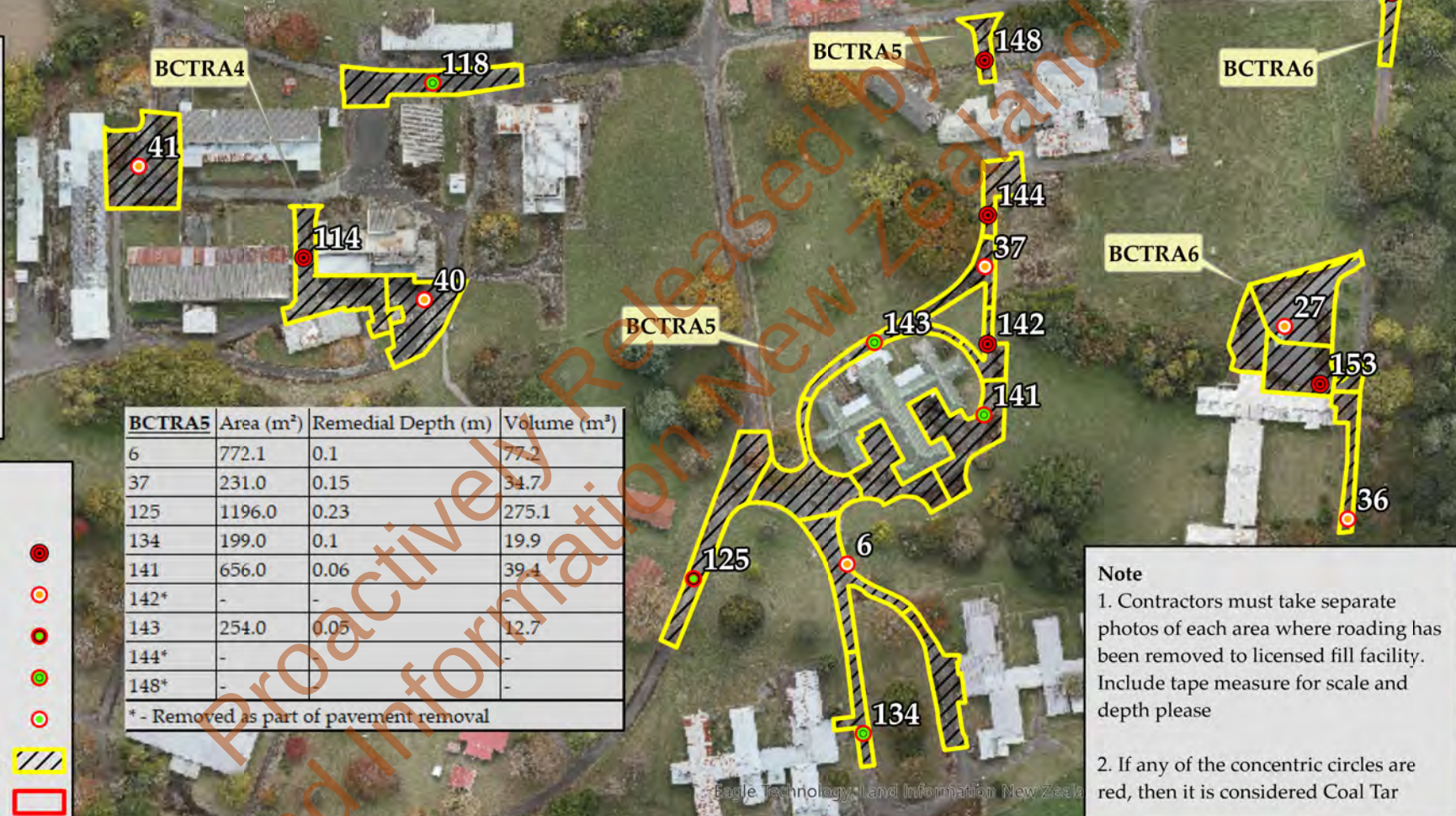


BCTRA5	Area (m ²)	Remedial Depth (m)	Volume (m ³)
6	772.1	0.1	77.2
37	231.0	0.15	34.7
125	1196.0	0.23	275.1
134	199.0	0.1	19.9
141	656.0	0.06	39.4
142*	-	-	-
143	254.0	0.05	12.7
144*	-	-	-
148*	-	-	-

* - Removed as part of pavement removal

BCTRA6	Area (m ²)	Remedial Depth (m)	Volume (m ³)
27	935.1	0.1	93.5
36	301.4	0.1	30.1
151*	-	-	-
153	409.8	0.13	53.3
154*	-	-	-

* - Removed as part of pavement removal



Note

- Contractors must take separate photos of each area where roading has been removed to licensed fill facility. Include tape measure for scale and depth please
- If any of the concentric circles are red, then it is considered Coal Tar



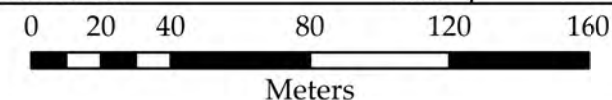
**Fraser
Thomas**

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CT23: Coal Tar Removal Plan - Basecourse

Toitū Te Whenua Land Information New Zealand
Addendum Detailed Site Investigation - Coal Tar
Former Tokanui Hospital Demolition and Remediation Project
Tokanui

Date: 25/09/2024
Drawing Reference: 33205/CT23
Drawn by: EB
Reviewed by: SF
Job Number: 33205



BCTRA7	Area (m ²)	Remedial Depth (m)	Volume (m ³)
189	347.5	0.12	41.7

BCTRA8	Area (m ²)	Remedial Depth (m)	Volume (m ³)
165	202.8	0.08	16.2
195	369.3	0.07	25.9
196	159.4	0.03	4.8
197*	-	-	-

* - Removed as part of pavement removal

BCTRA9	Area (m ²)	Remedial Depth (m)	Volume (m ³)
157	182.8	0.16	29.2
158	241.6	0.07	16.9
191	388.2	0.18	69.9

- Legend**
- Pancake Layers
 - P-PR, ND-UV, P-CTL
 - N-PR, P-UV, P-CTL
 - N-PR, N-UV, P-CTL
 - N-PR, ND-UV, P-CTL
 - Coal Tar Removal Areas
 - Site Boundary

- Note**
- PR = Paint Reaction
 - UV = UV Light Reaction
 - CTL = Coal Tar Positive Lab Sample
 - Inner Circle = PR
 - Middle Circle = UV
 - Outer Circle = CTL
 - P- = Positive
 - N- = Negative
 - ND- = No Data

- Note**
- Contractors must take separate photos of each area where roading has been removed to licensed fill facility. Include tape measure for scale and depth please
 - If any of the concentric circles are red, then it is considered Coal Tar



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CT24: Coal Tar Removal Plan - Basecourse

Toitū Te Whenua Land Information New Zealand
 Addendum Detailed Site Investigation - Coal Tar
 Former Tokanui Hospital Demolition and Remediation Project
 Tokanui

Date: 25/09/2024

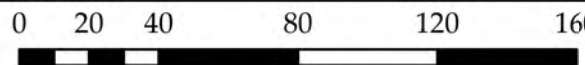
Drawing Reference: 33205/CT24

Drawn by: EB

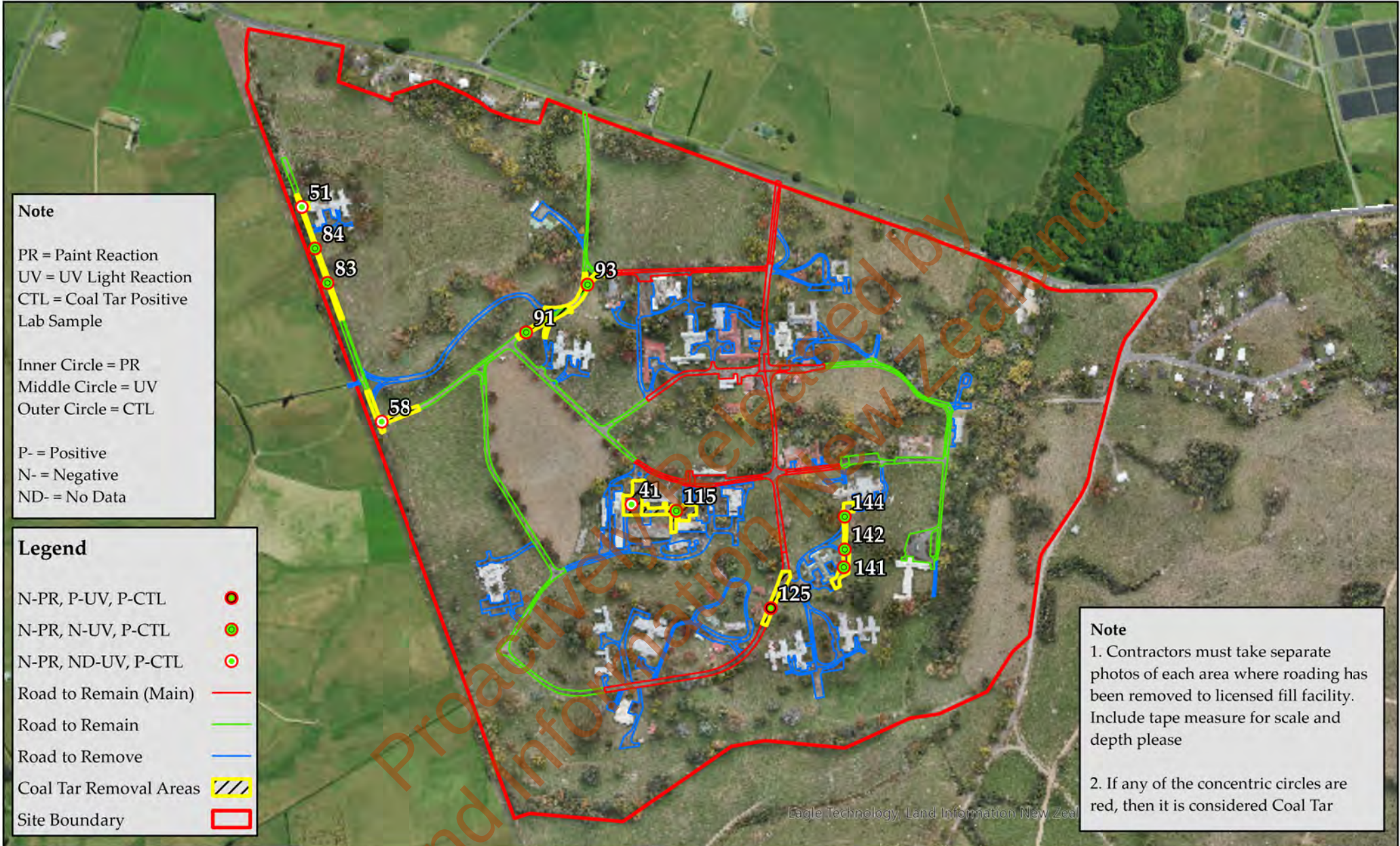
Reviewed by: SF

Job Number: 33205





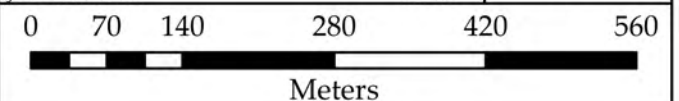
Meters

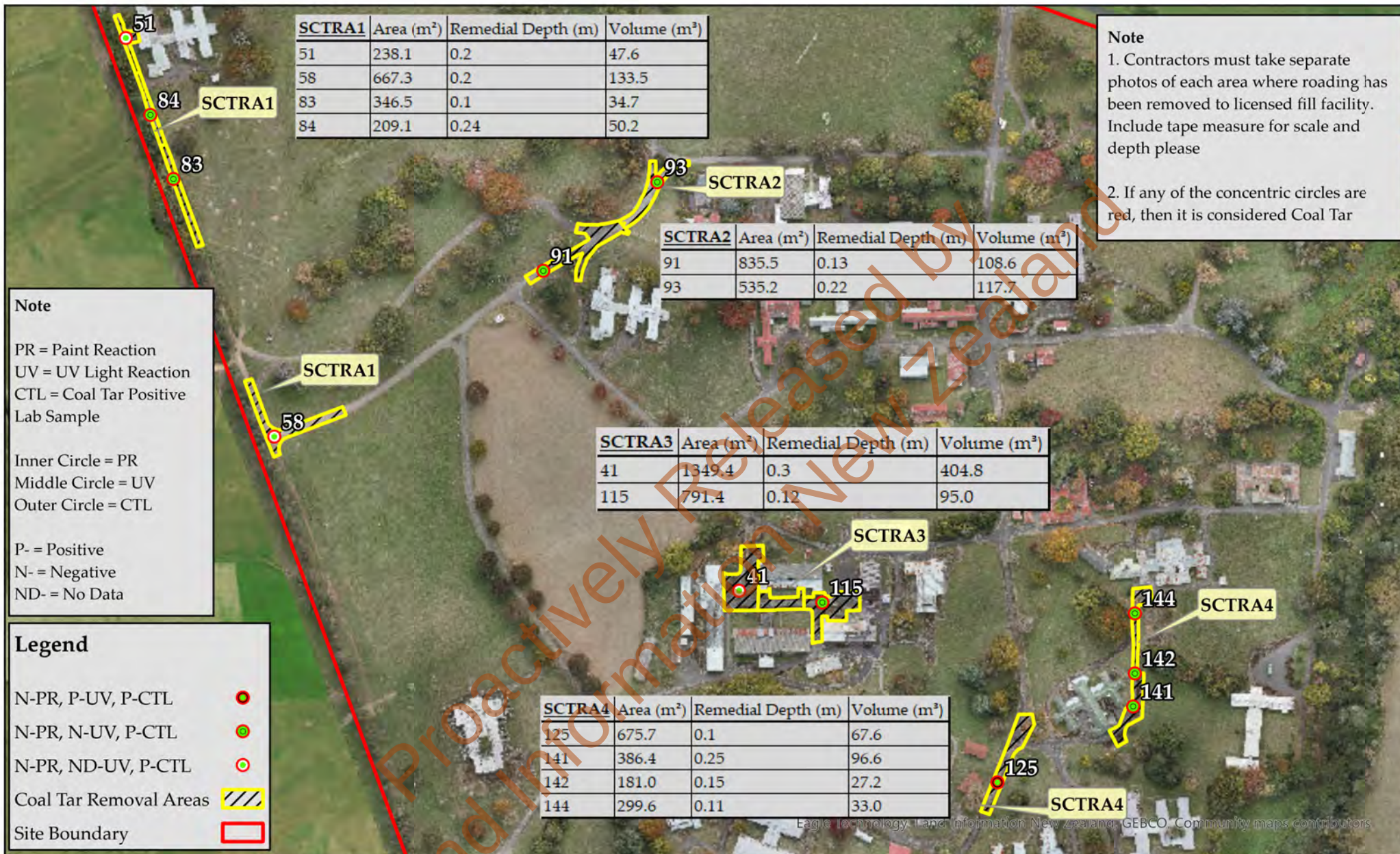


CT25: Coal Tar Removal Plan - Subbase Overview

Toitū Te Whenua Land Information New Zealand
 Addendum Detailed Site Investigation - Coal Tar
 Former Tokanui Hospital Demolition and Remediation Project
 Tokanui

Date: 25/09/2024
 Drawing Reference: 33205/CT25
 Drawn by: EB
 Reviewed by: SF
 Job Number: 33205





SCTRA1	Area (m²)	Remedial Depth (m)	Volume (m³)
51	238.1	0.2	47.6
58	667.3	0.2	133.5
83	346.5	0.1	34.7
84	209.1	0.24	50.2

SCTRA2	Area (m²)	Remedial Depth (m)	Volume (m³)
91	835.5	0.13	108.6
93	535.2	0.22	117.7

SCTRA3	Area (m²)	Remedial Depth (m)	Volume (m³)
41	1349.4	0.3	404.8
115	791.4	0.12	95.0

SCTRA4	Area (m²)	Remedial Depth (m)	Volume (m³)
125	675.7	0.1	67.6
141	386.4	0.25	96.6
142	181.0	0.15	27.2
144	299.6	0.11	33.0

Note

1. Contractors must take separate photos of each area where roading has been removed to licensed fill facility. Include tape measure for scale and depth please

2. If any of the concentric circles are red, then it is considered Coal Tar

Note

PR = Paint Reaction
 UV = UV Light Reaction
 CTL = Coal Tar Positive Lab Sample

Inner Circle = PR
 Middle Circle = UV
 Outer Circle = CTL

P- = Positive
 N- = Negative
 ND- = No Data

Legend

N-PR, P-UV, P-CTL ●

N-PR, N-UV, P-CTL ●

N-PR, ND-UV, P-CTL ●

Coal Tar Removal Areas

Site Boundary

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CT26: Coal Tar Removal Plan - Subbase

Toitū Te Whenua Land Information New Zealand
 Addendum Detailed Site Investigation - Coal Tar
 Former Tokanui Hospital Demolition and Remediation Project
 Tokanui

Date:	25/09/2024
Drawing Reference:	33205/CT26
Drawn by:	EB
Reviewed by:	SF
Job Number:	33205

N

0 40 80 160 240 320
Meters

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Appendix A

Representative Sample Location Photos

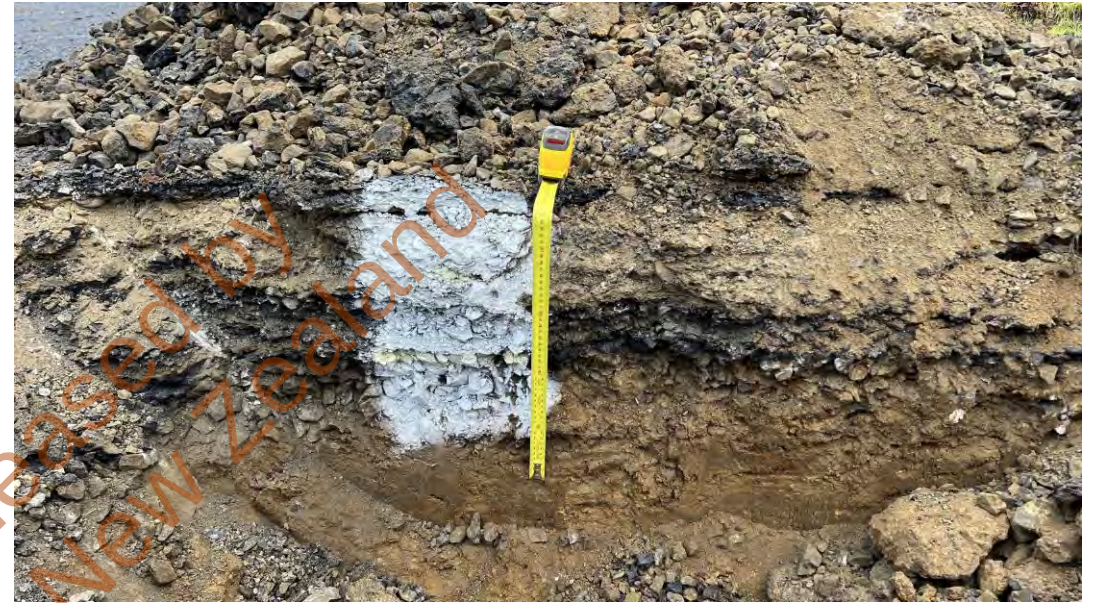
FTL86

Examples of Coal Tar Indication



FTL92

Examples of Coal Tar Indication



FTL115

Examples of Coal Tar Indication



FTL134

Examples of Coal Tar Indication



FTL139

Examples of Coal Tar Indication



FTL161

Examples of Coal Tar Indication



FTL165

Examples of Coal Tar Indication



FTL66

No Coal Tar Indication



FTL127

No Coal Tar Indication



FTL135

No Coal Tar Indication



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Land Information New Zealand

Appendix B

FTL Laboratory Results & Transcripts

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																				
Sample Date	Waste Acceptance Criteria		1-May-24																27-May-24 - 29-May-24	
Sample Name			FTL01A	FTL02	FTL06	FTL14	FTL22	FTL27	FTL29	FTL30	FTL32A	FTL33A	FTL34A	FTL35A	FTL36A	FTL37A	FTL38A	FTL40A	FTL41A	FTL42A
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.05	0-0.1	0-0.05	0-0.05
Lab Number			3574957.1	3574957.3	3574957.4	3574957.6	3574957.9	3574957.11	3574957.13	3574957.15	3594800.1	3594800.2	3594800.3	3594800.4	3594800.5	3594800.6	3594800.7	3594800.9	3594800.1	3594800.11
PAHs																				
1-Methylnaphthalene	-	-	< 0.10	0.17	1.58	24	< 0.10	0.22	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	10.3	< 0.10	0.18	< 0.10
2-Methylnaphthalene	-	-	< 0.10	0.13	0.89	36	< 0.10	0.1	< 0.10	< 0.10	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	11.9	< 0.15	< 0.15	< 0.15
Acenaphthylene	2	-	< 0.10	< 0.10	1.58	3.9	1.42	1.62	0.83	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.09	< 0.10	1.56	< 0.10	2.9	< 0.10
Acenaphthene	2	-	< 0.10	< 0.10	20	67	0.8	4.3	0.73	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.37	< 0.10	52	< 0.10	8.2	< 0.10
Anthracene	0.2	-	< 0.10	< 0.10	28	102	6.6	10.4	3.2	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	4.9	< 0.10	57	< 0.10	13.2	< 0.10
Benzo[a]anthracene	1	-	< 0.10	< 0.10	59	90	71	49	16.3	0.16	< 0.10	< 0.10	< 0.10	< 0.10	28	0.11	57	< 0.10	72	< 0.10
Benzo[a]pyrene (BAP)	1	-	< 0.10	< 0.10	49	72	106	61	19.1	0.42	< 0.10	< 0.10	< 0.10	< 0.10	33	0.1	43	< 0.10	91	< 0.10
BAP (Eq) NES	-	1	< 0.25	< 0.24	75	111	155	90	28	0.64	< 0.25	< 0.24	< 0.24	< 0.24	49	< 0.24	65	< 0.24	135	< 0.24
BAP Toxic (Eq) (TEF)	-	-	< 0.3	< 0.3	73	108	154	89	28	0.6	< 0.3	< 0.3	< 0.3	< 0.3	49	< 0.3	64	< 0.3	133	< 0.3
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.10	< 0.10	58	85	123	72	21	0.51	< 0.10	< 0.10	< 0.10	< 0.10	42	0.15	50	< 0.10	111	0.1
Benzo[e]pyrene	-	-	< 0.10	< 0.10	26	38	61	31	10.6	0.31	< 0.10	< 0.10	< 0.10	< 0.10	18.7	0.14	23	< 0.10	47	0.1
Benzo[g,h,i]perylene	2	-	< 0.10	0.12	24	38	64	37	11.7	0.54	< 0.10	< 0.10	< 0.10	< 0.10	22	0.11	19.9	< 0.10	54	< 0.10
Benzo[k]fluoranthene	-	-	< 0.10	< 0.10	24	33	45	27	8.6	0.18	< 0.10	< 0.10	< 0.10	< 0.10	14.9	< 0.10	20	< 0.10	38	< 0.10
Chrysene	2	-	< 0.10	< 0.10	49	72	64	47	15.2	0.16	< 0.10	< 0.10	< 0.10	< 0.10	26	0.1	45	< 0.10	66	< 0.10
Dibenzo[a,h]anthracene	1	-	< 0.10	< 0.10	6.9	10	16.4	8.5	2.6	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	4.7	< 0.10	5.3	< 0.10	12.4	< 0.10
Fluoranthene	2	-	< 0.10	0.1	144	250	89	111	37	0.3	< 0.10	< 0.10	< 0.10	< 0.10	64	0.12	168	< 0.10	171	0.1
Fluorene	2	-	< 0.10	< 0.10	13.4	80	0.4	1.92	0.38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10	30	< 0.10	2.7	< 0.10
Indeno(1,2,3-c,d)pyrene	2	-	< 0.10	< 0.10	28	42	71	44	12.2	0.4	< 0.10	< 0.10	< 0.10	< 0.10	24	0.14	23	< 0.10	64	< 0.10
Naphthalene	200	-	< 0.5	0.6	< 0.5	50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	11.9	< 0.5	< 0.5	< 0.5
Perylene	-	-	< 0.10	< 0.10	10.6	17.1	28	16.9	4.8	0.13	< 0.10	< 0.10	< 0.10	< 0.10	9.3	< 0.10	9.6	< 0.10	27	< 0.10
Phenanthrene	2	-	< 0.10	0.1	94	320	13.9	24	9.8	0.11	< 0.10	< 0.10	< 0.10	< 0.10	15.4	< 0.10	200	< 0.10	35	< 0.10
Pyrene	2	-	< 0.10	0.1	134	198	111	125	37	0.31	< 0.10	< 0.10	< 0.10	< 0.10	61	0.16	121	< 0.10	167	0.1
Total of Reported PAHs	-	20	< 3	< 3	770	1630	870	670	210	4	< 3	< 3	< 3	< 3	370	< 3	940	< 3	980	< 3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		27-May-24 - 29-May-24																		
Sample Name			FTL44A	FTL45A	FTL46A	FTL47A	FTL48A	FTL49A	FTL50A	FTL51A	FTL52A	FTL53A	FTL54A	FTL55A	FTL56A	FTL57A	FTL58A	FTL60A	FTL61A	FTL61D	FTL62A
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0-0.05	0-0.05	0-0.05	0-0.05	0-0.2	0-0.2	0-0.05	0-0.1	0-0.1	0-0.3	0-0.1	0-0.05	0-0.05	0-0.05	0-0.05	0-0.1	0-0.05	0-0.05	0-0.05
Lab Number			3594800.12	3594800.13	3594800.14	3594800.15	3594800.16	3594800.17	3594800.18	3594800.19	3594800.2	3594800.21	3594800.22	3594800.23	3594800.24	3594800.25	3594800.26	3594800.27	3594800.28	3594800.88	3594800.29
PAHs																					
1-Methylnaphthalene	-	-	< 0.10	< 0.10	0.11	< 0.10	< 0.010	< 0.010	< 0.10	4.5	< 0.10	< 0.010	2.2	< 0.10	0.012	0.42	< 0.10	< 0.10	< 0.10	< 0.012	< 0.10
2-Methylnaphthalene	-	-	< 0.15	< 0.15	< 0.15	< 0.15	< 0.010	< 0.010	< 0.15	1.86	< 0.15	< 0.010	0.86	< 0.15	< 0.010	0.17	< 0.15	< 0.15	< 0.15	< 0.018	< 0.15
Acenaphthylene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	< 0.010	< 0.10	3.8	< 0.10	< 0.010	0.6	< 0.10	< 0.010	< 0.10	< 0.10	< 0.10	< 0.10	0.043	< 0.10
Acenaphthene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	< 0.010	< 0.10	58	< 0.10	< 0.010	18.9	< 0.10	< 0.010	< 0.10	0.22	< 0.10	< 0.10	0.071	< 0.10
Anthracene	0.2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.022	< 0.10	89	< 0.10	0.032	43	< 0.10	< 0.010	< 0.10	0.21	< 0.10	< 0.10	0.3	< 0.10
Benzo[a]anthracene	1	-	< 0.10	< 0.10	0.1	< 0.10	< 0.010	0.027	< 0.10	136	< 0.10	0.187	50	< 0.10	< 0.010	< 0.10	0.14	< 0.10	< 0.10	1.09	< 0.10
Benzo[a]pyrene (BAP)	1	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.076	< 0.10	106	< 0.10	0.22	39	< 0.10	0.013	< 0.10	0.12	< 0.10	< 0.10	1.08	< 0.10
BAP (Eq) NES	-	1	< 0.24	< 0.25	< 0.24	< 0.25	< 0.025	0.122	< 0.24	162	< 0.25	0.33	61	< 0.24	< 0.025	< 0.24	0.25	< 0.24	< 0.24	1.65	< 0.24
BAP Toxic (Eq) (TEF)	-	-	< 0.3	< 0.3	< 0.3	< 0.3	< 0.03	0.12	< 0.3	158	< 0.3	0.32	59	< 0.3	< 0.03	< 0.3	0.2	< 0.3	< 0.3	1.62	< 0.3
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.118	< 0.10	128	< 0.10	0.28	50	< 0.10	< 0.010	< 0.10	0.13	< 0.10	< 0.10	1.4	< 0.10
Benzo[e]pyrene	-	-	< 0.10	< 0.10	0.12	< 0.10	< 0.010	0.141	< 0.10	57	< 0.10	0.139	23	< 0.10	< 0.010	< 0.10	0.16	< 0.10	< 0.10	0.65	< 0.10
Benzo[g,h,i]perylene	2	-	< 0.10	< 0.10	0.12	< 0.10	< 0.010	0.085	< 0.10	50	< 0.10	0.161	22	< 0.10	< 0.010	< 0.10	0.17	< 0.10	< 0.10	0.72	< 0.10
Benzo[k]fluoranthene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.033	< 0.10	46	< 0.10	0.107	17.8	< 0.10	< 0.010	< 0.10	< 0.10	< 0.10	< 0.10	0.51	< 0.10
Chrysene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.027	< 0.10	113	< 0.10	0.163	43	< 0.10	< 0.010	< 0.10	0.12	< 0.10	< 0.10	0.98	< 0.10
Dibenzo[a,h]anthracene	1	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.021	< 0.10	14.6	< 0.10	0.029	5	< 0.10	< 0.010	< 0.10	< 0.10	< 0.10	< 0.10	0.156	< 0.10
Fluoranthene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.024	< 0.10	370	< 0.10	0.42	178	< 0.10	< 0.010	< 0.10	0.38	< 0.10	< 0.10	2.7	< 0.10
Fluorene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	< 0.010	< 0.10	36	< 0.10	< 0.010	12	< 0.10	< 0.010	< 0.10	0.14	< 0.10	< 0.10	0.057	< 0.10
Indeno(1,2,3-c,d)pyrene	2	-	< 0.10	< 0.10	0.12	< 0.10	< 0.010	0.07	< 0.10	58	< 0.10	0.162	25	< 0.10	< 0.010	< 0.10	0.13	< 0.10	< 0.10	0.8	< 0.10
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.05	< 0.05	< 0.5	0.8	< 0.5	< 0.05	< 0.5	< 0.5	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.06	< 0.5
Perylene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	0.038	< 0.10	24	< 0.10	0.054	10.5	< 0.10	< 0.010	< 0.10	< 0.10	< 0.10	< 0.10	0.27	< 0.10
Phenanthrene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.010	< 0.010	< 0.10	250	< 0.10	0.131	170	< 0.10	< 0.010	< 0.10	0.68	< 0.10	< 0.10	1.42	< 0.10
Pyrene	2	-	0.11	< 0.10	< 0.10	< 0.10	< 0.010	0.049	< 0.10	300	< 0.10	0.37	129	< 0.10	< 0.010	< 0.10	0.39	< 0.10	< 0.10	2.4	< 0.10
Total of Reported PAHs	-	20	< 3	< 3	< 3	< 3	< 0.3	0.7	< 3	1850	< 3	2.5	840	< 3	< 0.3	< 3	3	< 3	< 3	14.7	< 3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		15-Jul-24																		
Sample Name			FTL64	FTL65	FTL66	FTL67	FTL68	FTL69	FTL70	FTL71	FTL72	FTL73	FTL74	FTL75	FTL76	FTL77	FTL78	FTL79	FTL80	FTL81	FTL82
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0-0.05	0-0.03	0-0.05	0-0.03	0-0.03	0-0.05	0-0.02	0-0.02	0-0.3	0-0.06	0-0.05	0-0.06	0-0.4	0-0.03	0-0.3	0-0.3	0-0.05	0-0.02	0-0.03
Lab Number			3631528.1	3631528.3	3631528.5	3631528.7	3631528.9	3631528.11	3631528.13	3631528.15	3631528.17	3631528.19	3631528.21	3631528.23	3631528.25	3631528.27	3631528.29	3631528.31	3631528.33	3631528.36	3631528.38
PAHs																					
1-Methylnaphthalene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.13	< 0.10	0.43	< 0.10	< 0.10	< 0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10	< 0.10	
2-Methylnaphthalene	-	-	< 0.15	< 0.10	< 0.15	< 0.10	< 0.15	< 0.10	0.13	< 0.15	0.25	< 0.10	< 0.2	< 0.15	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.15	
Acenaphthylene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acenaphthene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.37	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.1	< 0.10	< 0.10	
Anthracene	0.2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.7	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.31	< 0.10	< 0.10	
Benzo[a]anthracene	1	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.81	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.52	< 0.10	< 0.10	
Benzo[a]pyrene (BAP)	1	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.79	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.42	< 0.10	< 0.10	
BAP (Eq) NES	-	1	< 0.24	< 0.24	< 0.24	< 0.23	< 0.24	< 0.24	1.17	< 0.24	< 0.25	< 0.25	< 0.24	< 0.24	< 0.25	< 0.24	< 0.24	0.65	< 0.24	< 0.24	
BAP Toxic (Eq) (TEF)	-	-	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	1.1	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	0.6	< 0.3	< 0.3	
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.9	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.52	< 0.10	< 0.10	
Benzo[e]pyrene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.43	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.22	< 0.10	< 0.10	
Benzo[g,h,i]perylene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.46	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.21	< 0.10	< 0.10	
Benzo[k]fluoranthene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.38	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.26	< 0.10	< 0.10	
Chrysene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.72	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.52	< 0.10	< 0.10	
Dibenzo[a,h]anthracene	1	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Fluoranthene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.3	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.52	< 0.10	< 0.10	
Fluorene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.41	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10	< 0.10	
Indeno(1,2,3-c,d)pyrene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.44	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.23	< 0.10	< 0.10	
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Perylene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.2	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10	< 0.10	
Phenanthrene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.5	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.99	< 0.10	< 0.10	
Pyrene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.76	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.25	< 0.10	< 0.10	
Total of Reported PAHs	-	20	< 3	< 3	< 3	< 3	< 3	< 3	14	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	8	< 3	< 3	

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		15-Jul-24											16-Jul-24							
Sample Name			FTL82	FTL82	FTL83	FTL83	FTL84	FTL84	FTL85	FTL86	FTL87	FTL88	FTL88	FTL89	FTL89	FTL90	FTL91	FTL92	FTL92	FTL92	FTL92
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.07-0.09	0.11-0.13	0-0.05	0.09-0.13	0-0.03	0.03-0.06	0-0.05	0-0.5	0-0.04	0-0.03	0.03-0.06	0-0.02	0.02-0.05	0-0.05	0-0.04	0-0.05	0.13-0.14	0.16-0.18	0.24-0.29
Lab Number			3631528.4	3631528.42	3631528.44	3631528.46	3631528.48	3631528.49	3631528.51	3631528.53	3631528.55	3631528.57	3631528.58	3631528.6	3631528.61	3631528.63	3631528.65	3631528.69	3631528.71	3631528.72	3631528.74
PAHs																					
1-Methylnaphthalene	-	-	0.3	0.24	< 0.10	0.88	< 0.10	1.7	< 0.10	21	< 0.10	< 0.10	16.7	2	< 0.10	2.1	< 0.10	< 0.10	0.55	< 0.10	12
2-Methylnaphthalene	-	-	0.34	0.162	< 0.10	0.51	< 0.15	1.01	< 0.10	27	< 0.15	< 0.15	16.6	0.9	< 0.2	1.13	< 0.10	< 0.15	0.28	< 0.15	13.6
Acenaphthylene	2	-	< 0.10	0.75	0.16	1.9	< 0.10	0.42	< 0.10	3.3	< 0.10	< 0.10	1.81	0.76	0.18	1.35	< 0.10	< 0.10	2.6	< 0.10	2.3
Acenaphthene	2	-	0.13	3	0.74	24	0.23	11.7	< 0.10	68	< 0.10	< 0.10	96	23	1.57	23	< 0.10	0.34	6.5	< 0.10	50
Anthracene	0.2	-	0.24	8.8	2.6	56	0.47	19.3	< 0.10	128	< 0.10	< 0.10	181	41	5.2	54	< 0.10	0.23	24	< 0.10	89
Benzo[a]anthracene	1	-	0.84	21	7.2	95	0.5	19.5	< 0.10	121	< 0.10	< 0.10	177	67	12.1	109	< 0.10	< 0.10	75	0.23	75
Benzo[a]pyrene (BAP)	1	-	0.79	26	9	89	0.43	13.4	< 0.10	93	< 0.10	< 0.10	158	54	11.4	99	< 0.10	< 0.10	67	0.29	58
BAP (Eq) NES	-	1	1.24	39	13.1	133	0.68	21	< 0.24	143	< 0.24	< 0.24	240	84	17.6	153	< 0.25	< 0.24	102	0.44	91
BAP Toxic (Eq) (TEF)	-	-	1.2	39	12.9	131	0.7	21	< 0.3	140	< 0.3	< 0.3	230	82	17.2	149	< 0.3	< 0.3	101	0.4	88
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	1.06	35	10.2	102	0.53	16.9	< 0.10	115	< 0.10	0.1	181	63	13.8	118	< 0.10	0.1	79	0.32	71
Benzo[e]pyrene	-	-	0.56	15.1	4.7	48	0.26	7.4	< 0.10	50	< 0.10	0.11	89	30	6.5	58	< 0.10	0.1	35	0.2	32
Benzo[g,h,i]perylene	2	-	0.51	17.3	4.4	45	0.27	6.4	< 0.10	47	< 0.10	< 0.10	96	34	8	66	< 0.10	< 0.10	35	0.2	28
Benzo[k]fluoranthene	-	-	0.45	11	4	40	0.19	6.9	< 0.10	44	< 0.10	< 0.10	70	23	4.9	44	< 0.10	< 0.10	28	0.12	30
Chrysene	2	-	0.67	17.7	6.7	78	0.44	14.3	< 0.10	101	< 0.10	< 0.10	139	53	9.8	89	< 0.10	< 0.10	68	0.2	65
Dibenzo[a,h]anthracene	1	-	0.13	4.3	1.17	12.4	< 0.10	1.86	< 0.10	12.2	< 0.10	< 0.10	23	8.1	1.79	15.4	< 0.10	< 0.10	10.8	< 0.10	8.5
Fluoranthene	2	-	1.82	49	18.7	260	2	74	< 0.10	380	< 0.10	0.21	550	210	33	370	< 0.10	0.3	152	0.4	220
Fluorene	2	-	0.13	2.6	0.77	22	0.19	10.7	< 0.10	71	< 0.10	< 0.10	94	17.9	1	38.7	< 0.10	0.22	6.5	< 0.10	47
Indeno(1,2,3-c,d)pyrene	2	-	0.54	18	5	51	0.3	7.6	< 0.10	52	< 0.10	< 0.10	99	37	8.5	70	< 0.10	< 0.10	41	0.21	32
Naphthalene	200	-	1	0.09	< 0.5	< 0.5	< 0.5	0.6	< 0.5	41	< 0.5	< 0.5	14.1	< 0.5	< 0.5	0.9	< 0.5	< 0.5	< 0.5	< 0.5	9.2
Perylene	-	-	0.2	7.1	1.98	20	0.11	3.1	< 0.10	23	< 0.10	< 0.10	42	14	3	28	< 0.10	< 0.10	16.1	< 0.10	13.3
Phenanthrene	2	-	0.39	24	8.1	143	2.3	63	< 0.10	450	< 0.10	0.14	620	154	16.7	154	< 0.10	1.11	70	< 0.10	310
Pyrene	2	-	1.59	47	17.6	200	1.38	48	< 0.10	300	< 0.10	0.19	440	158	29	280	< 0.10	0.26	139	0.35	155
Total of Reported PAHs	-	20	12	310	103	1290	10	330	< 3	2100	< 3	< 3	3100	990	168	1590	< 3	3	860	3	1330

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																						
Sample Date	Waste Acceptance Criteria		16-Jul-24																			
Sample Name			FTL93	FTL93	FTL94	FTL95	FTL96	FTL97	FTL98	FTL99	FTL99	FTL100	FTL101	FTL102	FTL103	FTL104	FTL105	FTL106	FTL108	FTL109	FTL110	FTL111
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0-0.03	0.17-0.2	0-0.06	0-0.04	0-0.02	0-0.03	0-0.05	0-0.05	0.23-0.27	0-0.04	0-0.03	0-0.03	0-0.03	0-0.03	0-0.04	0-0.03	0-0.03	0-0.03	0-0.03	0-0.05
Lab Number			3631528.76	3631528.79	3631528.82	3631528.85	3631528.87	3631528.89	3631528.91	3631528.93	3631528.95	3631528.97	3631528.99	3631528.101	3631528.104	3631528.107	3631528.111	3631528.115	3631528.118	3631528.121	3631528.124	3631528.127
PAHs																						
1-Methylnaphthalene	-	-	<0.10	<0.10	<0.10	<0.10	0.16	0.19	35	<0.10	0.014	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10	0.2	<0.10	3.2	<0.10
2-Methylnaphthalene	-	-	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	45	<0.15	0.012	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	2.9	<0.15
Acenaphthylene	2	-	<0.10	<0.10	<0.10	<0.10	1.4	<0.10	4.9	<0.10	0.31	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.44	<0.10
Acenaphthene	2	-	<0.10	<0.10	<0.10	<0.10	4.7	<0.10	99	<0.10	0.18	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	14.3	<0.10
Anthracene	0.2	-	<0.10	<0.10	<0.10	<0.10	11.4	<0.10	148	<0.10	0.89	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	16.7	<0.10
Benzo[a]anthracene	1	-	<0.10	<0.10	<0.10	<0.10	49	<0.10	144	<0.10	6.3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	24	<0.10
Benzo[a]pyrene (BAP)	1	-	<0.10	<0.10	<0.10	<0.10	50	<0.10	108	<0.10	6.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	21	<0.10
BAP (Eq) NES	-	1	<0.24	<0.25	<0.24	<0.24	75	<0.24	169	<0.24	9.9	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	32	<0.24
BAP Toxic (Eq) (TEF)	-	-	<0.3	<0.3	<0.3	<0.3	74	<0.3	165	<0.3	9.8	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	32	<0.3
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.1	<0.10	0.14	<0.10	58	<0.10	134	<0.10	8.3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	26	<0.10
Benzo[e]pyrene	-	-	0.11	<0.10	0.12	<0.10	26	<0.10	61	<0.10	3.9	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	10.6	<0.10
Benzo[g,h,i]perylene	2	-	<0.10	<0.10	0.1	<0.10	24	<0.10	55	<0.10	4.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	11.9	<0.10
Benzo[k]fluoranthene	-	-	<0.10	<0.10	<0.10	<0.10	24	<0.10	55	<0.10	3.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	10.4	<0.10
Chrysene	2	-	<0.10	<0.10	<0.10	<0.10	46	<0.10	118	<0.10	4.8	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	21	<0.10
Dibenzo[a,h]anthracene	1	-	<0.10	<0.10	<0.10	<0.10	7	<0.10	16.4	<0.10	1.02	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	2.9	<0.10
Fluoranthene	2	-	0.11	<0.10	0.12	<0.10	98	0.15	400	<0.10	9.8	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	72	<0.10
Fluorene	2	-	<0.10	<0.10	<0.10	<0.10	2.2	<0.10	100	<0.10	0.127	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	9.5	<0.10
Indeno[1,2,3-c,d]pyrene	2	-	<0.10	<0.10	<0.10	<0.10	28	<0.10	62	<0.10	4.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	14.4	<0.10
Naphthalene	200	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	66	<0.5	0.06	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	3.2	<0.5
Perylene	-	-	<0.10	<0.10	<0.10	<0.10	13.4	<0.10	26	<0.10	1.53	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	5.7	<0.10
Phenanthrene	2	-	<0.10	<0.10	<0.10	<0.10	26	<0.10	480	<0.10	2.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	58	<0.10
Pyrene	2	-	0.18	<0.10	0.11	<0.10	112	0.14	320	<0.10	10.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	56	<0.10
Total of Reported PAHs	-	20	<3	<3	<3	<3	580	<3	2500	<3	68	<3	<3	<3	<3	<3	<3	<3	<3	<3	380	<3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		16-Jul-24																		
Sample Name			FTL112	FTL113	FTL114	FTL114	FTL115	FTL116	FTL117	FTL118	FTL119	FTL120	FTL121	FTL122	FTL123	FTL124	FTL125	FTL126	FTL127	FTL130	FTL131
Sample Depth (m)			0-0.03	0-0.05	0-0.03	0.03-0.06	0-0.05	0-0.03	0-0.03	0-0.02	0-0.03	0-0.05	0-0.05	0-0.03	0-0.02	0-0.03	0-0.02	0-0.03	0-0.03	0-0.03	0-0.03
Lab Number			3631528.129	3631528.131	3631528.134	3631528.135	3631528.137	3631528.14	3631528.143	3631528.146	3631528.149	3631528.151	3631528.153	3631528.156	3631528.158	3631528.16	3631528.162	3631528.165	3631528.167	3631528.17	3631528.173
PAHs	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹																			
1-Methylnaphthalene	-	-	< 0.10	< 0.10	< 0.10	17.6	0.68	< 0.10	0.17	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.12	0.27	< 0.10	0.17	
2-Methylnaphthalene	-	-	< 0.15	< 0.10	< 0.10	19.7	0.48	< 0.10	0.2	< 0.10	< 0.10	< 0.15	< 0.10	< 0.10	< 0.15	< 0.15	< 0.15	0.17	< 0.15	< 0.15	
Acenaphthylene	2	-	< 0.10	< 0.10	< 0.10	5.7	0.11	< 0.10	< 0.10	1.35	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acenaphthene	2	-	< 0.10	< 0.10	< 0.10	65	2.8	< 0.10	< 0.10	3	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Anthracene	0.2	-	< 0.10	< 0.10	0.11	114	1.71	< 0.10	< 0.10	6.2	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo[a]anthracene	1	-	< 0.10	< 0.10	0.14	127	1.61	< 0.10	< 0.10	36	< 0.10	< 0.10	< 0.10	0.35	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo[a]pyrene (BAP)	1	-	< 0.10	< 0.10	0.26	103	0.83	< 0.10	< 0.10	47	< 0.10	< 0.10	< 0.10	0.49	< 0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10	
BAP (Eq) NES	-	1	< 0.24	< 0.24	0.33	157	1.35	< 0.24	< 0.24	70	< 0.24	< 0.24	< 0.24	0.77	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24	
BAP Toxic (Eq) (TEF)	-	-	< 0.3	< 0.3	0.3	154	1.3	< 0.3	< 0.3	69	< 0.3	< 0.3	< 0.3	0.8	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.10	< 0.10	0.26	126	1.01	< 0.10	0.14	62	< 0.10	< 0.10	< 0.10	0.64	< 0.10	< 0.10	0.17	< 0.10	< 0.10	< 0.10	
Benzo[e]pyrene	-	-	< 0.10	< 0.10	0.13	54	0.42	< 0.10	0.11	25	< 0.10	< 0.10	< 0.10	0.35	< 0.10	< 0.10	0.14	< 0.10	< 0.10	< 0.10	
Benzo[g,h,i]perylene	2	-	< 0.10	< 0.10	0.19	50	0.33	< 0.10	0.14	27	< 0.10	< 0.10	< 0.10	0.44	< 0.10	< 0.10	0.14	< 0.10	< 0.10	< 0.10	
Benzo[k]fluoranthene	-	-	< 0.10	< 0.10	< 0.10	47	0.47	< 0.10	< 0.10	24	< 0.10	< 0.10	< 0.10	0.24	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Chrysene	2	-	< 0.10	< 0.10	0.12	104	1.38	< 0.10	< 0.10	38	< 0.10	< 0.10	< 0.10	0.45	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Dibenzo[a,h]anthracene	1	-	< 0.10	< 0.10	< 0.10	13.8	< 0.10	< 0.10	< 0.10	6.4	< 0.10	< 0.10	< 0.10	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Fluoranthene	2	-	< 0.10	< 0.10	0.38	350	6.6	< 0.10	0.19	81	< 0.10	< 0.10	< 0.10	0.89	< 0.10	< 0.10	0.11	< 0.10	< 0.10	< 0.10	
Fluorene	2	-	< 0.10	< 0.10	< 0.10	76	1.7	< 0.10	< 0.10	1.18	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Indeno(1,2,3-c,d)pyrene	2	-	< 0.10	< 0.10	0.18	55	0.37	< 0.10	0.11	32	< 0.10	< 0.10	< 0.10	0.41	< 0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10	
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	24	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Perylene	-	-	< 0.10	< 0.10	< 0.10	26	0.16	< 0.10	< 0.10	13.7	< 0.10	< 0.10	< 0.10	0.15	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Phenanthrene	2	-	< 0.10	< 0.10	0.34	340	5.1	< 0.10	0.13	19.1	< 0.10	< 0.10	< 0.10	0.3	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Pyrene	2	-	< 0.10	< 0.10	0.32	280	5.1	< 0.10	0.16	85	< 0.10	< 0.10	< 0.10	0.87	< 0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10	
Total of Reported PAHs	-	20	< 3	< 3	3	2000	31	< 3	< 3	510	< 3	< 3	< 3	6	< 3	< 3	< 3	< 3	< 3	< 3	

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		16-Jul-24						17-Jul-24												
Sample Name			FTL132	FTL133	FTL134	FTL135	FTL136	FTL138	FTL139	Dup FTL139	FTL140	FTL141	FTL142	FTL142	FTL143	FTL144	FTL144	FTL145	FTL146	FTL147	FTL148
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0-0.03	0-0.04	0-0.04	0-0.05	0-0.05	0-0.03	0-0.04	0-0.04	0-0.05	0-0.04	0-0.03	0.1-0.15	0-0.04	0-0.03	0.1-0.14	0-0.04	0-0.04	0-0.03	0-0.02
Lab Number			3631528.176	3631528.179	3631528.182	3631528.184	3631528.187	3631528.189	3631528.191	3631528.192	3631528.195	3631528.198	3631528.201	3631528.203	3631528.205	3631528.208	3631528.21	3631528.212	3631528.215	3631528.218	3631528.221
PAHs																					
1-Methylnaphthalene	-	-	< 0.10	0.36	8.8	< 0.10	< 0.10	< 0.10	0.55	0.54	< 0.10	0.37	0.57	26	4	0.24	1.03	< 0.10	< 0.10	< 0.10	
2-Methylnaphthalene	-	-	< 0.15	< 0.15	9.3	< 0.10	< 0.15	< 0.15	0.22	0.21	< 0.15	0.23	0.57	20	3.2	0.2	0.74	< 0.15	< 0.15	< 0.15	
Acenaphthylene	2	-	< 0.10	1.21	0.18	< 0.10	< 0.10	< 0.10	1.39	1.34	< 0.10	1.54	< 0.10	1.78	0.62	< 0.10	0.55	< 0.10	< 0.10	< 0.10	
Acenaphthene	2	-	< 0.10	9.8	14.2	< 0.10	< 0.10	< 0.10	13.7	12	< 0.10	11.2	< 0.10	94	22	< 0.10	5.5	< 0.10	< 0.10	< 0.10	
Anthracene	0.2	-	< 0.10	20	14.6	< 0.10	< 0.10	< 0.10	20	23	< 0.10	37	< 0.10	156	42	< 0.10	11	< 0.10	< 0.10	< 0.10	
Benzo[a]anthracene	1	-	< 0.10	63	8.4	< 0.10	< 0.10	< 0.10	51	59	< 0.10	106	< 0.10	149	57	< 0.10	25	< 0.10	< 0.10	< 0.10	
Benzo[a]pyrene (BAP)	1	-	< 0.10	65	3.2	< 0.10	< 0.10	< 0.10	37	43	< 0.10	104	< 0.10	134	41	< 0.10	45	< 0.10	< 0.10	< 0.10	
BAP (Eq) NES	-	1	< 0.24	99	5.8	< 0.24	< 0.24	< 0.24	59	68	< 0.24	158	< 0.24	200	64	< 0.24	67	< 0.25	< 0.24	< 0.25	
BAP Toxic (Eq) (TEF)	-	-	< 0.3	98	5.4	< 0.3	< 0.3	< 0.3	58	67	< 0.3	156	< 0.3	197	62	< 0.3	66	< 0.3	< 0.3	< 0.3	
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.10	80	4.4	< 0.10	< 0.10	0.15	46	53	< 0.10	127	0.13	132	48	< 0.10	51	< 0.10	< 0.10	< 0.10	
Benzo[e]pyrene	-	-	< 0.10	38	1.65	< 0.10	< 0.10	0.1	21	24	< 0.10	59	0.1	72	22	< 0.10	25	< 0.10	< 0.10	< 0.10	
Benzo[g,h,i]perylene	2	-	< 0.10	39	1.12	0.15	< 0.10	0.12	20	22	< 0.10	58	0.12	81	22	0.11	40	< 0.10	< 0.10	< 0.10	
Benzo[k]fluoranthene	-	-	< 0.10	28	2.1	< 0.10	< 0.10	< 0.10	18.2	21	< 0.10	50	< 0.10	49	18.8	< 0.10	16	< 0.10	< 0.10	< 0.10	
Chrysene	2	-	< 0.10	50	7.4	< 0.10	< 0.10	< 0.10	40	47	< 0.10	86	< 0.10	125	45	< 0.10	23	< 0.10	< 0.10	< 0.10	
Dibenzo[a,h]anthracene	1	-	< 0.10	10.7	0.43	< 0.10	< 0.10	< 0.10	6.2	6.9	< 0.10	15.7	< 0.10	20	6.3	< 0.10	8.1	< 0.10	< 0.10	< 0.10	
Fluoranthene	2	-	< 0.10	156	38	< 0.10	< 0.10	< 0.10	139	158	< 0.10	250	0.14	400	163	< 0.10	71	< 0.10	< 0.10	< 0.10	
Fluorene	2	-	< 0.10	4.7	12.9	< 0.10	< 0.10	< 0.10	5.1	6.2	< 0.10	7.3	< 0.10	89	22	< 0.10	3.3	< 0.10	< 0.10	< 0.10	
Indeno(1,2,3-c,d)pyrene	2	-	< 0.10	44	1.5	0.11	< 0.10	0.14	23	26	< 0.10	65	< 0.10	84	26	< 0.10	37	< 0.10	< 0.10	< 0.10	
Naphthalene	200	-	< 0.5	< 0.5	10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	8.4	1.7	< 0.5	0.6	< 0.5	< 0.5	< 0.5	
Perylene	-	-	< 0.10	16	0.61	< 0.10	< 0.10	< 0.10	8.5	10	< 0.10	26	< 0.10	32	9.7	< 0.10	12.9	< 0.10	< 0.10	< 0.10	
Phenanthrene	2	-	< 0.10	77	82	< 0.10	< 0.10	< 0.10	71	87	< 0.10	108	0.17	490	160	< 0.10	39	< 0.10	< 0.10	< 0.10	
Pyrene	2	-	< 0.10	161	24	< 0.10	< 0.10	< 0.10	107	123	< 0.10	230	0.14	410	121	0.11	63	< 0.10	< 0.10	< 0.10	
Total of Reported PAHs	-	20	< 3	860	240	< 3	< 3	< 3	630	720	< 3	1340	3	2600	840	< 3	480	< 3	< 3	< 3	

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		17-Jul-24																		
Sample Name			FTL148	FTL149	Dup FTL149	FTL150	FTL151	FTL151	FTL152	FTL153	FTL153	FTL154	FTL154	FTL155	FTL156	FTL157	FTL157	FTL158	FTL158	FTL159	
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.02-0.05	0-0.03	0-0.03	0-0.03	0-0.04	0.04-0.09	0-0.05	0-0.02	0.02-0.07	0-0.04	0.04-0.08	0-0.06	0-0.04	0-0.04	0.2-0.23	0-0.04	0.09-0.15	0-0.04	
Lab Number			3631528.222	3631528.224	3631528.225	3631528.23	3631528.233	3631528.234	3631528.236	3631528.239	3631528.24	3631528.242	3631528.243	3631528.245	3631528.247	3631528.25	3631528.252	3631528.254	3631528.256	3631528.26	
PAHs																					
1-Methylnaphthalene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.15	< 0.10	< 0.10	0.11	0.12	< 0.10	< 0.10	< 0.10	< 0.10	0.77	< 0.08	4.4	< 0.10	
2-Methylnaphthalene	-	-	0.11	< 0.10	< 0.15	< 0.15	< 0.2	0.15	< 0.10	< 0.10	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.10	0.52	< 0.08	4.2	< 0.15	
Acenaphthylene	2	-	0.22	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.34	< 0.10	1.55	1.4	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.08	0.9	< 0.10	
Acenaphthene	2	-	0.85	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.12	< 0.10	< 0.10	9.6	0.22	0.77	< 0.10	< 0.10	0.26	9.6	< 0.08	24	< 0.10
Anthracene	0.2	-	2.2	< 0.10	< 0.10	< 0.10	< 0.10	0.18	3.5	0.66	< 0.10	9	0.11	14	< 0.10	< 0.10	< 0.10	8.4	< 0.08	32	< 0.10
Benzo[a]anthracene	1	-	11.9	< 0.10	< 0.10	< 0.10	< 0.10	0.56	34	7.4	0.22	56	< 0.10	45	< 0.10	< 0.10	< 0.10	10.9	< 0.08	50	< 0.10
Benzo[a]pyrene (BAP)	1	-	27	< 0.10	< 0.10	< 0.10	< 0.10	0.65	36	12.9	0.47	65	< 0.10	44	< 0.10	< 0.10	< 0.10	7.3	< 0.08	39	< 0.10
BAP (Eq) NES	-	1	39	< 0.23	< 0.25	< 0.24	1.02	57	19.2	0.68	96	< 0.24	70	< 0.24	< 0.24	< 0.25	11.4	< 0.19	61	< 0.24	
BAP Toxic (Eq) (TEF)	-	-	39	< 0.3	< 0.3	< 0.3	1	56	19.1	0.7	95	< 0.3	68	< 0.3	< 0.3	< 0.3	11	< 0.19	60	< 0.3	
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	29	< 0.10	< 0.10	< 0.10	< 0.10	0.79	48	15	0.51	75	< 0.10	60	< 0.10	< 0.10	< 0.10	9	< 0.08	47	< 0.10
Benzo[e]pyrene	-	-	16.8	< 0.10	< 0.10	< 0.10	< 0.10	0.39	21	7.9	0.29	30	< 0.10	25	< 0.10	< 0.10	< 0.10	3.4	< 0.08	21	< 0.10
Benzo[g,h,i]perylene	2	-	25	< 0.10	< 0.10	< 0.10	< 0.10	0.57	25	9.4	0.5	35	< 0.10	32	< 0.10	< 0.10	< 0.10	2.5	< 0.08	22	< 0.10
Benzo[k]fluoranthene	-	-	9.5	< 0.10	< 0.10	< 0.10	< 0.10	0.31	19.8	5.7	0.18	29	< 0.10	24	< 0.10	< 0.10	< 0.10	3.7	< 0.08	17.8	< 0.10
Chrysene	2	-	11.8	< 0.10	< 0.10	< 0.10	< 0.10	0.58	30	7.3	0.22	49	< 0.10	41	< 0.10	< 0.10	< 0.10	9.5	< 0.08	48	< 0.10
Dibenzo[a,h]anthracene	1	-	4.4	< 0.10	< 0.10	< 0.10	< 0.10	0.12	6.1	2.2	< 0.10	8.7	< 0.10	7.3	< 0.10	< 0.10	< 0.10	0.86	< 0.08	6.2	< 0.10
Fluoranthene	2	-	26	< 0.10	< 0.10	< 0.10	< 0.10	2.9	71	14	0.46	146	< 0.10	136	< 0.10	< 0.10	0.1	43	< 0.08	152	< 0.10
Fluorene	2	-	0.45	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.46	< 0.10	< 0.10	2.2	< 0.10	0.42	< 0.10	< 0.10	< 0.10	5	< 0.08	23	< 0.10
Indeno(1,2,3-c,d)pyrene	2	-	22	< 0.10	< 0.10	< 0.10	< 0.10	0.56	29	10.8	0.43	43	< 0.10	36	< 0.10	< 0.10	< 0.10	3.4	< 0.08	27	< 0.10
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.4	4	< 0.5	
Perylene	-	-	7.5	< 0.10	< 0.10	< 0.10	< 0.10	0.19	10.5	4	0.17	17.9	< 0.10	12.6	< 0.10	< 0.10	< 0.10	1.54	< 0.08	9.6	< 0.10
Phenanthrene	2	-	6.1	< 0.10	< 0.10	< 0.10	< 0.10	1.44	11.4	1.08	< 0.10	16.9	1.41	58	< 0.10	< 0.10	< 0.10	27	< 0.08	155	< 0.10
Pyrene	2	-	30	< 0.10	< 0.10	< 0.10	< 0.10	2.2	68	15.2	0.47	126	< 0.10	105	< 0.10	< 0.10	< 0.10	34	< 0.08	113	< 0.10
Total of Reported PAHs	-	20	230	< 3	< 3	< 3	12	420	114	4	720	3	640	< 3	< 3	< 3	181	< 1.9	800	< 3	

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		17-Jul-24								18-Jul-24										
Sample Name			FTL160	FTL160	FTL161	FTL162	FTL163	FTL164	FTL165	FTL166	FTL167	FTL168	FTL168	FTL169	FTL170	FTL171	FTL172	FTL173	FTL174	FTL175	FTL176
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0-0.04	0.09-0.14	0-0.05	0-0.03	0-0.05	0-0.04	0-0.04	0-0.06	0-0.04	0-0.03	0.15-0.2	0-0.03	0-0.04	0-0.04	0-0.03	0-0.03	0-0.05	0-0.03	0-0.05
Lab Number			3631528.262	3631528.264	3631528.266	3631528.268	3631528.27	3631528.272	3631528.274	3631528.276	3631528.278	3631528.28	3631528.282	3631528.284	3631528.286	3631528.289	3631528.292	3631528.295	3631528.297	3631528.299	3631528.301
PAHs																					
1-Methylnaphthalene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	6.1	< 0.10	0.1	< 0.10	< 0.10	< 0.10	0.28	< 0.10	0.1	< 0.10	0.25	< 0.10	< 0.10
2-Methylnaphthalene	-	-	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	5.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.15	0.27	< 0.10	0.16	< 0.15	< 0.2	< 0.15	< 0.10
Acenaphthylene	2	-	0.29	0.64	0.16	< 0.10	< 0.10	< 0.10	1.61	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10	< 0.10
Acenaphthene	2	-	2.3	1.15	0.13	< 0.10	< 0.10	< 0.10	31	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.7	< 0.10	< 0.10
Anthracene	0.2	-	2.9	8	1.3	< 0.10	< 0.10	< 0.10	84	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.1	< 0.10	0.11
Benzo[a]anthracene	1	-	14.7	35	7.2	< 0.10	< 0.10	< 0.10	174	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	7.6	< 0.10	0.7
Benzo[a]pyrene (BAP)	1	-	16.5	38	13.2	< 0.10	< 0.10	< 0.10	173	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	5.2	< 0.10	1.37
BAP (Eq) NES	-	1	25	59	19.5	< 0.24	< 0.24	< 0.24	260	< 0.25	< 0.24	< 0.24	< 0.23	< 0.24	< 0.24	< 0.24	< 0.25	< 0.24	8.5	< 0.24	2.2
BAP Toxic (Eq) (TEF)	-	-	25	59	19.3	< 0.3	< 0.3	< 0.3	260	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	8.2	< 0.3	2.2
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	20	49	16.1	< 0.10	< 0.10	< 0.10	187	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	7.5	< 0.10	1.92
Benzo[e]pyrene	-	-	9.4	22	7.9	< 0.10	< 0.10	< 0.10	104	< 0.10	< 0.10	< 0.10	0.16	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.1	< 0.10	1.18
Benzo[g,h,i]perylene	2	-	9.3	25	9.4	< 0.10	< 0.10	< 0.10	108	< 0.10	< 0.10	< 0.10	0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.5	< 0.10	1.52
Benzo[k]fluoranthene	-	-	7.7	18.5	5.2	< 0.10	< 0.10	< 0.10	75	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.9	< 0.10	0.76
Chrysene	2	-	11.5	28	6.1	< 0.10	< 0.10	< 0.10	166	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	7.8	< 0.10	0.71
Dibenzo[a,h]anthracene	1	-	2.7	6.7	2.2	< 0.10	< 0.10	< 0.10	26	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.8	< 0.10	0.32
Fluoranthene	2	-	49	84	16.3	< 0.10	< 0.10	< 0.10	370	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	27	< 0.10	0.93
Fluorene	2	-	0.56	0.98	0.15	< 0.10	< 0.10	< 0.10	17.8	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.2	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene	2	-	10.5	28	10	< 0.10	< 0.10	< 0.10	108	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	3.3	< 0.10	1.42
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene	-	-	4	10.2	3.6	< 0.10	< 0.10	< 0.10	42	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.01	< 0.10	0.4
Phenanthrene	2	-	7.3	22	2.6	< 0.10	< 0.10	< 0.10	350	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.26	< 0.10	0.15	< 0.10	11.6	< 0.10	0.16
Pyrene	2	-	46	65	14.3	< 0.10	< 0.10	< 0.10	420	< 0.10	0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.11	< 0.10	24	< 0.10	1.02
Total of Reported PAHs	-	20	220	440	116	< 3	< 3	< 3	2500	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	111	< 3	13

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Surface Samples																					
Sample Date	Waste Acceptance Criteria		18-Jul-24																		
Sample Name			FTL177	FTL178	FTL179	FTL180	FTL181	FTL182	FTL183	FTL184	FTL185	FTL186	FTL187	FTL188	FTL189	FTL189	FTL190	FTL190	FTL191	FTL191	FTL192
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0-0.03	0-0.04	0-0.03	0-0.02	0-0.03	0-0.04	0-0.05	0-0.04	0-0.02	0-0.03	0-0.02	0-0.02	0-0.05	0.12-0.17	0-0.05	0.12-0.16	0-0.02	0.2-0.24	0-0.03
Lab Number			3631528.304	3631528.306	3631528.308	3631528.311	3631528.314	3631528.316	3631528.318	3631528.321	3631528.324	3631528.326	3631528.329	3631528.331	3631528.335	3631528.337	3631528.339	3631528.341	3631528.343	3631528.345	3631528.347
PAHs																					
1-Methylnaphthalene	-	-	0.11	0.52	< 0.10	0.4	< 0.10	< 0.10	< 0.09	0.58	< 0.10	0.16	< 0.10	< 0.10	0.55	1.1	< 0.10	0.2	< 0.10	10.5	0.12
2-Methylnaphthalene	-	-	0.15	0.37	< 0.15	0.3	< 0.10	< 0.10	< 0.09	0.3	< 0.15	< 0.10	< 0.10	< 0.10	0.27	0.61	< 0.2	< 0.10	< 0.10	11.6	0.16
Acenaphthylene	2	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.19	< 0.10	< 0.10	1.33	< 0.10
Acenaphthene	2	-	0.29	0.13	< 0.10	< 0.10	< 0.10	< 0.10	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.15	0.38	< 0.10	< 0.10	< 0.10	48	< 0.10
Anthracene	0.2	-	0.36	< 0.10	< 0.10	< 0.10	< 0.10	0.33	< 0.09	0.12	< 0.10	< 0.10	< 0.10	< 0.10	0.14	0.22	2.6	< 0.10	< 0.10	58	< 0.10
Benzo[a]anthracene	1	-	1.33	< 0.10	< 0.10	< 0.10	< 0.10	0.72	< 0.09	0.25	< 0.10	< 0.10	< 0.10	< 0.10	0.18	0.54	5.6	0.16	< 0.10	71	0.11
Benzo[a]pyrene (BAP)	1	-	1.94	< 0.10	< 0.10	< 0.10	< 0.10	0.7	0.22	0.17	< 0.10	< 0.10	< 0.10	< 0.10	0.19	0.53	< 0.10	0.21	< 0.10	55	0.2
BAP (Eq) NES	-	1	3.1	< 0.24	< 0.24	< 0.24	< 0.24	1.17	0.33	0.32	< 0.24	< 0.25	< 0.24	< 0.24	0.32	0.87	0.65	0.34	< 0.24	87	0.26
BAP Toxic (Eq) (TEF)	-	-	3.1	< 0.3	< 0.3	< 0.3	< 0.3	1.2	0.3	0.3	< 0.3	< 0.3	< 0.3	< 0.3	0.3	0.9	0.6	0.3	< 0.3	85	0.3
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	2.7	0.11	< 0.10	< 0.10	< 0.10	1.06	0.29	0.22	< 0.10	< 0.10	< 0.10	< 0.10	0.24	0.76	< 0.10	0.23	< 0.10	68	0.25
Benzo[e]pyrene	-	-	1.56	0.12	< 0.10	< 0.10	< 0.10	0.62	0.27	0.27	< 0.10	< 0.10	< 0.10	< 0.10	0.26	0.57	< 0.10	0.27	< 0.10	30	0.17
Benzo[g,h,i]perylene	2	-	2.3	< 0.10	< 0.10	< 0.10	< 0.10	0.65	0.36	0.22	< 0.10	< 0.10	< 0.10	< 0.10	0.22	0.49	0.1	0.23	< 0.10	31	0.16
Benzo[k]fluoranthene	-	-	0.95	< 0.10	< 0.10	< 0.10	< 0.10	0.38	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.22	< 0.10	< 0.10	< 0.10	26	< 0.10
Chrysene	2	-	1.37	0.17	< 0.10	< 0.10	< 0.10	0.76	< 0.09	0.36	< 0.10	< 0.10	< 0.10	< 0.10	0.24	0.63	< 0.10	0.21	< 0.10	67	0.13
Dibenzo[a,h]anthracene	1	-	0.42	< 0.10	< 0.10	< 0.10	< 0.10	0.17	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10	8.7	< 0.10
Fluoranthene	2	-	3.4	0.16	< 0.10	< 0.10	< 0.10	2.2	0.18	0.62	< 0.10	< 0.10	< 0.10	< 0.10	0.58	1.83	0.18	0.21	< 0.10	240	0.23
Fluorene	2	-	0.15	0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.09	0.19	< 0.10	< 0.10	< 0.10	< 0.10	0.21	0.51	0.51	< 0.10	< 0.10	45	< 0.10
Indeno(1,2,3-c,d)pyrene	2	-	1.91	< 0.10	< 0.10	< 0.10	< 0.10	0.62	0.24	0.11	< 0.10	< 0.10	< 0.10	< 0.10	0.17	0.41	< 0.10	0.17	< 0.10	37	0.14
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	15.8	< 0.5
Perylene	-	-	0.55	0.18	< 0.10	< 0.10	< 0.10	0.23	< 0.09	0.41	< 0.10	< 0.10	< 0.10	< 0.10	0.11	0.26	< 0.10	0.13	< 0.10	14.1	< 0.10
Phenanthrene	2	-	1.11	0.71	< 0.10	0.11	< 0.10	1.59	< 0.09	1.35	< 0.10	< 0.10	< 0.10	< 0.10	1.02	2.6	0.3	0.28	< 0.10	250	< 0.10
Pyrene	2	-	2.5	0.25	< 0.10	< 0.10	< 0.10	1.68	0.28	0.66	< 0.10	< 0.10	< 0.10	< 0.10	0.45	1.54	0.17	0.32	< 0.10	164	0.3
Total of Reported PAHs	-	20	23	3	< 3	< 3	< 3	12	2	6	< 3	< 3	< 3	< 3	5	14	10	3	< 3	1250	< 3

Former Tokanui Psychiatric Hospital Closed Landfill: Roding Material Coal Tar Sampling Results - Surface Samples														
Sample Date	Waste Acceptance Criteria		18-Jul-24		19-Jul-24									
Sample Name			FTL193	FTL193	1.FTL194	2.FTL194	3.FTL194	1.FTL195	2.FTL195	3.FTL195	FTL196	1.FTL197	2.FTL197	3.FTL197
Sample Depth (m)			0-0.02	0.02-0.05	0-0.03	0-0.03	0-0.03	0-0.05	0-0.05	0-0.05	0-0.05	0.03-0.06	0.03-0.06	0.03-0.06
Lab Number	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	3631528.349	3631528.35	3631528.352	3631528.353	3631528.354	3631528.361	3631528.362	3631528.363	3631528.364	3631528.367	3631528.368	3631528.369
PAHs														
1-Methylnaphthalene	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.15	0.14	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene	-	-	< 0.15	< 0.15	< 0.10	< 0.10	< 0.10	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene	2	-	< 0.10	1.73	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	2	-	< 0.10	0.53	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.17	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	0.2	-	0.17	3.4	< 0.10	< 0.10	< 0.10	< 0.10	0.12	0.16	0.1	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	1	-	1.97	45	< 0.10	< 0.10	< 0.10	< 0.10	0.27	0.13	0.27	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)	1	-	1.08	63	< 0.10	< 0.10	< 0.10	< 0.10	0.28	0.15	0.23	< 0.10	< 0.10	< 0.10
BAP (Eq) NES	-	1	1.87	95	< 0.24	< 0.24	< 0.24	< 0.24	0.44	0.25	0.37	< 0.24	< 0.24	< 0.24
BAP Toxic (Eq) (TEF)	-	-	1.8	94	< 0.3	< 0.3	< 0.3	< 0.3	0.4	0.2	0.4	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	1.71	78	< 0.10	< 0.10	< 0.10	< 0.10	0.41	0.22	0.38	0.1	< 0.10	< 0.10
Benzo[e]pyrene	-	-	0.64	35	< 0.10	< 0.10	< 0.10	< 0.10	0.22	0.13	0.22	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	2	-	0.57	45	< 0.10	< 0.10	< 0.10	< 0.10	0.23	0.16	0.2	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	-	-	0.75	29	< 0.10	< 0.10	< 0.10	< 0.10	0.14	< 0.10	0.11	< 0.10	< 0.10	< 0.10
Chrysene	2	-	1.99	42	< 0.10	< 0.10	< 0.10	< 0.10	0.21	0.11	0.3	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene	1	-	0.17	10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	2	-	8.5	78	< 0.10	< 0.10	< 0.10	< 0.10	0.84	0.51	1.05	< 0.10	< 0.10	0.2
Fluorene	2	-	< 0.10	0.34	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.17	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene	2	-	0.75	51	< 0.10	< 0.10	< 0.10	< 0.10	0.23	0.15	0.19	< 0.10	< 0.10	< 0.10
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene	-	-	0.24	19.4	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	2	-	1.79	5.9	< 0.10	< 0.10	< 0.10	< 0.10	0.54	0.64	0.75	< 0.10	0.1	0.31
Pyrene	2	-	7.2	85	0.13	0.16	0.15	< 0.10	0.76	0.47	0.84	0.13	< 0.10	0.26
Total of Reported PAHs	-	20	28	590	< 3	< 3	< 3	< 3	5	4	5	< 3	< 3	< 3

Note:
1 WasteMINZ Coal tar guidelines (Guidelines for Assessing and Managing Coal Tar Contamination in Roding 2023) have been selected.

Underlined: Present above detection limits
ND: Not detected
NL: No limit
NS: Not stated
- Not tested for
Above WasteMINZ Coal Tar Guidelines
Above Hampton Downs Criteria without TCLP (mg/kg)

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																		
Sample Date	Waste Acceptance Criteria		27-May-24 - 29-May-24															
Sample Name			FTL01B	FTL06B	FTL14B	FTL20B	FTL22B	FTL27B	FTL29B	FTL30B	FTL32B	FTL33B	FTL34B	FTL35B	FTL36B	FTL37B	FTL38B	FTL40B
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines¹	0.3	0.2	0.3	0.4	0.2	0.2	0.3	0.2	0.05-0.2	0.05-0.2	0.05-0.2	0.05-0.2	0.05-0.15	0.05-0.2	0.05-0.2	0.1-0.2
Lab Number			3574957.2	3574957.5	3574957.7	3574957.8	3574957.1	3574957.12	3574957.14	3574957.16	3594800.31	3594800.32	3594800.33	3594800.34	3594800.35	3594800.36	3594800.37	3594800.38
PAHs	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines¹																
1-Methylnaphthalene			< 0.10	0.83	0.14	< 0.10	< 0.10	0.14	< 0.10	1.9	< 0.3	< 0.3	< 0.3	0.044	< 0.011	5.4	< 0.013	0.016
2-Methylnaphthalene	-	-	< 0.10	0.48	0.12	< 0.10	< 0.10	< 0.10	< 0.10	1.96	< 0.016	< 0.018	< 0.017	0.05	< 0.016	3.5	< 0.02	< 0.019
Acenaphthylene	2	-	< 0.10	3.5	< 0.10	< 0.10	0.32	0.13	< 0.10	0.31	< 0.011	< 0.012	< 0.011	< 0.011	0.174	2.2	< 0.013	0.039
Acenaphthene	2	-	< 0.10	11	0.22	< 0.10	0.42	0.71	< 0.10	13.4	< 0.011	< 0.012	< 0.011	0.16	0.019	37	0.037	0.156
Anthracene	0.2	-	< 0.10	32	0.25	< 0.10	2.1	1.14	< 0.10	17.1	< 0.011	< 0.012	< 0.011	0.39	0.27	90	0.131	0.41
Benzo[a]anthracene	1	-	< 0.10	103	0.2	0.11	15.6	3.8	< 0.10	19.1	< 0.011	< 0.012	< 0.011	0.6	2.2	175	0.29	1.98
Benzo[a]pyrene (BAP)	1	-	< 0.10	101	0.2	0.23	22	4.5	< 0.10	18.6	< 0.011	< 0.012	< 0.011	0.62	4.4	196	0.26	2
BAP (Eq) NES	-	1	< 0.24	152	0.31	0.38	32	6.8	< 0.24	28	< 0.026	< 0.029	< 0.027	0.93	6.5	280	0.39	3.1
BAP Toxic (Eq) (TEF)	-	-	< 0.3	150	0.3	0.4	32	6.7	< 0.3	28	< 0.026	< 0.029	< 0.026	0.91	6.5	280	0.38	3
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.10	117	0.22	0.23	26	5.4	< 0.10	22	< 0.011	< 0.012	< 0.011	0.74	5.2	199	0.33	2.5
Benzo[e]pyrene	-	-	< 0.10	54	0.11	0.27	12.7	2.4	< 0.10	9.9	< 0.011	< 0.012	< 0.011	0.37	2.5	107	0.156	1.18
Benzo[g,h,i]perylene	2	-	< 0.10	53	0.11	0.25	13	3	< 0.10	10.4	< 0.011	< 0.012	< 0.011	0.4	4.4	115	0.139	1.15
Benzo[k]fluoranthene	-	-	< 0.10	44	< 0.10	< 0.10	9.4	2.3	< 0.10	8	< 0.011	< 0.012	< 0.011	0.28	1.92	73	0.128	0.96
Chrysene	2	-	< 0.10	85	0.18	0.11	14	3.8	< 0.10	16.1	< 0.011	< 0.012	< 0.011	0.53	2.1	159	0.23	1.64
Dibenzo[a,h]anthracene	1	-	< 0.10	14.9	< 0.10	< 0.10	3.2	0.67	< 0.10	2.8	< 0.011	< 0.012	< 0.011	0.084	0.74	26	0.035	0.29
Fluoranthene	2	-	< 0.10	220	0.63	0.18	27	8.6	< 0.10	54	< 0.011	< 0.012	< 0.011	1.64	4.3	400	0.75	3.9
Fluorene	2	-	< 0.10	8.4	0.23	< 0.10	0.17	0.27	< 0.10	11.7	< 0.011	< 0.012	< 0.011	0.196	0.016	28	0.029	0.127
Indeno[1,2,3-c,d]pyrene	2	-	< 0.10	61	0.13	0.25	14.4	3.4	< 0.10	12	< 0.011	< 0.012	< 0.011	0.42	4	116	0.154	1.31
Naphthalene	200	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	3	< 0.07	< 0.07
Perylene	-	-	< 0.10	24	< 0.10	0.11	5	1.3	< 0.10	4.2	< 0.011	< 0.012	< 0.011	0.148	1.32	48	0.057	0.51
Phenanthrene	2	-	< 0.10	90	0.81	< 0.10	4.2	3.3	< 0.10	52	< 0.011	< 0.012	< 0.011	1.51	0.32	320	0.48	1.25
Pyrene	2	-	< 0.10	200	0.5	0.28	35	8.8	< 0.10	47	< 0.011	< 0.012	< 0.011	1.48	5.5	420	0.66	3.2
Total of Reported PAHs	-	20	< 3	1220	4	< 3	200	54	< 3	320	< 0.011	< 0.012	< 0.011	9.7	39	2500	3.9	23

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																			
Sample Date	Waste Acceptance Criteria		27-May-24 - 29-May-24																
Sample Name			FTL42B	FTL44B	FTL45B	FTL46B	FTL47B	FTL48B	FTL49B	FTL50B	FTL51B	FTL52B	FTL53B	FTL54B	FTL55B	FTL56B	FTL57B	FTL58B	FTL60B
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.05-0.2	0.05-0.25	0.05-0.25	0.05-0.45	0.05-0.3	0.2-0.4	0.4-0.6	0.05-0.4	0.1-0.4	0.1-0.3	0.3-0.5	0.1-0.3	0.05-0.3	0.05-0.3	0.05-0.3	0.05-0.3	0.1-0.3
Lab Number			3594800.4	3594800.41	3594800.42	3594800.43	3594800.44	3594800.45	3594800.46	3594800.47	3594800.48	3594800.49	3594800.5	3594800.51	3594800.52	3594800.53	3594800.54	3594800.55	3594800.56
PAHs																			
1-Methylnaphthalene	-	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	0.99	0.025	< 0.011	0.016	< 0.011	< 0.011	< 0.011	< 0.015	0.087	< 0.011
2-Methylnaphthalene	-	-	< 0.016	< 0.017	< 0.017	< 0.016	< 0.03	< 0.03	< 0.02	1.04	0.021	< 0.016	< 0.019	< 0.017	< 0.016	< 0.017	< 0.03	0.077	< 0.016
Acenaphthylene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	0.83	0.113	0.014	0.026	< 0.011	< 0.011	< 0.011	< 0.015	0.043	< 0.011
Acenaphthene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	4.9	0.24	< 0.011	0.162	< 0.011	< 0.011	< 0.011	< 0.015	0.52	< 0.011
Anthracene	0.2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	8.6	0.88	0.035	0.81	0.02	< 0.011	< 0.011	< 0.015	0.98	< 0.011
Benzo[a]anthracene	1	-	0.046	0.05	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	18.6	3.3	0.27	2.5	0.34	0.057	< 0.011	< 0.015	1.62	< 0.011
Benzo[a]pyrene (BAP)	1	-	0.067	0.085	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	17.2	3.3	0.38	2.3	0.53	0.066	< 0.011	< 0.015	1.61	< 0.011
BAP (Eq) NES	-	1	0.099	0.122	< 0.026	< 0.025	< 0.035	< 0.048	< 0.033	26	5	0.57	3.5	0.76	0.099	< 0.026	< 0.035	2.4	< 0.026
BAP Toxic (Eq) (TEF)	-	-	0.099	0.121	< 0.026	< 0.025	< 0.035	< 0.047	< 0.033	26	4.9	0.56	3.5	0.76	0.098	< 0.026	< 0.035	2.3	< 0.026
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.086	0.095	< 0.011	< 0.011	< 0.015	< 0.02	0.014	21	3.9	0.46	2.9	0.59	0.082	< 0.011	< 0.015	1.81	< 0.011
Benzo[e]pyrene	-	-	0.045	0.065	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	9.5	1.89	0.24	1.38	0.35	0.045	< 0.011	< 0.015	0.88	< 0.011
Benzo[g,h,i]perylene	2	-	0.051	0.066	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	8.7	1.85	0.25	1.47	0.35	0.04	< 0.011	< 0.015	0.86	< 0.011
Benzo[k]fluoranthene	-	-	0.033	0.037	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	7.6	1.51	0.178	1.04	0.23	0.036	< 0.011	< 0.015	0.71	< 0.011
Chrysene	2	-	0.041	0.052	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	14.8	2.6	0.24	2	0.29	0.046	< 0.011	< 0.015	1.34	< 0.011
Dibenzo[a,h]anthracene	1	-	< 0.011	0.011	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	2.7	0.5	0.06	0.34	0.074	< 0.011	< 0.011	< 0.015	0.21	< 0.011
Fluoranthene	2	-	0.081	0.1	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	40	7	0.38	5.6	0.26	0.068	< 0.011	< 0.015	4.4	< 0.011
Fluorene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	5.1	0.21	< 0.011	0.103	< 0.011	< 0.011	< 0.015	0.46	< 0.011	
Indeno[1,2,3-c,d]pyrene	2	-	0.055	0.063	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	10.7	2.1	0.29	1.64	0.38	0.045	< 0.011	< 0.015	1	< 0.011
Naphthalene	200	-	< 0.06	< 0.06	< 0.06	< 0.06	< 0.08	< 0.10	< 0.07	0.73	< 0.06	< 0.06	< 0.07	< 0.06	< 0.06	< 0.06	< 0.08	0.07	< 0.06
Perylene	-	-	0.019	0.019	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	4	0.77	0.106	0.59	0.14	0.015	< 0.011	< 0.015	0.41	< 0.011
Phenanthrene	2	-	0.023	0.019	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	26	2.4	0.082	2.8	0.013	< 0.011	< 0.011	< 0.015	2.9	< 0.011
Pyrene	2	-	0.087	0.115	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014	39	7.3	0.47	5	0.45	0.085	< 0.011	< 0.015	3.5	< 0.011
Total of Reported PAHs	-	20	0.7	0.8	< 0.3	< 0.3	< 0.4	< 0.5	< 0.4	240	40	3.5	31	4	0.6	< 0.3	< 0.4	23	< 0.3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																			
Sample Date	Waste Acceptance Criteria		27-May-24 - 29-May-24			15-Jul-24													
Sample Name			FTL61B	FTL61E	FTL62B	FTL65	FTL70	FTL71	FTL72	FTL73	FTL74	FTL75	FTL76	FTL77	FTL78	FTL79	FTL80	FTL81	FTL82
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.05-0.3	0.05-0.3	0.05-0.3	0.03-0.2	0.02-0.12	0.02-0.2	0.03-0.2	0.06-0.18	0.05-0.2	0.06-0.2	0.04-0.2	0.03-0.15	0.03-0.25	0.03-0.31	0.05-0.3	0.02-0.2	0.03-0.07
Lab Number			3594800.57	3594800.89	3594800.58	3631528.4	3631528.14	3631528.16	3631528.18	3631528.2	3631528.22	3631528.24	3631528.26	3631528.28	3631528.3	3631528.32	3631528.34	3631528.37	3631528.39
PAHs																			
1-Methylnaphthalene	-	-	< 0.011	< 0.016	< 0.011	< 0.012	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	< 0.011	< 0.011	0.014
2-Methylnaphthalene	-	-	< 0.016	< 0.03	< 0.017	< 0.012	< 0.011	< 0.015	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	< 0.011	< 0.011	0.014
Acenaphthylene	2	-	< 0.011	< 0.016	< 0.011	< 0.012	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	< 0.011	< 0.011	0.111
Acenaphthene	2	-	< 0.011	< 0.016	< 0.011	< 0.012	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	< 0.011	< 0.011	0.134
Anthracene	0.2	-	< 0.011	< 0.016	< 0.011	0.038	0.06	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.034	0.03	0.9
Benzo[a]anthracene	1	-	0.027	0.022	< 0.011	0.112	0.138	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.097	0.22	3.5
Benzo[a]pyrene (BAP)	1	-	0.034	0.022	< 0.011	0.108	0.192	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.106	0.28	4.5
BAP (Eq) NES	-	1	0.049	< 0.037	< 0.027	0.167	0.28	< 0.025	< 0.027	< 0.026	< 0.027	< 0.026	< 0.029	< 0.030	< 0.026	< 0.025	0.159	0.45	6.7
BAP Toxic (Eq) (TEF)	-	-	0.048	< 0.037	< 0.027	0.164	0.28	< 0.03	< 0.027	< 0.026	< 0.026	< 0.026	< 0.029	< 0.030	< 0.026	< 0.025	0.157	0.45	6.7
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.043	0.025	0.011	0.133	0.21	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.131	0.4	5.4
Benzo[e]pyrene	-	-	0.022	< 0.016	< 0.011	0.067	0.113	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.065	0.195	2.6
Benzo[g,h,i]perylene	2	-	0.024	< 0.016	< 0.011	0.071	0.142	0.011	< 0.011	< 0.011	0.018	0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.066	0.24	3
Benzo[k]fluoranthene	-	-	0.017	< 0.016	< 0.011	0.051	0.087	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.049	0.144	2.1
Chrysene	2	-	0.025	0.016	< 0.011	0.093	0.131	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.081	0.171	3
Dibenzo[a,h]anthracene	1	-	< 0.011	< 0.016	< 0.011	0.018	0.028	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.015	0.06	0.75
Fluoranthene	2	-	0.057	0.05	< 0.011	0.26	0.35	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.23	0.33	6.6
Fluorene	2	-	< 0.011	< 0.016	< 0.011	< 0.012	0.014	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.013	< 0.011	0.165
Indeno[1,2,3-c,d]pyrene	2	-	0.024	< 0.016	< 0.011	0.071	0.144	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.073	0.26	3.2
Naphthalene	200	-	< 0.06	< 0.08	< 0.06	< 0.06	< 0.06	< 0.05	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	< 0.011	< 0.016	< 0.011	0.026	0.049	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.025	0.074	1.1
Phenanthrene	2	-	0.014	0.017	< 0.011	0.142	0.186	< 0.010	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.116	0.086	2.5
Pyrene	2	-	0.057	0.047	< 0.011	0.25	0.32	0.016	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011	0.21	0.36	7.7
Total of Reported PAHs	-	20	0.4	< 0.4	< 0.3	1.4	2.2	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	1.3	2.9	47

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																			
Sample Date	Waste Acceptance Criteria		15-Jul-24							16-Jul-24									
Sample Name			FTL82	FTL82	FTL83	FTL85	FTL86	FTL87	FTL89	FTL90	FTL91	FTL92	FTL92	FTL92	FTL93	FTL93	FTL94	FTL95	FTL96
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.09-0.11	0.13-0.26	0.05-0.09	0.05-0.18	0.05-0.15	0.04-0.2	0.05-0.26	0.05-0.2	0.04-0.22	0.05-0.16	0.18-0.24	0.29-0.4	0.03-0.08	0.2-0.24	0.06-0.15	0.04-0.25	0.02-0.13
Lab Number			3631528.41	3631528.43	3631528.45	3631528.52	3631528.54	3631528.56	3631528.62	3631528.64	3631528.66	3631528.7	3631528.73	3631528.75	3631528.77	3631528.8	3631528.83	3631528.86	3631528.88
PAHs																			
1-Methylnaphthalene	-	-	< 0.011	0.023	0.014	< 0.011	< 0.011	< 0.011	< 0.011	0.016	< 0.011	< 0.010	< 0.10	0.121	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	-	-	< 0.011	0.024	0.017	< 0.011	< 0.011	< 0.011	< 0.011	0.013	< 0.014	< 0.010	< 0.15	0.107	< 0.013	< 0.010	< 0.013	< 0.014	< 0.011
Acenaphthylene	2	-	< 0.011	< 0.012	0.47	0.011	0.038	< 0.011	< 0.011	< 0.011	0.02	0.018	< 0.10	0.129	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011
Acenaphthene	2	-	0.026	0.082	0.37	0.015	0.047	< 0.011	< 0.011	0.121	0.011	< 0.010	< 0.10	1.04	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011
Anthracene	0.2	-	0.117	0.22	1.36	0.113	0.21	< 0.011	< 0.011	0.3	0.05	0.2	< 0.10	3.4	< 0.011	< 0.010	< 0.011	< 0.011	0.012
Benzo[a]anthracene	1	-	0.32	0.44	9.1	0.52	0.77	< 0.011	0.071	0.46	0.37	0.59	< 0.10	4.2	< 0.011	0.014	< 0.011	0.014	0.078
Benzo[a]pyrene (BAP)	1	-	0.33	0.47	15.4	0.76	1.05	< 0.011	0.105	0.42	0.38	0.63	< 0.10	3.4	0.012	0.024	0.011	0.016	0.19
BAP (Eq) NES	-	1	0.49	0.7	23	1.12	1.54	< 0.025	0.157	0.64	0.58	0.94	< 0.24	5.3	< 0.025	0.036	< 0.025	< 0.026	0.29
BAP Toxic (Eq) (TEF)	-	-	0.48	0.69	23	1.11	1.53	< 0.025	0.156	0.63	0.58	0.93	< 0.3	5.1	< 0.025	0.035	< 0.025	< 0.026	0.29
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.39	0.54	18.5	0.92	1.23	0.011	0.118	0.5	0.47	0.76	< 0.10	4.4	0.014	0.027	0.014	0.016	0.23
Benzo[e]pyrene	-	-	0.191	0.28	8.9	0.46	0.61	< 0.011	0.062	0.27	0.24	0.41	< 0.10	2	< 0.011	0.02	0.013	< 0.011	0.134
Benzo[g,h,i]perylene	2	-	0.186	0.3	11.4	0.47	0.64	0.016	0.085	0.26	0.23	0.41	< 0.10	2	0.011	0.023	0.036	< 0.011	0.192
Benzo[k]fluoranthene	-	-	0.142	0.21	6.4	0.31	0.47	< 0.011	0.047	0.21	0.19	0.27	< 0.10	1.63	< 0.011	< 0.010	< 0.011	< 0.011	0.085
Chrysene	2	-	0.27	0.36	7.8	0.46	0.66	< 0.011	0.06	0.4	0.29	0.47	< 0.10	3.4	< 0.011	0.011	< 0.011	< 0.011	0.074
Dibenzo[a,h]anthracene	1	-	0.046	0.064	2.7	0.128	0.164	< 0.011	0.019	0.061	0.062	0.091	< 0.10	0.48	< 0.011	< 0.010	< 0.011	< 0.011	0.04
Fluoranthene	2	-	0.79	1.06	14.7	0.95	1.54	< 0.011	0.107	1.26	0.67	1.28	< 0.10	11.8	0.019	0.021	0.027	0.027	0.082
Fluorene	2	-	0.031	0.092	0.3	0.02	0.044	< 0.011	< 0.011	0.131	< 0.011	0.014	< 0.10	1.18	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	2	-	0.22	0.31	12	0.5	0.67	< 0.011	0.085	0.27	0.25	0.44	< 0.10	2.2	0.011	0.022	< 0.011	< 0.011	0.179
Naphthalene	200	-	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.05	< 0.5	< 0.06	< 0.06	< 0.05	< 0.06	< 0.06	< 0.06
Perylene	-	-	0.087	0.115	3.9	0.189	0.26	< 0.011	0.028	0.12	0.082	0.159	< 0.10	0.76	< 0.011	< 0.010	< 0.011	< 0.011	0.069
Phenanthrene	2	-	0.32	0.7	2.9	0.28	0.63	< 0.011	0.015	1.19	0.117	0.56	< 0.10	11.7	0.014	< 0.010	0.022	0.013	< 0.011
Pyrene	2	-	0.78	0.87	21	1.19	2.1	0.014	0.145	1.18	0.65	1.29	< 0.10	9.1	0.022	0.023	0.021	0.024	0.127
Total of Reported PAHs	-	20	4.3	6.2	137	7.3	11.2	< 0.3	1	7.2	4.1	7.6	< 3	63	< 0.3	< 0.3	< 0.3	< 0.3	1.5

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																			
Sample Date	Waste Acceptance Criteria		16-Jul-24																
Sample Name			FTL97	FTL98	FTL99	FTL99	FTL100	FTL101	FTL102	FTL103	FTL104	FTL105	FTL106	FTL108	FTL109	FTL110	FTL111	FTL112	FTL113
Sample Depth (m)	Hampton Downs Criteria without TCLP	WasteMINZ Coal Tar Guidelines ¹	0.03-0.25	0.05-0.2	0.05-0.23	0.27-0.35	0.04-0.2	0.03-0.2	0.03-0.11	0.03-0.15	0.03-0.09	0.04-0.1	0.03-0.1	0.03-0.1	0.03-0.15	0.03-0.15	0.05-0.2	0.03-0.2	0.05-0.2
Lab Number			3631528.9	3631528.92	3631528.94	3631528.96	3631528.98	3631528.1	3631528.102	3631528.105	3631528.108	3631528.112	3631528.116	3631528.119	3631528.122	3631528.125	3631528.128	3631528.13	3631528.132
PAHs	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹																	
1-Methylnaphthalene	-	-	< 0.012	1.98	< 0.011	0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	-	-	< 0.012	2.6	< 0.013	< 0.014	< 0.013	< 0.013	< 0.013	< 0.013	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011
Acenaphthylene	2	-	< 0.012	1.18	< 0.011	0.131	< 0.011	< 0.011	< 0.011	< 0.011	0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	2	-	< 0.012	8.3	< 0.011	0.098	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	0.2	-	< 0.012	16.4	< 0.011	0.42	0.023	< 0.011	< 0.011	< 0.011	0.037	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	1	-	< 0.012	32	< 0.011	2.8	0.025	0.061	< 0.011	0.019	0.163	< 0.011	< 0.011	< 0.011	< 0.011	0.017	0.025	< 0.011	0.031
Benzo[a]pyrene (BAP)	1	-	< 0.012	25	< 0.011	2.8	0.02	0.062	< 0.011	0.026	0.42	< 0.011	< 0.011	< 0.011	< 0.011	0.022	0.047	< 0.011	0.039
BAP (Eq) NES	-	1	< 0.027	38	< 0.025	4.2	0.028	0.095	< 0.025	0.04	0.63	< 0.026	< 0.025	< 0.025	< 0.025	0.03	0.068	< 0.026	0.057
BAP Toxic (Eq) (TEF)	-	-	< 0.027	38	< 0.025	4.2	0.027	0.094	< 0.025	0.04	0.63	< 0.026	< 0.025	< 0.025	< 0.025	0.029	0.067	< 0.026	0.057
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.012	30	< 0.011	3.4	0.023	0.078	< 0.011	0.036	0.47	< 0.011	< 0.011	< 0.011	< 0.011	0.024	0.057	< 0.011	0.048
Benzo[e]pyrene	-	-	< 0.012	13.6	< 0.011	1.6	< 0.011	0.039	< 0.011	0.019	0.27	< 0.011	< 0.011	< 0.011	< 0.011	0.013	0.029	< 0.011	0.023
Benzo[g,h,i]perylene	2	-	< 0.012	13.5	< 0.011	1.61	< 0.011	0.041	< 0.011	0.021	0.45	< 0.011	< 0.011	< 0.011	< 0.011	0.018	0.033	< 0.011	0.024
Benzo[k]fluoranthene	-	-	< 0.012	12.7	< 0.011	1.33	< 0.011	0.031	< 0.011	0.016	0.163	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.022	< 0.011	0.02
Chrysene	2	-	< 0.012	25	< 0.011	2.1	0.021	0.054	< 0.011	0.022	0.166	< 0.011	< 0.011	< 0.011	< 0.011	0.016	0.024	< 0.011	0.025
Dibenzo[a,h]anthracene	1	-	< 0.012	3.8	< 0.011	0.46	< 0.011	< 0.011	< 0.011	< 0.011	0.081	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Fluoranthene	2	-	< 0.012	70	< 0.011	4.7	0.076	0.114	< 0.011	0.035	0.2	< 0.011	< 0.011	< 0.011	< 0.011	0.033	0.029	< 0.011	0.032
Fluorene	2	-	< 0.012	8.2	< 0.011	0.061	0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Indeno[1,2,3-c,d]pyrene	2	-	< 0.012	15	< 0.011	1.72	< 0.011	0.043	< 0.011	0.019	0.41	< 0.011	< 0.011	< 0.011	< 0.011	0.016	0.035	< 0.011	0.025
Naphthalene	200	-	< 0.06	3.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	< 0.012	6	< 0.011	0.6	< 0.011	0.016	< 0.011	< 0.011	0.158	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.013	< 0.011	< 0.011
Phenanthrene	2	-	< 0.012	46	< 0.011	1.18	0.075	0.017	< 0.011	0.015	0.052	< 0.011	< 0.011	< 0.011	< 0.011	0.014	< 0.011	< 0.011	< 0.011
Pyrene	2	-	< 0.012	60	< 0.011	4.6	0.054	0.091	< 0.011	0.03	0.26	< 0.011	< 0.011	< 0.011	< 0.011	0.031	0.037	< 0.011	0.034
Total of Reported PAHs	-	20	< 0.3	390	< 0.3	30	0.4	0.7	< 0.3	0.3	3.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	0.4	< 0.3	0.3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																			
Sample Date	Waste Acceptance Criteria		16-Jul-24																
Sample Name			FTL115	FTL116	FTL117	FTL118	FTL119	FTL120	FTL121	FTL122	FTL123	FTL124	FTL125	FTL126	FTL127	FTL130	FTL131	FTL132	FTL133
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.05-0.11	0.03-0.11	0.03-0.12	0.02-0.08	0.03-0.2	0.05-0.18	0.05-0.15	0.03-0.17	0.02-0.3	0.03-0.23	0.02-0.25	0.03-0.4	0.03-0.08	0.03-0.08	0.03-0.08	0.03-0.12	0.04-0.09
Lab Number			3631528.138	3631528.141	3631528.144	3631528.147	3631528.15	3631528.152	3631528.154	3631528.157	3631528.159	3631528.161	3631528.163	3631528.166	3631528.168	3631528.171	3631528.174	3631528.177	3631528.18
PAHs																			
1-Methylnaphthalene	-	-	0.047	< 0.011	< 0.011	0.013	< 0.011	< 0.011	< 0.011	< 0.011	0.052	< 0.011	0.07	< 0.011	< 0.011	< 0.011	0.015	< 0.011	< 0.011
2-Methylnaphthalene	-	-	0.056	< 0.011	< 0.011	0.02	< 0.011	< 0.011	< 0.013	< 0.011	0.073	< 0.014	0.037	< 0.011	< 0.011	< 0.013	0.015	< 0.011	< 0.011
Acenaphthylene	2	-	0.014	< 0.011	0.011	0.129	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.148	0.025	< 0.011	< 0.011	< 0.011	< 0.011	0.043
Acenaphthene	2	-	0.15	< 0.011	0.011	0.43	< 0.011	< 0.011	< 0.011	< 0.011	0.021	< 0.011	0.49	0.013	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	0.2	-	0.22	< 0.011	0.027	0.74	< 0.011	< 0.011	< 0.011	0.014	0.011	< 0.011	0.94	0.057	< 0.011	< 0.011	< 0.011	0.04	0.08
Benzo[a]anthracene	1	-	0.23	< 0.011	0.14	3.2	0.103	< 0.011	< 0.011	0.026	0.034	< 0.011	2.5	0.31	< 0.011	< 0.011	0.015	0.112	0.64
Benzo[a]pyrene (BAP)	1	-	0.19	< 0.011	0.25	4.5	0.162	< 0.011	< 0.011	0.088	0.041	< 0.011	2.5	0.46	< 0.011	< 0.011	0.021	0.136	1.73
BAP (Eq) NES	-	1	0.29	< 0.026	0.37	6.7	0.24	< 0.025	< 0.025	0.133	0.062	< 0.026	3.8	0.7	< 0.027	< 0.026	0.033	0.21	2.7
BAP Toxic (Eq) (TEF)	-	-	0.28	< 0.026	0.37	6.6	0.24	< 0.025	< 0.025	0.132	0.062	< 0.026	3.7	0.69	< 0.027	< 0.025	0.032	0.21	2.7
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.22	< 0.011	0.28	5.4	0.197	< 0.011	< 0.011	0.097	0.049	< 0.011	2.9	0.57	< 0.011	< 0.011	0.024	0.179	2.4
Benzo[e]pyrene	-	-	0.103	< 0.011	0.155	2.4	0.105	< 0.011	< 0.011	0.073	0.03	< 0.011	1.43	0.35	< 0.011	< 0.011	0.015	0.098	1.67
Benzo[g,h,i]perylene	2	-	0.092	0.015	0.184	2.7	0.12	< 0.011	< 0.011	0.21	0.035	< 0.011	1.45	0.37	< 0.011	< 0.011	0.016	0.103	1.51
Benzo[k]fluoranthene	-	-	0.096	< 0.011	0.116	2.1	0.079	< 0.011	< 0.011	0.032	0.02	< 0.011	1.2	0.22	< 0.011	< 0.011	0.01	0.066	0.79
Chrysene	2	-	0.177	< 0.011	0.138	2.9	0.099	< 0.011	< 0.011	0.026	0.031	< 0.011	1.9	0.27	< 0.011	< 0.011	0.013	0.103	0.52
Dibenzo[a,h]anthracene	1	-	0.024	< 0.011	0.041	0.7	0.024	< 0.011	< 0.011	0.017	< 0.011	< 0.011	0.38	0.085	< 0.011	< 0.011	< 0.011	0.022	0.38
Fluoranthene	2	-	0.64	< 0.011	0.25	6.5	0.149	< 0.011	< 0.011	0.038	0.057	< 0.011	5.2	0.49	< 0.011	< 0.011	0.021	0.22	0.41
Fluorene	2	-	0.158	< 0.011	< 0.011	0.24	< 0.011	< 0.011	< 0.011	< 0.011	0.014	< 0.011	0.54	0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Indeno[1,2,3-c,d]pyrene	2	-	0.1	< 0.011	0.22	3.4	0.12	< 0.011	< 0.011	0.111	0.031	< 0.011	1.6	0.4	< 0.011	< 0.011	0.016	0.109	1.74
Naphthalene	200	-	< 0.06	< 0.06	< 0.06	0.06	< 0.06	< 0.06	< 0.06	< 0.06	0.35	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	0.042	< 0.011	0.071	1.41	0.044	< 0.011	< 0.011	0.035	< 0.011	< 0.011	0.59	0.126	< 0.011	< 0.011	< 0.011	0.037	0.38
Phenanthrene	2	-	0.77	< 0.011	0.09	1.14	0.011	< 0.011	< 0.011	< 0.011	0.049	< 0.011	3.3	0.179	< 0.011	< 0.011	< 0.011	0.114	0.025
Pyrene	2	-	0.53	< 0.011	0.3	8.7	0.176	< 0.011	< 0.011	0.057	0.055	< 0.011	4.5	0.48	< 0.011	< 0.011	0.02	0.23	3.2
Total of Reported PAHs	-	20	3.9	< 0.3	2.3	47	1.4	< 0.3	< 0.3	0.9	1	< 0.3	32	4.4	< 0.3	< 0.3	< 0.3	1.6	15.6

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																			
Sample Date	Waste Acceptance Criteria		16-Jul-24				17-Jul-24												
Sample Name			FTL134	FTL135	FTL136	FTL138	FTL139	Dup FTL139	FTL140	FTL141	FTL142	FTL143	FTL144	FTL145	FTL146	FTL147	FTL149	Dup FTL149	FTL150
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.04-0.14	0.05-0.11	0.05-0.15	0.03-0.25	0.04-0.23	0.04-0.23	0.05-0.15	0.04-0.10	0.03-0.1	0.04-0.09	0.03-0.1	0.04-0.09	0.04-0.1	0.03-0.11	0.03-0.13	0.03-0.13	0.03-0.09
Lab Number			3631528.183	3631528.185	3631528.188	3631528.19	3631528.193	3631528.194	3631528.196	3631528.199	3631528.202	3631528.206	3631528.209	3631528.213	3631528.216	3631528.219	3631528.226	3631528.227	3631528.231
PAHs																			
1-Methylnaphthalene	-	-	1.67	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.56	0.042	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	-	-	1.83	< 0.013	< 0.011	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011	0.57	0.027	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthylene	2	-	0.23	< 0.011	< 0.011	< 0.011	0.02	0.012	< 0.011	0.057	0.018	0.2	0.056	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	2	-	5.2	< 0.011	< 0.011	< 0.011	0.019	< 0.011	< 0.011	0.091	0.043	3.1	0.64	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	0.2	-	8.1	< 0.011	< 0.011	< 0.011	0.051	0.027	< 0.011	0.34	0.115	9.1	1.66	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	1	-	8.6	< 0.011	< 0.011	< 0.011	0.3	0.183	0.059	2.5	0.7	12.9	5.1	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	1	-	6.2	< 0.011	< 0.011	< 0.011	0.39	0.22	0.089	3.7	1	11.3	6	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
BAP (Eq) NES	-	1	9.7	< 0.025	< 0.026	< 0.026	0.58	0.34	0.134	5.4	1.48	17.4	8.8	< 0.026	< 0.034	< 0.025	< 0.026	< 0.026	< 0.026
BAP Toxic (Eq) (TEF)	-	-	9.4	< 0.025	< 0.026	< 0.026	0.57	0.34	0.133	5.4	1.47	17.1	8.7	< 0.026	< 0.034	< 0.025	< 0.026	< 0.026	< 0.026
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	7.2	< 0.011	< 0.011	< 0.011	0.48	0.29	0.106	4.4	1.09	13.3	6.2	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[e]pyrene	-	-	3.2	< 0.011	< 0.011	< 0.011	0.25	0.143	0.06	2.3	0.68	6.6	3.4	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[g,h,i]perylene	2	-	3.1	0.032	< 0.011	< 0.011	0.24	0.143	0.088	2.3	0.83	7.3	4	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[k]fluoranthene	-	-	2.9	< 0.011	< 0.011	< 0.011	0.188	0.113	0.045	1.51	0.4	5.1	2.4	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Chrysene	2	-	6.5	< 0.011	< 0.011	< 0.011	0.27	0.159	0.05	2.1	0.62	10.4	4.4	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Dibenzo[a,h]anthracene	1	-	0.91	< 0.011	< 0.011	< 0.011	0.062	0.039	0.015	0.6	0.169	1.81	0.9	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Fluoranthene	2	-	22	< 0.011	< 0.011	< 0.011	0.55	0.27	0.092	3.7	1.09	31	11.2	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Fluorene	2	-	5.3	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.068	0.026	0.27	3.7	0.49	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Indeno[1,2,3-c,d]pyrene	2	-	3.6	0.011	< 0.011	< 0.011	0.25	0.155	0.072	2.5	0.78	7.6	3.9	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Naphthalene	200	-	1.97	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	0.42	< 0.06	< 0.06	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	1.38	< 0.011	< 0.011	< 0.011	0.087	0.054	0.022	0.89	0.27	2.8	1.47	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Phenanthrene	2	-	26	< 0.011	< 0.011	< 0.011	0.121	0.066	< 0.011	0.77	0.31	30	4.2	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Pyrene	2	-	17.2	< 0.011	< 0.011	< 0.011	0.79	0.4	0.091	6.5	1.24	25	12.1	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
Total of Reported PAHs	-	20	134	< 0.3	< 0.3	< 0.3	4.1	2.3	0.8	34	9.4	183	68	< 0.3	< 0.4	< 0.3	< 0.3	< 0.3	< 0.3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																			
Sample Date	Waste Acceptance Criteria		17-Jul-24																18-Jul-24
Sample Name			FTL152	FTL153	FTL155	FTL156	FTL157	FTL158	FTL158	FTL160	FTL160	FTL162	FTL163	FTL164	FTL165	FTL166	FTL167	FTL168	FTL169
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.05-0.25	0.07-0.2	0.06-0.25	0.04-0.11	0.04-0.2	0.04-0.09	0.15-0.35	0.04-0.09	0.14-0.19	0.03-0.26	0.05-0.3	0.04-0.3	0.04-0.12	0.06-0.3	0.04-0.22	0.03-0.15	0.03-0.32
Lab Number			3631528.237	3631528.241	3631528.246	3631528.248	3631528.251	3631528.255	3631528.257	3631528.263	3631528.265	3631528.269	3631528.271	3631528.273	3631528.275	3631528.277	3631528.279	3631528.281	3631528.285
PAHs																			
1-Methylnaphthalene	-	-	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	0.021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.031	0.031	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	-	-	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011	0.021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.032	0.018	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthylene	2	-	0.015	< 0.014	< 0.011	< 0.011	0.029	< 0.011	0.012	0.014	< 0.011	< 0.011	< 0.011	0.018	0.087	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	2	-	< 0.011	0.065	< 0.011	< 0.011	< 0.011	0.2	0.021	0.094	0.015	< 0.011	< 0.011	0.084	0.173	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	0.2	-	0.019	0.083	< 0.011	< 0.011	0.044	0.28	0.102	0.181	0.047	< 0.011	0.021	0.101	1.12	< 0.011	< 0.011	0.014	< 0.011
Benzo[a]anthracene	1	-	0.131	0.34	< 0.011	< 0.011	0.24	0.23	0.31	0.38	0.24	< 0.011	0.149	0.26	5.9	0.013	0.057	0.077	0.012
Benzo[a]pyrene (BAP)	1	-	0.29	0.39	< 0.011	< 0.011	0.6	0.21	0.25	0.46	0.28	< 0.011	0.26	0.27	6.7	0.02	0.107	0.099	0.017
BAP (Eq) NES	-	1	0.44	0.58	< 0.027	< 0.025	0.94	0.33	0.39	0.69	0.41	< 0.026	0.39	0.41	10	0.026	0.154	0.147	< 0.026
BAP Toxic (Eq) (TEF)	-	-	0.44	0.57	< 0.026	< 0.025	0.93	0.32	0.38	0.68	0.41	< 0.026	0.39	0.4	9.9	0.026	0.153	0.144	< 0.026
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.34	0.47	< 0.011	< 0.011	0.76	0.27	0.32	0.54	0.32	< 0.011	0.33	0.33	8	0.021	0.126	0.125	0.024
Benzo[e]pyrene	-	-	0.168	0.192	< 0.011	< 0.011	0.48	0.147	0.147	0.29	0.156	< 0.011	0.193	0.165	4.4	0.014	0.075	0.068	0.012
Benzo[g,h,i]perylene	2	-	0.37	0.2	< 0.011	< 0.011	0.77	0.146	0.139	0.32	0.165	< 0.011	0.21	0.168	4.9	0.016	0.078	0.07	0.013
Benzo[k]fluoranthene	-	-	0.132	0.195	< 0.011	< 0.011	0.23	0.103	0.132	0.22	0.118	< 0.011	0.133	0.142	3	< 0.011	0.05	0.05	< 0.011
Chrysene	2	-	0.127	0.3	< 0.011	< 0.011	0.24	0.23	0.28	0.31	0.2	< 0.011	0.139	0.22	5	< 0.011	0.062	0.09	0.011
Dibenzo[a,h]anthracene	1	-	0.051	0.052	< 0.011	< 0.011	0.135	0.037	0.036	0.069	0.037	< 0.011	0.051	0.042	1.03	< 0.011	0.015	0.012	< 0.011
Fluoranthene	2	-	0.196	0.77	< 0.011	< 0.011	0.31	0.78	0.94	1.02	0.58	< 0.011	0.199	0.59	12.3	0.016	0.106	0.3	0.029
Fluorene	2	-	< 0.011	0.03	< 0.011	< 0.011	< 0.011	0.198	0.029	0.069	< 0.011	< 0.011	< 0.011	0.063	0.069	< 0.011	< 0.011	< 0.011	< 0.011
Indeno[1,2,3-c,d]pyrene	2	-	0.32	0.26	< 0.011	< 0.011	0.74	0.171	0.158	0.35	0.183	< 0.011	0.22	0.18	4.8	0.016	0.076	0.071	0.014
Naphthalene	200	-	< 0.06	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	0.1	0.103	< 0.011	< 0.011	0.181	0.055	0.055	0.123	0.068	< 0.011	0.069	0.066	1.49	< 0.011	0.024	0.024	< 0.011
Phenanthrene	2	-	0.026	0.176	< 0.011	< 0.011	0.044	1.07	0.52	0.5	0.116	< 0.011	0.041	0.29	3.5	< 0.011	< 0.011	0.162	< 0.011
Pyrene	2	-	0.28	0.84	< 0.011	< 0.011	0.47	0.59	0.73	0.92	0.53	< 0.011	0.21	0.49	17.2	0.023	0.13	0.24	0.026
Total of Reported PAHs	-	20	2.6	4.5	< 0.3	< 0.3	5.3	4.8	4.2	5.9	3.1	< 0.3	2.3	3.6	80	< 0.3	0.9	1.4	< 0.3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples																				
Sample Date	Waste Acceptance Criteria		18-Jul-24																	
Sample Name			FTL170	FTL171	FTL172	FTL173	FTL174	FTL175	FTL176	FTL176	FTL177	FTL178	FTL179	FTL180	FTL181	FTL183	FTL184	FTL186	FTL187	FTL188
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.04-0.14	0.04-0.1	0.03-0.06	0.03-0.25	0.03-0.25	0.03-0.17	0.05-0.3	0.35-0.45	0.03-0.25	0.04-0.20	0.03-0.15	0.02-0.14	0.03-0.1	0.05-0.15	0.04-0.1	0.03-0.27	0.02-0.4	0.02-0.22
Lab Number			3631528.287	3631528.29	3631528.293	3631528.296	3631528.298	3631528.3	3631528.302	3631528.303	3631528.305	3631528.307	3631528.309	3631528.312	3631528.315	3631528.319	3631528.322	3631528.327	3631528.33	3631528.332
PAHs																				
1-Methylnaphthalene	-	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.10	0.044	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
2-Methylnaphthalene	-	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.15	0.042	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014
Acenaphthylene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.10	0.028	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Acenaphthene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	0.046	< 0.011	< 0.011	< 0.10	0.48	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Anthracene	0.2	-	< 0.011	0.012	< 0.011	< 0.011	0.053	0.013	< 0.011	< 0.10	1.17	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Benzo[a]anthracene	1	-	< 0.011	0.041	< 0.011	0.021	0.041	0.119	< 0.011	< 0.10	1.69	< 0.011	< 0.011	0.024	< 0.012	0.066	< 0.011	< 0.012	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	1	-	0.012	0.064	< 0.011	0.028	0.04	0.35	0.021	< 0.10	1.71	< 0.011	0.017	0.038	0.013	0.09	< 0.011	< 0.012	< 0.011	< 0.011
BAP (Eq) NES	-	1	< 0.026	0.093	< 0.025	0.045	0.059	0.51	0.031	< 0.24	2.6	< 0.025	< 0.026	0.057	< 0.028	0.132	< 0.025	< 0.028	< 0.027	< 0.026
BAP Toxic (Eq) (TEF)	-	-	< 0.026	0.092	< 0.025	0.045	0.057	0.51	0.031	< 0.3	2.5	< 0.025	< 0.026	0.057	< 0.028	0.131	< 0.025	< 0.027	< 0.027	< 0.026
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.015	0.07	< 0.011	0.032	0.048	0.39	0.027	< 0.10	2	< 0.011	0.021	0.048	0.013	0.104	< 0.011	< 0.012	< 0.011	< 0.011
Benzo[e]pyrene	-	-	< 0.011	0.038	< 0.011	0.017	0.023	0.28	0.013	< 0.10	0.94	< 0.011	0.014	0.03	< 0.012	0.057	< 0.011	< 0.012	< 0.011	< 0.011
Benzo[g,h,i]perylene	2	-	< 0.011	0.049	< 0.011	0.029	0.02	0.3	0.013	< 0.10	0.93	< 0.011	0.016	0.047	< 0.012	0.062	< 0.011	< 0.012	< 0.011	< 0.011
Benzo[k]fluoranthene	-	-	< 0.011	0.024	< 0.011	0.018	0.019	0.148	< 0.011	< 0.10	0.82	< 0.011	< 0.011	0.02	< 0.012	0.04	< 0.011	< 0.012	< 0.011	< 0.011
Chrysene	2	-	< 0.011	0.036	< 0.011	0.016	0.037	0.111	< 0.011	< 0.10	1.39	< 0.011	< 0.011	0.023	< 0.012	0.068	< 0.011	< 0.012	< 0.011	< 0.011
Dibenzo[a,h]anthracene	1	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	0.066	< 0.011	< 0.10	0.24	< 0.011	< 0.011	< 0.011	< 0.012	0.013	< 0.011	< 0.012	< 0.011	< 0.011
Fluoranthene	2	-	0.013	0.079	< 0.011	0.024	0.139	0.1	< 0.011	0.14	4.6	< 0.011	0.014	0.047	< 0.012	0.131	< 0.011	< 0.012	< 0.011	< 0.011
Fluorene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	0.035	< 0.011	< 0.011	< 0.10	0.49	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	2	-	< 0.011	0.047	< 0.011	0.025	0.023	0.32	0.017	< 0.10	1.06	< 0.011	0.016	0.033	< 0.012	0.062	< 0.011	< 0.012	< 0.011	< 0.011
Naphthalene	200	-	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	< 0.011	0.017	< 0.011	< 0.011	< 0.011	0.101	< 0.011	< 0.10	0.37	< 0.011	< 0.011	< 0.011	< 0.012	0.023	< 0.011	< 0.012	< 0.011	< 0.011
Phenanthrene	2	-	< 0.011	0.028	< 0.011	< 0.011	0.165	< 0.011	< 0.011	0.22	3.9	< 0.011	< 0.011	< 0.011	< 0.012	0.043	< 0.011	< 0.012	< 0.011	< 0.011
Pyrene	2	-	0.016	0.085	< 0.011	0.025	0.118	0.167	< 0.011	0.1	4	< 0.011	0.017	0.042	< 0.012	0.135	< 0.011	< 0.012	< 0.011	< 0.011
Total of Reported PAHs	-	20	< 0.3	0.6	< 0.3	0.3	0.9	2.5	< 0.3	< 0.3	26	< 0.3	< 0.3	0.4	< 0.3	0.9	< 0.3	< 0.3	< 0.3	< 0.3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Basecourse Samples													
Sample Date	Waste Acceptance Criteria		18-Jul-24							19-Jul-24			
Sample Name			FTL189	FTL189	FTL190	FTL190	FTL191	FTL192	FTL193	1.FTL194	2.FTL194	3.FTL194	FTL196
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.05-0.12	0.17-0.36	0.05-0.12	0.16-0.37	0.02-0.2	0.03-0.27	0.05-0.17	0.03-0.17	0.03-0.17	0.03-0.17	0.05-0.08
Lab Number			3631528.336	3631528.338	3631528.34	3631528.342	3631528.344	3631528.348	3631528.351	3631528.355	3631528.356	3631528.357	3631528.365
PAHs													
1-Methylnaphthalene	-	-	0.081	< 0.011	< 0.011	< 0.011	0.163	< 0.011	< 0.011	< 0.011	0.022	< 0.011	0.032
2-Methylnaphthalene	-	-	0.066	< 0.013	< 0.011	< 0.011	0.172	< 0.011	< 0.011	< 0.014	0.025	< 0.011	0.029
Acenaphthylene	2	-	0.032	< 0.011	0.015	< 0.011	0.031	< 0.011	0.082	0.037	0.084	0.054	0.059
Acenaphthene	2	-	1.32	< 0.011	< 0.011	< 0.011	0.75	< 0.011	0.026	0.015	0.197	0.023	0.24
Anthracene	0.2	-	1.37	< 0.011	0.118	< 0.011	1	0.017	0.107	0.111	3.1	0.181	0.92
Benzo[a]anthracene	1	-	1.87	< 0.011	0.26	< 0.011	1.32	0.26	1.03	0.58	4.5	0.94	3.7
Benzo[a]pyrene (BAP)	1	-	1.59	0.012	0.62	0.012	1.16	0.43	1.77	0.74	4.8	1.07	4.8
BAP (Eq) NES	-	1	2.5	< 0.025	0.98	< 0.026	1.79	0.63	2.6	1.1	7.1	1.61	7.1
BAP Toxic (Eq) (TEF)	-	-	2.4	< 0.025	0.97	< 0.026	1.76	0.62	2.6	1.09	6.9	1.59	7
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	1.99	0.014	0.89	0.018	1.41	0.5	2.1	0.87	4.9	1.29	5.3
Benzo[e]pyrene	-	-	0.83	< 0.011	0.42	< 0.011	0.64	0.29	0.93	0.45	2.6	0.66	3.1
Benzo[g,h,i]perylene	2	-	0.89	0.012	0.72	0.012	0.65	0.32	1.89	0.49	2.9	0.7	3.9
Benzo[k]fluoranthene	-	-	0.7	< 0.011	0.31	< 0.011	0.58	0.191	0.81	0.34	1.82	0.52	1.88
Chrysene	2	-	1.82	< 0.011	0.32	< 0.011	1.26	0.28	1.01	0.52	3.8	0.81	3.2
Dibenzo[a,h]anthracene	1	-	0.25	< 0.011	0.142	< 0.011	0.173	0.064	0.28	0.116	0.69	0.166	0.78
Fluoranthene	2	-	6	0.013	0.67	0.016	3.8	0.46	1.66	0.87	10.3	1.42	5.8
Fluorene	2	-	0.76	< 0.011	< 0.011	< 0.011	0.72	< 0.011	< 0.011	0.019	0.52	0.027	0.23
Indeno(1,2,3-c,d)pyrene	2	-	1.03	0.011	0.64	0.011	0.76	0.31	1.63	0.49	2.9	0.73	3.5
Naphthalene	200	-	< 0.06	< 0.06	< 0.06	< 0.06	0.27	< 0.06	< 0.06	< 0.06	0.06	< 0.06	< 0.06
Perylene	-	-	0.43	< 0.011	0.21	< 0.011	0.3	0.094	0.59	0.178	1	0.27	1.32
Phenanthrene	2	-	4.8	< 0.011	0.119	< 0.011	4.3	0.083	0.109	0.31	9.6	0.51	3.1
Pyrene	2	-	5.2	0.015	1.02	0.02	3.2	0.61	2.3	0.86	12.1	1.53	7.9
Total of Reported PAHs	-	20	31	< 0.3	6.5	< 0.3	23	3.9	16.3	7	66	11	50

Note:
1 WasteMINZ Coal tar guidelines (Guidelines for Assessing and Managing Coal Tar Contamination in Roading 2023) have been selected.

Underlined:	Present above detection limits
ND:	Not detected
NL:	No limit
NS:	Not stated
-	Not tested for
	Above WasteMINZ Coal Tar Guidelines
	Above Hampton Downs Criteria without TCLP (mg/kg)

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Subbase Samples																
Sample Date	Waste Acceptance Criteria		27-May-24 - 29-May-24													
Sample Name			FTL32C	FTL33C	FTL34C	FTL35C	FTL36C	FTL37C	FTL38C	FTL40C	FTL41C	FTL42C	FTL44C	FTL45C	FTL46C	FTL47C
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.2-0.5	0.05-0.2	0.2-0.45	0.2-0.4	0.15-0.3	0.2-0.4	0.25-0.35	0.2-0.4	0.1-0.4	0.2-0.4	0.25-0.45	0.25-0.45	0.45-1.0	0.3-0.8
Lab Number			3594800.6	3594800.61	3594800.62	3594800.63	3594800.64	3594800.65	3594800.66	3594800.67	3594800.68	3594800.69	3594800.7	3594800.71	3594800.72	3594800.73
PAHs																
1-Methylnaphthalene	-	-	< 0.014	< 0.012	< 0.015	< 0.015	< 0.015	< 0.016	0.045	< 0.013	0.027	< 0.015	< 0.013	< 0.013	< 0.014	< 0.016
2-Methylnaphthalene	-	-	< 0.014	< 0.012	< 0.03	< 0.03	< 0.03	< 0.03	0.05	< 0.02	< 0.03	< 0.03	< 0.019	< 0.013	< 0.02	< 0.03
Acenaphthylene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	< 0.015	< 0.016	0.038	< 0.013	0.053	< 0.015	< 0.013	< 0.013	< 0.014	< 0.016
Acenaphthene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	< 0.015	< 0.016	0.186	< 0.013	0.37	< 0.015	< 0.013	< 0.013	< 0.014	< 0.016
Anthracene	0.2	-	< 0.014	< 0.012	< 0.015	< 0.015	< 0.015	< 0.016	0.39	< 0.013	0.69	< 0.015	< 0.013	< 0.013	< 0.014	< 0.016
Benzo[a]anthracene	1	-	< 0.014	< 0.012	< 0.015	< 0.015	0.07	< 0.016	0.99	0.026	1.69	0.018	< 0.013	< 0.013	< 0.014	< 0.016
Benzo[a]pyrene (BAP)	1	-	< 0.014	< 0.012	< 0.015	< 0.015	0.153	< 0.016	1.02	0.027	2.2	0.022	< 0.013	< 0.013	< 0.014	< 0.016
BAP (Eq) NES	-	1	< 0.033	< 0.028	< 0.036	< 0.037	0.22	< 0.039	1.55	0.04	3.2	< 0.036	< 0.030	< 0.030	< 0.032	< 0.036
BAP Toxic (Eq) (TEF)	-	-	< 0.033	< 0.028	< 0.036	< 0.037	0.22	< 0.039	1.52	0.04	3.2	< 0.036	< 0.030	< 0.030	< 0.032	< 0.036
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.014	< 0.012	< 0.015	< 0.015	0.177	< 0.016	1.29	0.031	2.7	0.026	< 0.013	0.017	< 0.014	< 0.016
Benzo[e]pyrene	-	-	< 0.014	< 0.012	< 0.015	< 0.015	0.084	< 0.016	0.59	0.017	1.07	< 0.015	< 0.013	0.029	< 0.014	< 0.016
Benzo[g,h,i]perylene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	0.144	< 0.016	0.57	0.015	1.32	0.016	< 0.013	< 0.013	< 0.014	< 0.016
Benzo[k]fluoranthene	-	-	< 0.014	< 0.012	< 0.015	< 0.015	0.063	< 0.016	0.48	0.013	0.91	< 0.015	< 0.013	< 0.013	< 0.014	< 0.016
Chrysene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	0.069	< 0.016	0.83	0.023	1.53	0.015	< 0.013	< 0.013	< 0.014	< 0.016
Dibenzo[a,h]anthracene	1	-	< 0.014	< 0.012	< 0.015	< 0.015	0.019	< 0.016	0.153	< 0.013	0.29	< 0.015	< 0.013	< 0.013	< 0.014	< 0.016
Fluoranthene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	0.128	0.019	2.7	0.056	4.1	0.044	< 0.013	< 0.013	< 0.014	< 0.016
Fluorene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	< 0.015	< 0.016	0.145	< 0.013	0.29	< 0.015	< 0.013	< 0.013	< 0.014	< 0.016
Indeno[1,2,3-c,d]pyrene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	0.135	< 0.016	0.62	0.016	1.51	0.016	< 0.013	< 0.013	< 0.014	< 0.016
Naphthalene	200	-	< 0.07	< 0.06	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.07	< 0.09	< 0.08	< 0.07	< 0.07	< 0.07	< 0.08
Perylene	-	-	< 0.014	< 0.012	< 0.015	< 0.015	0.049	< 0.016	0.23	< 0.013	0.6	< 0.015	< 0.013	0.018	< 0.014	< 0.016
Phenanthrene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	< 0.015	< 0.016	1.38	0.021	2	0.021	< 0.013	0.045	< 0.014	< 0.016
Pyrene	2	-	< 0.014	< 0.012	< 0.015	< 0.015	0.169	0.021	2.4	0.051	4.1	0.044	< 0.013	0.018	< 0.014	< 0.016
Total of Reported PAHs	-	20	< 0.4	< 0.3	< 0.4	< 0.4	1.3	< 0.4	14.2	0.3	26	< 0.4	< 0.3	< 0.3	< 0.4	< 0.7

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Subbase Samples																
Sample Date	Waste Acceptance Criteria		27-May-24 - 29-May-24													
Sample Name			FTL49C	FTL50C	FTL51C	FTL52C	FTL53C	FTL54C	FTL55C	FTL56C	FTL57C	FTL58C	FTL60C	FTL61C	FTL61F	FTL62C
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.4-0.6	0.4-0.6	0.4-0.6	0.3-0.5	0.5-0.7	0.3-0.5	0.3-0.5	0.3-0.5	0.3-1.0	0.3-0.5	0.3-0.6	0.3-0.5	0.3-0.5	0.3-0.5
Lab Number			3594800.75	3594800.76	3594800.77	3594800.78	3594800.79	3594800.8	3594800.81	3594800.82	3594800.83	3594800.84	3594800.85	3594800.86	3594800.87	3594800.87
PAHs																
1-Methylnaphthalene	-	-	< 0.017	0.069	0.095	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	0.109	< 0.011	< 0.015	< 0.015	< 0.03
2-Methylnaphthalene	-	-	< 0.017	0.078	0.06	< 0.015	< 0.015	< 0.015	< 0.016	< 0.03	< 0.03	0.092	< 0.017	< 0.015	< 0.03	< 0.03
Acenaphthylene	2	-	< 0.017	0.036	0.154	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	0.062	< 0.011	< 0.015	< 0.015	< 0.03
Acenaphthene	2	-	< 0.017	0.29	0.88	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	0.51	< 0.011	< 0.015	< 0.015	< 0.03
Anthracene	0.2	-	< 0.017	0.58	2.4	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	1.28	< 0.011	< 0.015	< 0.015	< 0.03
Benzo[a]anthracene	1	-	< 0.017	0.89	5	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	2.9	< 0.011	< 0.015	< 0.015	< 0.03
Benzo[a]pyrene (BAP)	1	-	< 0.017	0.83	4.6	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	2.9	< 0.011	< 0.015	0.018	< 0.03
BAP (Eq) NES	-	1	< 0.040	1.25	6.9	< 0.036	< 0.036	< 0.036	< 0.037	< 0.045	< 0.038	4.4	< 0.027	< 0.037	< 0.036	< 0.054
BAP Toxic (Eq) (TEF)	-	-	< 0.040	1.22	6.8	< 0.036	< 0.035	< 0.035	< 0.037	< 0.045	< 0.038	4.3	< 0.027	< 0.036	< 0.036	< 0.054
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.017	0.96	5.5	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	3.5	< 0.011	0.02	0.022	< 0.03
Benzo[e]pyrene	-	-	< 0.017	0.45	2.7	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	1.57	< 0.011	< 0.015	< 0.015	< 0.03
Benzo[g,h,i]perylene	2	-	< 0.017	0.46	2.6	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	1.66	< 0.011	< 0.015	< 0.015	< 0.03
Benzo[k]fluoranthene	-	-	< 0.017	0.39	2.1	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	1.32	< 0.011	< 0.015	< 0.015	< 0.03
Chrysene	2	-	< 0.017	0.67	4	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	2.3	< 0.011	< 0.015	< 0.015	< 0.03
Dibenzo[a,h]anthracene	1	-	< 0.017	0.113	0.67	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	0.41	< 0.011	< 0.015	< 0.015	< 0.03
Fluoranthene	2	-	< 0.017	2.4	10.8	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	6.9	< 0.011	0.019	0.027	< 0.03
Fluorene	2	-	< 0.017	0.39	0.78	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	0.49	< 0.011	< 0.015	< 0.015	< 0.03
Indeno[1,2,3-c,d]pyrene	2	-	< 0.017	0.51	3	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	1.95	< 0.011	< 0.015	< 0.015	< 0.03
Naphthalene	200	-	< 0.09	0.09	< 0.07	< 0.08	< 0.08	< 0.08	< 0.08	< 0.10	< 0.08	0.11	< 0.06	< 0.08	< 0.08	< 0.12
Perylene	-	-	< 0.017	0.178	1.11	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	0.69	< 0.011	< 0.015	< 0.015	< 0.03
Phenanthrene	2	-	< 0.017	2	7.3	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	4.4	< 0.011	< 0.015	< 0.015	< 0.03
Pyrene	2	-	< 0.017	1.99	9.7	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019	< 0.016	5.6	< 0.011	0.018	0.028	< 0.03
Total of Reported PAHs	-	20	< 0.4	13.3	63	< 0.4	< 0.4	< 0.4	< 0.4	< 0.5	< 0.4	39	< 0.3	< 0.4	< 0.4	< 0.6

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Subbase Samples																	
Sample Date	Waste Acceptance Criteria		15-Jul-24										16-Jul-24				
Sample Name			FTL64	FTL66	FTL67	FTL68	FTL69	FTL80	FTL83	FTL84	FTL88	FTL91	FTL91	FTL93	FTL93	FTL94	FTL102
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.05-0.35	0.05-0.35	0.03-0.25	0.03-0.25	0.05-0.25	0.3-0.4	0.13-0.23	0.06-0.30	0.06-0.28	0.22-0.27	0.27-0.4	0.08-0.17	0.24-0.37	0.15-0.45	0.11-0.3
Lab Number			3631528.2	3631528.6	3631528.8	3631528.1	3631528.12	3631528.35	3631528.47	3631528.5	3631528.59	3631528.67	3631528.68	3631528.78	3631528.81	3631528.84	3631528.103
PAHs																	
1-Methylnaphthalene	-	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	0.31	0.027	0.6	< 0.011	< 0.011	0.02	< 0.011	< 0.010
2-Methylnaphthalene	-	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	0.013	0.33	0.024	0.31	< 0.013	< 0.013	0.025	< 0.011	< 0.010
Acenaphthylene	2	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	0.019	0.162	0.149	< 0.011	2.9	0.143	< 0.011	0.096	< 0.011	< 0.010
Acenaphthene	2	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	0.099	0.125	1.61	0.22	5.6	0.123	< 0.011	0.159	< 0.011	< 0.010
Anthracene	0.2	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	0.28	0.42	3.2	0.58	19.7	0.75	< 0.011	1.2	< 0.011	< 0.010
Benzo[a]anthracene	1	-	< 0.012	0.016	< 0.011	< 0.011	< 0.012	0.67	2.9	4	0.61	75	3.7	< 0.011	2.5	< 0.011	0.068
Benzo[a]pyrene (BAP)	1	-	< 0.012	0.025	< 0.011	< 0.011	0.032	0.76	5.5	3.8	0.64	66	3.2	0.015	2	< 0.011	0.072
BAP (Eq) NES	-	1	< 0.028	0.033	< 0.025	< 0.026	0.04	1.13	8.1	5.8	0.96	101	4.9	< 0.026	3.1	< 0.026	0.109
BAP Toxic (Eq) (TEF)	-	-	< 0.028	0.033	< 0.025	< 0.026	0.04	1.12	8	5.7	0.94	100	4.8	< 0.025	3	< 0.026	0.108
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.012	0.03	< 0.011	< 0.011	0.027	0.86	6.6	4.6	0.73	81	3.9	0.017	2.4	< 0.011	0.099
Benzo[e]pyrene	-	-	< 0.012	0.016	< 0.011	< 0.011	0.022	0.42	3.3	2.1	0.38	40	1.89	0.013	1.14	< 0.011	0.046
Benzo[g,h,i]perylene	2	-	< 0.012	0.02	< 0.011	< 0.011	0.03	0.42	3.9	2.2	0.4	36	1.84	0.014	1.09	< 0.011	0.046
Benzo[k]fluoranthene	-	-	< 0.012	0.012	< 0.011	< 0.011	< 0.012	0.36	2.2	1.88	0.27	34	1.53	< 0.011	0.99	< 0.011	0.039
Chrysene	2	-	< 0.012	0.013	< 0.011	< 0.011	< 0.012	0.57	2.5	3.5	0.53	65	2.8	< 0.011	1.85	< 0.011	0.059
Dibenzo[a,h]anthracene	1	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	0.108	0.93	0.56	0.087	10.3	0.53	< 0.011	0.3	< 0.011	0.01
Fluoranthene	2	-	< 0.012	0.014	< 0.011	< 0.011	< 0.012	1.48	4.9	11.4	2	155	6.9	0.012	5.4	< 0.011	0.096
Fluorene	2	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	0.111	0.1	1.81	0.22	3.9	0.079	< 0.011	0.29	< 0.011	< 0.010
Indeno(1,2,3-c,d)pyrene	2	-	< 0.012	0.02	< 0.011	< 0.011	0.034	0.48	4.3	2.5	0.42	40	2.1	0.013	1.23	< 0.011	0.049
Naphthalene	200	-	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	0.28	< 0.06	< 0.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.05
Perylene	-	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	0.183	1.31	0.95	0.167	17.1	0.72	< 0.011	0.43	< 0.011	0.018
Phenanthrene	2	-	< 0.012	< 0.011	< 0.011	< 0.011	< 0.012	0.86	0.93	10.8	1.98	53	2.1	< 0.011	3.7	< 0.011	0.011
Pyrene	2	-	< 0.012	0.021	< 0.011	< 0.011	0.021	1.64	9.5	11.1	1.92	145	6.6	0.014	4.4	< 0.011	0.092
Total of Reported PAHs	-	20	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	9.4	50	67	11.3	850	39	< 0.3	29	< 0.3	0.7

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Subbase Samples																		
Sample Date	Waste Acceptance Criteria		16-Jul-24															
Sample Name			FTL103	FTL104	FTL104	FTL105	FTL105	FTL106	FTL108	FTL109	FTL110	FTL113	FTL114	FTL115	FTL116	FTL117	FTL118	FTL121
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.15-0.3	0.09-0.14	0.14-0.3	0.1-0.4	0.4-0.7	0.1-0.18	0.1-0.3	0.15-0.65	0.15-0.45	0.2-0.45	0.06-0.3	0.11-0.23	0.11-0.23	0.12-0.3	0.08-0.25	0.15-0.3
Lab Number			3631528.106	3631528.109	3631528.11	3631528.113	3631528.114	3631528.117	3631528.12	3631528.123	3631528.126	3631528.133	3631528.136	3631528.139	3631528.142	3631528.145	3631528.148	3631528.155
PAHs																		
1-Methylnaphthalene	-	-	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.014	0.27	< 0.011	< 0.011	< 0.014	< 0.011
2-Methylnaphthalene	-	-	< 0.011	< 0.013	< 0.014	< 0.011	< 0.017	< 0.015	< 0.011	< 0.014	< 0.013	< 0.011	< 0.014	0.27	< 0.011	< 0.011	< 0.017	< 0.011
Acenaphthylene	2	-	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.014	0.144	< 0.011	< 0.011	0.021	< 0.011
Acenaphthene	2	-	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	0.024	< 0.011	< 0.014	1.22	< 0.011	< 0.011	0.036	< 0.011
Anthracene	0.2	-	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	0.049	< 0.011	< 0.014	2.4	< 0.011	< 0.011	0.061	< 0.011
Benzo[a]anthracene	1	-	< 0.011	0.018	< 0.014	< 0.011	0.019	< 0.012	< 0.011	< 0.011	0.065	< 0.011	< 0.014	3.3	< 0.011	0.034	0.28	< 0.011
Benzo[a]pyrene (BAP)	1	-	< 0.011	0.031	< 0.014	< 0.011	0.023	< 0.012	< 0.011	< 0.011	0.06	< 0.011	< 0.014	2.5	< 0.011	0.046	0.48	< 0.011
BAP (Eq) NES	-	1	< 0.025	0.045	< 0.034	< 0.026	< 0.033	< 0.028	< 0.027	< 0.027	0.09	< 0.026	< 0.033	3.9	< 0.027	0.07	0.71	< 0.027
BAP Toxic (Eq) (TEF)	-	-	< 0.025	0.045	< 0.033	< 0.026	< 0.033	< 0.028	< 0.027	< 0.027	0.088	< 0.026	< 0.033	3.8	< 0.027	0.069	0.71	< 0.027
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.011	0.036	< 0.014	< 0.011	0.029	< 0.012	< 0.011	< 0.011	0.066	< 0.011	< 0.014	3.1	< 0.011	0.063	0.6	< 0.011
Benzo[e]pyrene	-	-	< 0.011	0.018	< 0.014	< 0.011	0.015	< 0.012	< 0.011	< 0.011	0.028	< 0.011	< 0.014	1.41	< 0.011	0.032	0.29	< 0.011
Benzo[g,h,i]perylene	2	-	< 0.011	0.022	< 0.014	< 0.011	0.016	< 0.012	< 0.011	< 0.011	0.032	< 0.011	< 0.014	1.35	< 0.011	0.029	0.33	0.04
Benzo[k]fluoranthene	-	-	< 0.011	0.014	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	0.029	< 0.011	< 0.014	1.21	< 0.011	0.027	0.23	< 0.011
Chrysene	2	-	< 0.011	0.019	< 0.014	< 0.011	0.019	< 0.012	< 0.011	< 0.011	0.057	< 0.011	< 0.014	2.5	< 0.011	0.042	0.28	< 0.011
Dibenzo[a,h]anthracene	1	-	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.014	0.39	< 0.011	< 0.011	0.074	< 0.011
Fluoranthene	2	-	< 0.011	0.019	< 0.014	< 0.011	0.055	< 0.012	< 0.011	< 0.011	0.187	< 0.011	< 0.014	8.2	< 0.011	0.077	0.57	< 0.011
Fluorene	2	-	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	0.023	< 0.011	< 0.014	1.27	< 0.011	< 0.011	0.02	< 0.011
Indeno(1,2,3-c,d)pyrene	2	-	< 0.011	0.023	< 0.014	< 0.011	0.018	< 0.012	< 0.011	< 0.011	0.037	< 0.011	< 0.014	1.55	< 0.011	0.031	0.39	< 0.011
Naphthalene	200	-	< 0.06	< 0.06	< 0.07	< 0.06	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.07	0.15	< 0.06	< 0.06	< 0.07	< 0.06
Perylene	-	-	< 0.011	< 0.011	< 0.014	< 0.011	< 0.014	< 0.012	< 0.011	< 0.011	0.016	< 0.011	< 0.014	0.61	< 0.011	< 0.011	0.155	< 0.011
Phenanthrene	2	-	< 0.011	< 0.011	< 0.014	< 0.011	0.041	< 0.012	< 0.011	< 0.011	0.163	< 0.011	< 0.014	8.5	< 0.011	0.018	0.097	< 0.011
Pyrene	2	-	< 0.011	0.018	< 0.014	< 0.011	0.045	< 0.012	< 0.011	< 0.011	0.151	< 0.011	< 0.014	6.8	< 0.011	0.077	0.64	< 0.011
Total of Reported PAHs	-	20	< 0.3	< 0.3	< 0.4	< 0.3	< 0.4	< 0.3	< 0.3	< 0.3	1	< 0.3	< 0.4	47	< 0.3	0.5	4.5	< 0.3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Subbase Samples																		
Sample Date	Waste Acceptance Criteria		16-Jul-24							17-Jul-24								
Sample Name			FTL125	FTL127	FTL130	FTL131	FTL132	FTL133	FTL135	FTL140	FTL141	FTL142	FTL143	FTL144	FTL145	FTL146	FTL147	FTL148
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.25-0.35	0.08-0.21	0.08-0.33	0.08-0.27	0.12-0.3	0.09-0.42	0.11-0.24	0.15-0.50	0.10-0.35	0.15-0.3	0.09-0.34	0.14-0.25	0.09-0.25	0.1-0.2	0.11-0.33	0.05-0.19
Lab Number			3631528.164	3631528.169	3631528.172	3631528.175	3631528.178	3631528.181	3631528.186	3631528.197	3631528.2	3631528.204	3631528.207	3631528.211	3631528.214	3631528.217	3631528.22	3631528.223
PAHs																		
1-Methylnaphthalene	-	-	0.57	< 0.012	< 0.013	< 0.014	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	0.044	0.014	0.064	< 0.011	< 0.011	< 0.012	< 0.011
2-Methylnaphthalene	-	-	0.51	< 0.015	< 0.016	< 0.017	< 0.015	< 0.011	< 0.014	< 0.011	< 0.011	0.021	< 0.011	0.033	< 0.011	< 0.011	< 0.012	< 0.011
Acenaphthylene	2	-	1.55	< 0.012	< 0.013	< 0.014	< 0.012	< 0.011	< 0.011	< 0.011	0.035	0.053	< 0.011	0.195	< 0.011	< 0.011	< 0.012	< 0.011
Acenaphthene	2	-	3.4	< 0.012	< 0.013	< 0.014	< 0.012	0.011	< 0.011	< 0.011	0.19	0.75	0.145	1.12	< 0.011	< 0.011	< 0.012	< 0.011
Anthracene	0.2	-	17.4	< 0.012	< 0.013	< 0.014	< 0.012	0.032	< 0.011	< 0.011	0.29	1.23	0.43	2.5	< 0.011	< 0.011	< 0.012	< 0.011
Benzo[a]anthracene	1	-	48	< 0.012	< 0.013	< 0.014	< 0.012	0.137	< 0.011	< 0.011	1.49	4.6	0.55	10.8	< 0.011	< 0.011	0.038	0.011
Benzo[a]pyrene (BAP)	1	-	39	< 0.012	< 0.013	< 0.014	0.011	0.24	< 0.011	< 0.011	2.1	5.4	0.48	16.5	0.017	< 0.011	0.05	0.012
BAP (Eq) NES	-	1	58	< 0.028	< 0.030	< 0.032	< 0.028	0.34	< 0.027	< 0.026	3.1	7.9	0.74	24	< 0.026	< 0.026	0.073	< 0.027
BAP Toxic (Eq) (TEF)	-	-	57	< 0.028	< 0.030	< 0.032	< 0.028	0.34	< 0.027	< 0.026	3	7.8	0.73	24	< 0.026	< 0.026	0.072	< 0.027
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	45	< 0.012	< 0.013	< 0.014	0.013	0.27	< 0.011	< 0.011	2.5	5.7	0.56	17.9	0.019	< 0.011	0.056	0.012
Benzo[e]pyrene	-	-	17.2	< 0.012	< 0.013	< 0.014	< 0.012	0.149	< 0.011	< 0.011	1.25	3	0.28	9.5	0.012	< 0.011	0.031	< 0.011
Benzo[g,h,i]perylene	2	-	17.3	< 0.012	< 0.013	< 0.014	< 0.012	0.14	< 0.011	< 0.011	1.27	3.4	0.27	14.4	0.028	< 0.011	0.039	< 0.011
Benzo[k]fluoranthene	-	-	14.3	< 0.012	< 0.013	< 0.014	< 0.012	0.097	< 0.011	< 0.011	0.97	2.1	0.23	6	< 0.011	< 0.011	0.02	< 0.011
Chrysene	2	-	37	< 0.012	< 0.013	< 0.014	< 0.012	0.118	< 0.011	< 0.011	1.18	3.4	0.43	9.9	< 0.011	< 0.011	0.031	< 0.011
Dibenzo[a,h]anthracene	1	-	5.4	< 0.012	< 0.013	< 0.014	< 0.012	0.033	< 0.011	< 0.011	0.32	0.81	0.074	2.6	< 0.011	< 0.011	< 0.012	< 0.011
Fluoranthene	2	-	103	0.015	< 0.013	< 0.014	< 0.012	0.24	< 0.011	< 0.011	3.5	9.5	1.51	21	0.013	< 0.011	0.07	0.023
Fluorene	2	-	4.8	< 0.012	< 0.013	< 0.014	< 0.012	< 0.011	< 0.011	< 0.011	0.076	0.35	0.18	0.52	< 0.011	< 0.011	< 0.012	< 0.011
Indeno[1,2,3-c,d]pyrene	2	-	18.8	< 0.012	< 0.013	< 0.014	< 0.012	0.144	< 0.011	< 0.011	1.34	3.4	0.31	12.3	0.017	< 0.011	0.037	< 0.011
Naphthalene	200	-	0.23	< 0.06	< 0.07	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	0.07	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	8.2	< 0.012	< 0.013	< 0.014	< 0.012	0.055	< 0.011	< 0.011	0.5	1.31	0.11	4.7	< 0.011	< 0.011	< 0.012	< 0.011
Phenanthrene	2	-	49	< 0.012	< 0.013	< 0.014	< 0.012	0.086	< 0.011	< 0.011	0.77	3.4	1.48	5.8	< 0.011	< 0.011	0.015	< 0.011
Pyrene	2	-	84	0.013	< 0.013	< 0.014	< 0.012	0.43	< 0.011	< 0.011	4.1	12.8	1.16	25	0.017	< 0.011	0.074	0.029
Total of Reported PAHs	-	20	510	< 0.3	< 0.3	< 0.4	< 0.3	2.2	< 0.3	< 0.3	22	61	8.3	162	< 0.3	< 0.3	0.5	< 0.3

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Subbase Samples																		
Sample Date	Waste Acceptance Criteria		17-Jul-24												18-Jul-24			
Sample Name			FTL149	Dup FTL149	FTL150	FTL151	FTL152	FTL154	FTL156	FTL157	FTL158	FTL158	FTL159	FTL161	FTL168	FTL170	FTL171	FTL172
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.13-0.33	0.13-0.33	0.09-0.18	0.09-0.29	0.2-0.6	0.08-0.25	0.11-0.3	0.23-0.45	0.35-0.37	0.37-0.7	0.04-0.14	0.05-0.22	0.2-0.35	0.14-0.4	0.1-0.2	0.06-0.15
Lab Number			3631528.228	3631528.229	3631528.232	3631528.235	3631528.238	3631528.244	3631528.249	3631528.253	3631528.258	3631528.259	3631528.261	3631528.267	3631528.283	3631528.288	3631528.291	3631528.294
PAHs																		
1-Methylnaphthalene	-	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
2-Methylnaphthalene	-	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Acenaphthylene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Acenaphthene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Anthracene	0.2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	0.02	< 0.011	< 0.012	< 0.011	< 0.011
Benzo[a]anthracene	1	-	< 0.011	< 0.011	< 0.011	0.064	0.079	< 0.011	< 0.011	0.035	< 0.012	0.012	< 0.011	0.112	< 0.011	< 0.012	< 0.011	0.027
Benzo[a]pyrene (BAP)	1	-	< 0.011	< 0.011	< 0.011	0.157	0.27	< 0.011	< 0.011	0.041	< 0.012	0.011	< 0.011	0.174	0.016	< 0.012	< 0.011	0.05
BAP (Eq) NES	-	1	< 0.026	< 0.026	< 0.026	0.23	0.4	< 0.026	< 0.027	0.059	< 0.027	< 0.026	< 0.027	0.25	< 0.026	< 0.027	< 0.025	0.07
BAP Toxic (Eq) (TEF)	-	-	< 0.025	< 0.026	< 0.025	0.23	0.39	< 0.026	< 0.026	0.058	< 0.027	< 0.026	< 0.026	0.25	< 0.026	< 0.027	< 0.025	0.069
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	< 0.011	< 0.011	< 0.011	0.191	0.31	< 0.011	< 0.011	0.049	0.013	0.014	< 0.011	0.191	0.02	< 0.012	< 0.011	0.055
Benzo[e]pyrene	-	-	< 0.011	< 0.011	< 0.011	0.092	0.151	< 0.011	< 0.011	0.021	< 0.012	< 0.011	< 0.011	0.117	< 0.011	< 0.012	< 0.011	0.034
Benzo[g,h,i]perylene	2	-	< 0.011	< 0.011	< 0.011	0.21	0.22	< 0.011	< 0.011	0.021	< 0.012	< 0.011	< 0.011	0.142	< 0.011	< 0.012	< 0.011	0.041
Benzo[k]fluoranthene	-	-	< 0.011	< 0.011	< 0.011	0.056	0.113	< 0.011	< 0.011	0.018	< 0.012	< 0.011	< 0.011	0.072	< 0.011	< 0.012	< 0.011	0.018
Chrysene	2	-	< 0.011	< 0.011	< 0.011	0.063	0.088	< 0.011	< 0.011	0.031	< 0.012	0.012	< 0.011	0.097	< 0.011	< 0.012	< 0.011	0.025
Dibenzo[a,h]anthracene	1	-	< 0.011	< 0.011	< 0.011	0.026	0.048	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	0.025	< 0.011	< 0.012	< 0.011	< 0.011
Fluoranthene	2	-	< 0.011	< 0.011	< 0.011	0.14	0.084	< 0.011	< 0.011	0.06	0.018	0.042	< 0.011	0.177	0.016	< 0.012	< 0.011	0.046
Fluorene	2	-	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Indeno[1,2,3-c,d]pyrene	2	-	< 0.011	< 0.011	< 0.011	0.172	0.25	< 0.011	< 0.011	0.026	< 0.012	< 0.011	< 0.011	0.133	< 0.011	< 0.012	< 0.011	0.035
Naphthalene	200	-	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	-	-	< 0.011	< 0.011	< 0.011	0.062	0.083	< 0.011	< 0.011	< 0.012	< 0.012	< 0.011	< 0.011	0.052	< 0.011	< 0.012	< 0.011	0.011
Phenanthrene	2	-	< 0.011	< 0.011	< 0.011	0.015	< 0.012	< 0.011	< 0.011	< 0.012	< 0.012	0.033	< 0.011	0.05	< 0.011	< 0.012	< 0.011	< 0.011
Pyrene	2	-	< 0.011	< 0.011	< 0.011	0.21	0.173	0.013	< 0.011	0.062	0.017	0.03	< 0.011	0.175	0.019	< 0.012	< 0.011	0.068
Total of Reported PAHs	-	20	< 0.3	< 0.3	< 0.3	1.5	1.9	< 0.3	< 0.3	0.4	< 0.3	< 0.3	< 0.3	1.5	< 0.3	< 0.3	< 0.3	0.4

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar Sampling Results - Subbase Samples																
Sample Date	Waste Acceptance Criteria		18-Jul-42										19-Jul-24			
Sample Name			FTL179	FTL180	FTL182	FTL183	FTL184	FTL185	FTL186	FTL188	FTL188	FTL191	1.FTL194	2.FTL194	3.FTL194	FTL196
Sample Depth (m)	Hampton Downs Criteria without TCLP (mg/kg)	WasteMINZ Coal Tar Guidelines ¹	0.15-0.3	0.14-0.25	0.04-0.2	0.15-0.20	0.1-0.19	0.02-0.47	0.27-0.5	0.22-0.4	0.4-0.5	0.24-0.45	0.17-0.27	0.17-0.27	0.17-0.27	0.08-0.35
Lab Number			3631528.31	3631528.313	3631528.317	3631528.32	3631528.323	3631528.325	3631528.328	3631528.333	3631528.334	3631528.346	3631528.358	3631528.359	3631528.36	3631528.366
PAHs																
1-Methylnaphthalene	-	-	< 0.013	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.065	< 0.012	< 0.013	< 0.012	< 0.011
2-Methylnaphthalene	-	-	< 0.013	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.014	< 0.015	0.062	< 0.015	< 0.013	< 0.012	< 0.014
Acenaphthylene	2	-	< 0.013	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.019	< 0.012	< 0.013	< 0.012	0.019
Acenaphthene	2	-	< 0.013	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.42	< 0.012	< 0.013	< 0.012	0.039
Anthracene	0.2	-	< 0.013	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.69	< 0.012	< 0.013	< 0.012	0.198
Benzo[a]anthracene	1	-	0.023	0.016	0.027	0.017	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.87	< 0.012	< 0.013	< 0.012	0.99
Benzo[a]pyrene (BAP)	1	-	0.037	0.028	0.035	0.031	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.75	< 0.012	< 0.013	< 0.012	1.71
BAP (Eq) NES	-	1	0.054	0.041	0.054	0.04	< 0.025	< 0.027	< 0.032	< 0.027	< 0.028	1.14	< 0.029	< 0.030	< 0.029	2.5
BAP Toxic (Eq) (TEF)	-	-	0.053	0.041	0.053	0.04	< 0.025	< 0.027	< 0.032	< 0.027	< 0.028	1.12	< 0.029	< 0.029	< 0.029	2.4
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	-	0.045	0.035	0.05	0.033	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.88	< 0.012	< 0.013	< 0.012	1.77
Benzo[e]pyrene	-	-	0.025	0.02	0.036	0.021	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.39	< 0.012	< 0.013	< 0.012	1.11
Benzo[g,h,i]perylene	2	-	0.027	0.024	0.035	0.025	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.39	< 0.012	< 0.013	< 0.012	1.36
Benzo[k]fluoranthene	-	-	0.016	0.012	0.016	0.014	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.36	< 0.012	< 0.013	< 0.012	0.62
Chrysene	2	-	0.024	0.014	0.033	0.017	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.79	< 0.012	< 0.013	< 0.012	0.87
Dibenzo[a,h]anthracene	1	-	< 0.013	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.102	< 0.012	< 0.013	< 0.012	0.27
Fluoranthene	2	-	0.053	0.024	0.084	0.027	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	2.5	< 0.012	< 0.013	< 0.012	1.58
Fluorene	2	-	< 0.013	< 0.011	< 0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.43	< 0.012	< 0.013	< 0.012	0.036
Indeno[1,2,3-c,d]pyrene	2	-	0.027	0.021	0.029	0.024	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.45	< 0.012	< 0.013	< 0.012	1.27
Naphthalene	200	-	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.07	< 0.06	< 0.06	0.07	< 0.06	< 0.07	< 0.06	< 0.06
Perylene	-	-	< 0.013	< 0.011	0.011	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	0.171	< 0.012	< 0.013	< 0.012	0.42
Phenanthrene	2	-	0.014	< 0.011	0.068	< 0.012	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	2.8	< 0.012	< 0.013	< 0.012	0.64
Pyrene	2	-	0.061	0.027	0.076	0.032	< 0.011	< 0.012	< 0.014	< 0.011	< 0.012	2.2	< 0.012	< 0.013	< 0.012	2.3
Total of Reported PAHs	-	20	0.4	< 0.3	0.5	< 0.3	< 0.3	< 0.3	< 0.4	< 0.3	< 0.3	14.4	< 0.3	< 0.3	< 0.3	15.2

Note:
1 WasteMINZ Coal tar guidelines (Guidelines for Assessing and Managing Coal Tar Contamination in Roading 2023) have been selected.

Underlined:	Present above detection limits
ND:	Not detected
NL:	No limit
NS:	Not stated
-	Not tested for
	Above WasteMINZ Coal Tar Guidelines
	Above Hampton Downs Criteria without TCLP (mg/kg)

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar TCLP Results - Select Surface Samples												
Sample Date	Waste Acceptance Criteria ³	1-May-24			27-05-24 - 29/05-24	15-07-24 - 19-07-24						
Sample Name		FTL06 0.1m	FTL14 0.1m	FTL22 0.1	FTL51A	FTL86 0-0.5	FTL98 0-0.05	FTL110 0-0.03	FTL142 0.1-0.15	FTL151 0.04-0.09	FTL153 0.02-0.07	FTL165 0-0.04
Sample Depth (m)	Hampton Downs TCLP Limit (g/m ³)	0-0.1m	0-0.1	0-0.1	0-0.1	0-0.5	0-0.05	0-0.03	0.1-0.15	0.04-0.09	0.02-0.07	0-0.04
Lab Number		3574957.17	3574957.19	3574957.20	3678546.50	3677791.29	3677791.260	3677791.28	3677791.25	3677791.2400	3677791.2300	3677791.2200
PAHs												
1-Methylnaphthalene	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	0.1	<u>0.0135</u>	<u>0.0191</u>	<u>0.00114</u>	<u>0.00046</u>	<u>0.00103</u>	<u>0.045</u>	<u>0.0161</u>	<u>0.048</u>	< 0.00010	<u>0.0036</u>	<u>0.024</u>
Acenaphthylene	0.1	<u>0.00015</u>	<u>0.00042</u>	< 0.00010	< 0.00010	< 0.00010	<u>0.00038</u>	<u>0.00012</u>	<u>0.00042</u>	< 0.00010	<u>0.00011</u>	<u>0.00029</u>
Anthracene	0.01	<u>0.0042</u>	<u>0.006</u>	<u>0.00064</u>	<u>0.00019</u>	<u>0.00079</u>	0.0159	<u>0.0047</u>	0.0141	< 0.00010	<u>0.0006</u>	0.0153
Benzo[a]anthracene	0.05	<u>0.00036</u>	<u>0.0004</u>	<u>0.0002</u>	< 0.00010	< 0.00010	<u>0.00066</u>	<u>0.00034</u>	<u>0.00072</u>	< 0.00010	<u>0.00026</u>	<u>0.00091</u>
Benzo[a]pyrene (BAP)	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	<u>0.00011</u>	< 0.00010	<u>0.00013</u>	< 0.00010	< 0.00010	<u>0.00026</u>
BAP (Eq) NES ²	0.45	0.00674	0.00741	0.00276	0.00081	0.00124	0.01609	0.00613	0.01717	0.00000	0.00495	0.01979
BAP Toxic (Eq) (TEF) ¹	0.35	0.00074	0.00071	0.00036	0.00000	0.00000	0.00159	0.00073	0.00177	0.00000	0.00065	0.00259
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	<u>0.0001</u>	< 0.00010	< 0.00010	< 0.00010	< 0.00010	<u>0.00014</u>	<u>0.0001</u>	<u>0.00016</u>	< 0.00010	<u>0.00016</u>	<u>0.0003</u>
Benzo[e]pyrene	0.05	-	-	-	-	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	0.1	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	<u>0.00012</u>
Benzo[k]fluoranthene	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	<u>0.00013</u>
Chrysene	0.1	<u>0.00028</u>	<u>0.00031</u>	<u>0.00016</u>	< 0.00010	< 0.00010	<u>0.00068</u>	<u>0.00029</u>	<u>0.00076</u>	< 0.00010	<u>0.00023</u>	<u>0.00087</u>
Dibenzo[a,h]anthracene	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	0.1	<u>0.006</u>	<u>0.0067</u>	<u>0.0024</u>	<u>0.00081</u>	<u>0.00124</u>	<u>0.0145</u>	<u>0.0054</u>	<u>0.0154</u>	< 0.00010	<u>0.0043</u>	<u>0.0172</u>
Fluorene	0.1	<u>0.0054</u>	<u>0.0129</u>	<u>0.0002</u>	<u>0.0003</u>	<u>0.0005</u>	<u>0.028</u>	<u>0.0071</u>	<u>0.024</u>	< 0.0002	<u>0.0005</u>	<u>0.0075</u>
Indeno(1,2,3-c,d)pyrene	0.1	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	<u>0.00012</u>
Naphthalene	10	<u>0.001</u>	<u>0.0089</u>	< 0.0005	< 0.0005	< 0.0005	<u>0.065</u>	<u>0.0135</u>	<u>0.0098</u>	< 0.0005	< 0.0005	<u>0.0054</u>
Perylene	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.1	<u>0.0171</u>	<u>0.026</u>	<u>0.0027</u>	<u>0.0012</u>	<u>0.0029</u>	<u>0.067</u>	<u>0.02</u>	<u>0.054</u>	< 0.0004	<u>0.0016</u>	<u>0.082</u>
Pyrene	0.1	<u>0.0046</u>	<u>0.0048</u>	<u>0.0021</u>	<u>0.0008</u>	<u>0.0009</u>	<u>0.0104</u>	<u>0.0039</u>	<u>0.0142</u>	< 0.0002	<u>0.0034</u>	<u>0.0162</u>
Total of Reported PAHs	-	-	-	-	-	-	-	-	-	-	-	-

Note:

1. Hampton Downs estimated BAP (Eq) (TEF) determined by - Benzo[a]anthracene + Benzo[a]pyrene (BAP) + Benzo[b]fluoranthene + Benzo[j]fluoranthene + Benzo[k]fluoranthene + Chrysene + Dibenzo[a,h]anthracene + Indeno(1,2,3-c,d)pyrene

2. Hampton Downs BAP (Eq) (NES) determined by - Hampton Downs estimated BAP (Eq) (TEF) + Fluoranthene

3.Hampton Downs Class 1 Landfill TCLP Acceptance Criteria

RED	Synthetic Results derived from formula for calculation of proxy guidelines ^{1,2}
Grey	Below Laboratory Detection Limit
Underlined:	Above Laboratory Detection Limit
ND:	Not Detected
NL:	No Limit
NS:	Not Stated
-	Not Tested
	Exceeds Hampton Downs TCLP Criteria

Former Tokanui Psychiatric Hospital Closed Landfill: Roding Material Coal Tar TCLP Results - Select Basecourse Samples												
Sample Date	Waste Acceptance Criteria ³	1-May-24			27-05-24 - 29/05-24	15-07-24 - 19-07-24						
Sample Name		FTL06 0.2	FTL36B	FTL37B	FTL41B	FTL83 0-0.05	FTL83 0.05-0.09	FTL88 0.03-0.06	FTL98 0.05-0.2	FTL143 0.04-0.09	FTL165 0.04-0.12	2.FTL194 0.03-0.17m
Sample Depth (m)		0.1-0.2	0.05-0.15	0.05-0.2	0.05-0.1	0-0.05	0.05-0.09	0.03-0.06	0.05-0.2	0.04-0.09	0.04-0.12	0.03-0.17m
Lab Number		3574957.18	3678546.60	3678546.70	3678546.80	3677791.27	3677791.3	3677791.31	3677791.320	3677791.33	3677791.3400	3677791.3500
PAHs	Hampton Downs TCLP Limit (g/m ³)											
1-Methylnaphthalene	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	0.1	<u>0.0026</u>	<u>0.0185</u>	< 0.00010	<u>0.0099</u>	<u>0.00018</u>	< 0.00010	<u>0.0009</u>	<u>0.027</u>	<u>0.0094</u>	<u>0.00011</u>	< 0.00010
Acenaphthylene	0.1	< 0.00010	<u>0.00017</u>	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	<u>0.00039</u>	<u>0.0002</u>	< 0.00010	< 0.00010
Anthracene	0.01	<u>0.0021</u>	<u>0.0049</u>	< 0.00010	<u>0.0054</u>	<u>0.00011</u>	< 0.00010	<u>0.00055</u>	0.0109	<u>0.008</u>	<u>0.00022</u>	< 0.00010
Benzo[a]anthracene	0.05	<u>0.00031</u>	<u>0.00032</u>	< 0.00010	<u>0.00036</u>	< 0.00010	< 0.00010	< 0.00010	<u>0.00069</u>	<u>0.00052</u>	< 0.00010	< 0.00010
Benzo[a]pyrene (BAP)	0.05	0.00013	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
BAP (Eq) NES ²	0.45	0.00411	0.007	0.00011	0.00791	0.00021	0.00021	0.00068	0.01286	0.01089	0.00042	0.00000
BAP Toxic (Eq) (TEF) ¹	0.35	0.00081	0.0006	0.0000	0.00081	0.00000	0.00000	0.00000	0.00126	0.00099	0.00000	0.00000
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	<u>0.00016</u>	< 0.00010	< 0.00010	<u>0.00012</u>	< 0.00010	< 0.00010	< 0.00010	<u>0.00011</u>	< 0.00010	< 0.00010	< 0.00010
Benzo[e]pyrene	0.05	-	-	-	-	-	-	-	-	-	-	-
Benzo[g,h,i]perylene	0.1	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo[k]fluoranthene	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	0.1	<u>0.00021</u>	<u>0.00028</u>	< 0.00010	<u>0.00033</u>	< 0.00010	< 0.00010	< 0.00010	<u>0.00046</u>	<u>0.00047</u>	< 0.00010	< 0.00010
Dibenzo[a,h]anthracene	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	0.1	<u>0.0033</u>	<u>0.0064</u>	<u>0.00011</u>	<u>0.0071</u>	<u>0.00021</u>	<u>0.00021</u>	<u>0.00068</u>	<u>0.0116</u>	<u>0.0099</u>	<u>0.00042</u>	< 0.00010
Fluorene	0.1	<u>0.0013</u>	<u>0.0078</u>	< 0.0002	<u>0.0059</u>	< 0.0002	< 0.0002	<u>0.0005</u>	<u>0.0169</u>	<u>0.0068</u>	< 0.0002	< 0.0002
Indeno(1,2,3-c,d)pyrene	0.1	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	10	< 0.0005	<u>0.0019</u>	< 0.0005	<u>0.0028</u>	< 0.0005	< 0.0005	< 0.0005	<u>0.0102</u>	<u>0.0007</u>	< 0.0005	< 0.0005
Perylene	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	0.1	<u>0.0069</u>	<u>0.024</u>	< 0.0004	<u>0.027</u>	< 0.0004	< 0.0004	<u>0.0024</u>	<u>0.044</u>	<u>0.036</u>	<u>0.0006</u>	< 0.0004
Pyrene	0.1	<u>0.0026</u>	<u>0.0054</u>	< 0.0002	<u>0.007</u>	< 0.0002	<u>0.0002</u>	<u>0.0005</u>	<u>0.0085</u>	<u>0.0072</u>	<u>0.0007</u>	< 0.0002
Total of Reported PAHs	-	-	-	-	-	-	-	-	-	-	-	-

Note:

1. Hampton Downs estimated BAP (Eq) (TEF) determined by - Benzo[a]anthracene + Benzo[a]pyrene (BAP) + Benzo[b]fluoranthene + Benzo[j]fluoranthene + Benzo[k]fluoranthene + Chrysene + Dibenzo[a,h]anthracene + Indeno(1,2,3-c,d)pyrene
2. Hampton Downs BAP (Eq) (NES) determined by - Hampton Downs estimated BAP (Eq) (TEF) + Fluoranthene
- 3.Hampton Downs Class 1 Landfill TCLP Acceptance Criteria

RED	Synthetic Results derived from formula for calculation of proxy guidelines ^{1,2}
Grey	Below Laboratory Detection Limit
<u>Underlined:</u>	Above Laboratory Detection Limit
ND:	Not Detected
NL:	No Limit
NS:	Not Stated
-	Not Tested
	Exceeds Hampton Downs TCLP Criteria

Former Tokanui Psychiatric Hospital Closed Landfill: Roading Material Coal Tar TCLP Results - Select Sub-Base Samples						
Sample Date	Waste Acceptance Criteria ³	15-07-24 - 19-07-24				
Sample Name		FTL83 0.13-0.23	FTL91 0.22-0.27	FTL125 0.25-0.35	FTL142 0.15-0.3	FTL144 0.14-0.25
Sample Depth (m)	Hampton Downs TCLP Limit (g/m ³)	0.13-0.23	0.22-0.27	0.25-0.35	0.15-0.3	0.14-0.25
Lab Number		3677791.38	3677791.39	3677791.40	3677791.41	3677791.42
PAHs						
1-Methylnaphthalene	-	-	-	-	-	-
2-Methylnaphthalene	-	-	-	-	-	-
Acenaphthene	0.1	< 0.00010	<u>0.00055</u>	<u>0.0052</u>	<u>0.00016</u>	<u>0.00108</u>
Acenaphthylene	0.1	< 0.00010	< 0.00010	<u>0.00015</u>	< 0.00010	< 0.00010
Anthracene	0.01	< 0.00010	<u>0.0004</u>	<u>0.0038</u>	< 0.00010	<u>0.0006</u>
Benzo[a]anthracene	0.05	< 0.00010	<u>0.00012</u>	<u>0.00042</u>	< 0.00010	<u>0.0001</u>
Benzo[a]pyrene (BAP)	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
BAP (Eq) NES ²	0.45	0.00022	0.00123	0.00771	0.00064	0.00125
BAP Toxic (Eq) (TEF) ¹	0.35	0.00000	0.00012	0.00091	0.00000	0.0001
Benzo[b]fluoranthene + Benzo[j]fluoranthene	-	< 0.00010	< 0.00010	<u>0.00011</u>	< 0.00010	< 0.00010
Benzo[e]pyrene	0.05	-	-	-	-	-
Benzo[g,h,i]perylene	0.1	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo[k]fluoranthene	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	0.1	< 0.00010	< 0.00010	<u>0.00038</u>	< 0.00010	< 0.00010
Dibenzo[a,h]anthracene	0.05	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	0.1	<u>0.00022</u>	<u>0.00111</u>	<u>0.0068</u>	<u>0.00064</u>	<u>0.00115</u>
Fluorene	0.1	< 0.0002	< 0.0002	<u>0.0039</u>	< 0.0002	<u>0.0004</u>
Indeno(1,2,3-c,d)pyrene	0.1	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene	10	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Perylene	-	-	-	-	-	-
Phenanthrene	0.1	< 0.0004	<u>0.0014</u>	<u>0.0142</u>	< 0.0004	<u>0.0018</u>
Pyrene	0.1	<u>0.0003</u>	<u>0.001</u>	<u>0.0057</u>	<u>0.001</u>	<u>0.0011</u>
Total of Reported PAHs	-	-	-	-	-	-

95UCL Statistical Analysis - TCLP (Anthracene)		
Sample ID	Waste Acceptance Criteria	95UCL of TCLP (Anthracene) Results for 27 select samples
PAHs (g/m ³)	Hampton Downs TCLP Criteria	TCLP
Anthracene	0.01	0.00676
Note: 95UCL Statistical Analysis comprises TCLP concentrations from 11x Surface, 11 Basecourse and 5 Sub-Base samples		

Note:

1. Hampton Downs estimated BAP (Eq) (TEF) determined by - Benzo[a]anthracene + Benzo[a]pyrene (BAP) + Benzo[b]fluoranthene + Benzo[j]fluoranthene + Benzo[k]fluoranthene + Chrysene + Dibenzo[a,h]anthracene + Indeno(1,2,3-c,d)pyrene

2. Hampton Downs BAP (Eq) (NES) determined by - Hampton Downs estimated BAP (Eq) (TEF) + Fluoranthene

3. Hampton Downs Class 1 Landfill TCLP Acceptance Criteria

RED Synthetic Results derived from formula for calculation of proxy guidelines^{1,2}

Grey Below Laboratory Detection Limit

Underlined: Above Laboratory Detection Limit

ND: Not Detected

NL: No Limit

NS: Not Stated

- Not Tested

Exceeds Hampton Downs TCLP Criteria

Certificate of Analysis

Page 1 of 3

Client:	Fraser Thomas Limited	Lab No:	3574957	SPv1
Contact:	Elliot Bish C/- Fraser Thomas Limited PO Box 204006 Highbrook Auckland 2161	Date Received:	09-May-2024	
		Date Reported:	14-May-2024	
		Quote No:	130949	
		Order No:	001110	
		Client Reference:	33097	
		Submitted By:	Ben Laing-McConnell	

Sample Type: Roading material with dark colour

Sample Name:	FTL01 0.1m 01-May-2024	FTL01 0.3m 01-May-2024	FTL02 0.1m 01-May-2024	FTL06 0.1m 01-May-2024	FTL06 0.2m 01-May-2024
Lab Number:	3574957.1	3574957.2	3574957.3	3574957.4	3574957.5
Polycyclic Aromatic Hydrocarbons Screening in Rock					
1-Methylnaphthalene	mg/kg as rcvd	< 0.10	< 0.10	0.17	1.58
2-Methylnaphthalene	mg/kg as rcvd	< 0.10	< 0.10	0.13	0.89
Acenaphthylene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	1.58
Acenaphthene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	20
Anthracene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	28
Benzo[a]anthracene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	59
Benzo[a]pyrene (BAP)	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	49
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	mg/kg as rcvd	< 0.25	< 0.24	< 0.24	75
Benzo[a]pyrene Toxic Equivalence (TEF)	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	73
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	58
Benzo[e]pyrene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	26
Benzo[g,h,i]perylene	mg/kg as rcvd	< 0.10	< 0.10	0.12	24
Benzo[k]fluoranthene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	24
Chrysene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	49
Dibenzo[a,h]anthracene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	6.9
Fluoranthene	mg/kg as rcvd	< 0.10	< 0.10	0.10	144
Fluorene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	13.4
Indeno(1,2,3-c,d)pyrene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	28
Naphthalene	mg/kg as rcvd	< 0.5	< 0.5	0.6	< 0.5
Perylene	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	10.6
Phenanthrene	mg/kg as rcvd	< 0.10	< 0.10	0.10	94
Pyrene	mg/kg as rcvd	< 0.10	< 0.10	0.10	134
Total of Reported PAHs	mg/kg as rcvd	< 3	< 3	< 3	770

Sample Name:	FTL14 0.1m 01-May-2024	FTL14 0.3m 01-May-2024	FTL20 0.4m 01-May-2024	FTL22 0.1m 01-May-2024	FTL22 0.2m 01-May-2024
Lab Number:	3574957.6	3574957.7	3574957.8	3574957.9	3574957.10
Polycyclic Aromatic Hydrocarbons Screening in Rock					
1-Methylnaphthalene	mg/kg as rcvd	24	0.14	< 0.10	< 0.10
2-Methylnaphthalene	mg/kg as rcvd	36	0.12	< 0.10	< 0.10
Acenaphthylene	mg/kg as rcvd	3.9	< 0.10	< 0.10	1.42
Acenaphthene	mg/kg as rcvd	67	0.22	< 0.10	0.80
Anthracene	mg/kg as rcvd	102	0.25	< 0.10	6.6
Benzo[a]anthracene	mg/kg as rcvd	90	0.20	0.11	71
Benzo[a]pyrene (BAP)	mg/kg as rcvd	72	0.20	0.23	106
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	mg/kg as rcvd	111	0.31	0.38	155
Benzo[a]pyrene Toxic Equivalence (TEF)	mg/kg as rcvd	108	0.3	0.4	154

Sample Type: Roading material with dark colour						
Sample Name:		FTL14 0.1m 01-May-2024	FTL14 0.3m 01-May-2024	FTL20 0.4m 01-May-2024	FTL22 0.1m 01-May-2024	FTL22 0.2m 01-May-2024
Lab Number:		3574957.6	3574957.7	3574957.8	3574957.9	3574957.10
Polycyclic Aromatic Hydrocarbons Screening in Rock						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg as rcvd	85	0.22	0.23	123	26
Benzo[e]pyrene	mg/kg as rcvd	38	0.11	0.27	61	12.7
Benzo[g,h,i]perylene	mg/kg as rcvd	38	0.11	0.25	64	13.0
Benzo[k]fluoranthene	mg/kg as rcvd	33	< 0.10	< 0.10	45	9.4
Chrysene	mg/kg as rcvd	72	0.18	0.11	64	14.0
Dibenzo[a,h]anthracene	mg/kg as rcvd	10.0	< 0.10	< 0.10	16.4	3.2
Fluoranthene	mg/kg as rcvd	250	0.63	0.18	89	27
Fluorene	mg/kg as rcvd	80	0.23	< 0.10	0.40	0.17
Indeno(1,2,3-c,d)pyrene	mg/kg as rcvd	42	0.13	0.25	71	14.4
Naphthalene	mg/kg as rcvd	50	< 0.5	< 0.5	< 0.5	< 0.5
Perylene	mg/kg as rcvd	17.1	< 0.10	0.11	28	5.0
Phenanthrene	mg/kg as rcvd	320	0.81	< 0.10	13.9	4.2
Pyrene	mg/kg as rcvd	198	0.50	0.28	111	35
Total of Reported PAHs	mg/kg as rcvd	1,630	4	< 3	870	200
Sample Name:		FTL27 0.1m 01-May-2024	FTL27 0.2m 01-May-2024	FTL29 0.1m 01-May-2024	FTL29 0.3m 01-May-2024	FTL30 0.1m 01-May-2024
Lab Number:		3574957.11	3574957.12	3574957.13	3574957.14	3574957.15
Polycyclic Aromatic Hydrocarbons Screening in Rock						
1-Methylnaphthalene	mg/kg as rcvd	0.22	0.14	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene	mg/kg as rcvd	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	mg/kg as rcvd	1.62	0.13	0.83	< 0.10	< 0.10
Acenaphthene	mg/kg as rcvd	4.3	0.71	0.73	< 0.10	< 0.10
Anthracene	mg/kg as rcvd	10.4	1.14	3.2	< 0.10	< 0.10
Benzo[a]anthracene	mg/kg as rcvd	49	3.8	16.3	< 0.10	0.16
Benzo[a]pyrene (BAP)	mg/kg as rcvd	61	4.5	19.1	< 0.10	0.42
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	mg/kg as rcvd	90	6.8	28	< 0.24	0.64
Benzo[a]pyrene Toxic Equivalence (TEF)	mg/kg as rcvd	89	6.7	28	< 0.3	0.6
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg as rcvd	72	5.4	21	< 0.10	0.51
Benzo[e]pyrene	mg/kg as rcvd	31	2.4	10.6	< 0.10	0.31
Benzo[g,h,i]perylene	mg/kg as rcvd	37	3.0	11.7	< 0.10	0.54
Benzo[k]fluoranthene	mg/kg as rcvd	27	2.3	8.6	< 0.10	0.18
Chrysene	mg/kg as rcvd	47	3.8	15.2	< 0.10	0.16
Dibenzo[a,h]anthracene	mg/kg as rcvd	8.5	0.67	2.6	< 0.10	< 0.10
Fluoranthene	mg/kg as rcvd	111	8.6	37	< 0.10	0.30
Fluorene	mg/kg as rcvd	1.92	0.27	0.38	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene	mg/kg as rcvd	44	3.4	12.2	< 0.10	0.40
Naphthalene	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene	mg/kg as rcvd	16.9	1.30	4.8	< 0.10	0.13
Phenanthrene	mg/kg as rcvd	24	3.3	9.8	< 0.10	0.11
Pyrene	mg/kg as rcvd	125	8.8	37	< 0.10	0.31
Total of Reported PAHs	mg/kg as rcvd	670	54	210	< 3	4
Sample Name:		FTL30 0.2m 01-May-2024				
Lab Number:		3574957.16				
Polycyclic Aromatic Hydrocarbons Screening in Rock						
1-Methylnaphthalene	mg/kg as rcvd	1.90				
2-Methylnaphthalene	mg/kg as rcvd	1.96				
Acenaphthylene	mg/kg as rcvd	0.31				
Acenaphthene	mg/kg as rcvd	13.4				
Anthracene	mg/kg as rcvd	17.1				
Benzo[a]anthracene	mg/kg as rcvd	19.1				
Benzo[a]pyrene (BAP)	mg/kg as rcvd	18.6				

Sample Type: Roading material with dark colour		
Sample Name:		FTL30 0.2m 01-May-2024
Lab Number:		3574957.16
Polycyclic Aromatic Hydrocarbons Screening in Rock		
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES	mg/kg as rcvd	28
Benzo[a]pyrene Toxic Equivalence (TEF)	mg/kg as rcvd	28
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg as rcvd	22
Benzo[e]pyrene	mg/kg as rcvd	9.9
Benzo[g,h,i]perylene	mg/kg as rcvd	10.4
Benzo[k]fluoranthene	mg/kg as rcvd	8.0
Chrysene	mg/kg as rcvd	16.1
Dibenzo[a,h]anthracene	mg/kg as rcvd	2.8
Fluoranthene	mg/kg as rcvd	54
Fluorene	mg/kg as rcvd	11.7
Indeno(1,2,3-c,d)pyrene	mg/kg as rcvd	12.0
Naphthalene	mg/kg as rcvd	1.5
Perylene	mg/kg as rcvd	4.2
Phenanthrene	mg/kg as rcvd	52
Pyrene	mg/kg as rcvd	47
Total of Reported PAHs	mg/kg as rcvd	320

Analyst's Comments

Carbon particulates were observed in the matrix of samples 3574957.1 & 14 and this has absorbed some of the System Monitoring Compounds in the PAH analysis, whereby the recovery for Benzo[a]pyrene-d12 was 68% and 60% respectively. Therefore the results presented for these analytes may not represent the actual concentration in the samples.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Roading material with dark colour			
Test	Method Description	Default Detection Limit	Sample No
SHOC Macro Extraction 10x Dilution		-	1-16
Polycyclic Aromatic Hydrocarbons Screening in Rock	Sonication extraction, GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8270.	0.002 - 0.3 mg/kg as rcvd	1-16

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 10-May-2024 and 14-May-2024. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

Ara Heron BSc (Tech)
Client Services Manager - Environmental

Certificate of Analysis

Page 1 of 11

Client:	Fraser Thomas Limited	Lab No:	3594800	SPV1
Contact:	Elliot Bish	Date Received:	29-May-2024	
	C/- Fraser Thomas Limited	Date Reported:	05-Jun-2024	
	PO Box 204006	Quote No:	130949	
	Highbrook	Order No:	PO 001117	
	Auckland 2161	Client Reference:	33205	
		Submitted By:	Ben Laing-McConnell	

Sample Type: Soil						
Sample Name:		FTL32B	FTL33B	FTL34B	FTL35B	FTL36B
Lab Number:		3594800.31	3594800.32	3594800.33	3594800.34	3594800.35
Individual Tests						
Dry Matter	g/100g as rcvd	91	83	92	89	94
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.3	9.7	39
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.044	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.016	< 0.018	< 0.017	0.050	< 0.016
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	0.174
Acenaphthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.160	0.019
Anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.39	0.27
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.60	2.2
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.62	4.4
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	< 0.029	< 0.027	0.93	6.5
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	< 0.029	< 0.026	0.91	6.5
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.74	5.2
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.37	2.5
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.40	4.4
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.28	1.92
Chrysene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.53	2.1
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.084	0.74
Fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	1.64	4.3
Fluorene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.196	0.016
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.42	4.0
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	0.148	1.32
Phenanthrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	1.51	0.32
Pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	1.48	5.5
Sample Name:		FTL38B	FTL40B	FTL41B	FTL42B	FTL44B
Lab Number:		3594800.37	3594800.38	3594800.39	3594800.40	3594800.41
Individual Tests						
Dry Matter	g/100g as rcvd	74	78	87	92	91
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	3.9	23	108	0.7	0.8
1-Methylnaphthalene	mg/kg dry wt	< 0.013	0.016	0.33	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.02	< 0.019	0.34	< 0.016	< 0.017
Acenaphthylene	mg/kg dry wt	< 0.013	0.039	0.22	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	0.037	0.156	2.3	< 0.011	< 0.011
Anthracene	mg/kg dry wt	0.131	0.41	3.4	< 0.011	< 0.011



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Sample Type: Soil						
Sample Name:		FTL38B	FTL40B	FTL41B	FTL42B	FTL44B
Lab Number:		3594800.37	3594800.38	3594800.39	3594800.40	3594800.41
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[a]anthracene	mg/kg dry wt	0.29	1.98	7.3	0.046	0.050
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.26	2.0	8.6	0.067	0.085
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.39	3.1	13.2	0.099	0.122
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.38	3.0	13.0	0.099	0.121
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.33	2.5	10.6	0.086	0.095
Benzo[e]pyrene	mg/kg dry wt	0.156	1.18	4.2	0.045	0.065
Benzo[g,h,i]perylene	mg/kg dry wt	0.139	1.15	6.0	0.051	0.066
Benzo[k]fluoranthene	mg/kg dry wt	0.128	0.96	3.8	0.033	0.037
Chrysene	mg/kg dry wt	0.23	1.64	6.4	0.041	0.052
Dibenzo[a,h]anthracene	mg/kg dry wt	0.035	0.29	1.42	< 0.011	0.011
Fluoranthene	mg/kg dry wt	0.75	3.9	15.7	0.081	0.100
Fluorene	mg/kg dry wt	0.029	0.127	1.65	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.154	1.31	7.1	0.055	0.063
Naphthalene	mg/kg dry wt	< 0.07	< 0.07	0.33	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.057	0.51	2.6	0.019	0.019
Phenanthrene	mg/kg dry wt	0.48	1.25	9.4	0.023	0.019
Pyrene	mg/kg dry wt	0.66	3.2	16.3	0.087	0.115
Sample Name:		FTL45B	FTL46B	FTL47B	FTL48B	FTL49B
Lab Number:		3594800.42	3594800.43	3594800.44	3594800.45	3594800.46
Individual Tests						
Dry Matter	g/100g as rcvd	89	94	69	50	73
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.4	< 0.5	< 0.4
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
2-Methylnaphthalene	mg/kg dry wt	< 0.017	< 0.016	< 0.03	< 0.03	< 0.02
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	< 0.025	< 0.035	< 0.048	< 0.033
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	< 0.025	< 0.035	< 0.047	< 0.033
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	0.014
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Chrysene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.08	< 0.10	< 0.07
Perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Phenanthrene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.02	< 0.014
Sample Name:		FTL50B	FTL51B	FTL52B	FTL53B	FTL54B
Lab Number:		3594800.47	3594800.48	3594800.49	3594800.50	3594800.51
Individual Tests						
Dry Matter	g/100g as rcvd	93	87	93	78	90

Sample Type: Soil						
Sample Name:		FTL50B	FTL51B	FTL52B	FTL53B	FTL54B
Lab Number:		3594800.47	3594800.48	3594800.49	3594800.50	3594800.51
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	240	40	3.5	31	4.0
1-Methylnaphthalene	mg/kg dry wt	0.99	0.025	< 0.011	0.016	< 0.011
2-Methylnaphthalene	mg/kg dry wt	1.04	0.021	< 0.016	< 0.019	< 0.017
Acenaphthylene	mg/kg dry wt	0.83	0.113	0.014	0.026	< 0.011
Acenaphthene	mg/kg dry wt	4.9	0.24	< 0.011	0.162	< 0.011
Anthracene	mg/kg dry wt	8.6	0.88	0.035	0.81	0.020
Benzo[a]anthracene	mg/kg dry wt	18.6	3.3	0.27	2.5	0.34
Benzo[a]pyrene (BAP)	mg/kg dry wt	17.2	3.3	0.38	2.3	0.53
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	26	5.0	0.57	3.5	0.76
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	26	4.9	0.56	3.5	0.76
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	21	3.9	0.46	2.9	0.59
Benzo[e]pyrene	mg/kg dry wt	9.5	1.89	0.24	1.38	0.35
Benzo[g,h,i]perylene	mg/kg dry wt	8.7	1.85	0.25	1.47	0.35
Benzo[k]fluoranthene	mg/kg dry wt	7.6	1.51	0.178	1.04	0.23
Chrysene	mg/kg dry wt	14.8	2.6	0.24	2.0	0.29
Dibenzo[a,h]anthracene	mg/kg dry wt	2.7	0.50	0.060	0.34	0.074
Fluoranthene	mg/kg dry wt	40	7.0	0.38	5.6	0.26
Fluorene	mg/kg dry wt	5.1	0.21	< 0.011	0.103	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	10.7	2.1	0.29	1.64	0.38
Naphthalene	mg/kg dry wt	0.73	< 0.06	< 0.06	< 0.07	< 0.06
Perylene	mg/kg dry wt	4.0	0.77	0.106	0.59	0.140
Phenanthrene	mg/kg dry wt	26	2.4	0.082	2.8	0.013
Pyrene	mg/kg dry wt	39	7.3	0.47	5.0	0.45

Sample Name:		FTL55B	FTL56B	FTL57B	FTL58B	FTL60B
Lab Number:		3594800.52	3594800.53	3594800.54	3594800.55	3594800.56
Individual Tests						
Dry Matter	g/100g as rcvd	95	89	66	92	92
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.6	< 0.3	< 0.4	23	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	0.087	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.016	< 0.017	< 0.03	0.077	< 0.016
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	0.043	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	0.52	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	0.98	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.057	< 0.011	< 0.015	1.62	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.066	< 0.011	< 0.015	1.61	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.099	< 0.026	< 0.035	2.4	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.098	< 0.026	< 0.035	2.3	< 0.026
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.082	< 0.011	< 0.015	1.81	< 0.011
Benzo[e]pyrene	mg/kg dry wt	0.045	< 0.011	< 0.015	0.88	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.040	< 0.011	< 0.015	0.86	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	0.036	< 0.011	< 0.015	0.71	< 0.011
Chrysene	mg/kg dry wt	0.046	< 0.011	< 0.015	1.34	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	0.21	< 0.011
Fluoranthene	mg/kg dry wt	0.068	< 0.011	< 0.015	4.4	< 0.011
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	0.46	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.045	< 0.011	< 0.015	1.00	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.08	0.07	< 0.06
Perylene	mg/kg dry wt	0.015	< 0.011	< 0.015	0.41	< 0.011
Phenanthrene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	2.9	< 0.011
Pyrene	mg/kg dry wt	0.085	< 0.011	< 0.015	3.5	< 0.011

Sample Type: Soil						
Sample Name:		FTL61B	FTL62B	FTL32C	FTL33C	FTL34C
Lab Number:		3594800.57	3594800.58	3594800.60	3594800.61	3594800.62
Individual Tests						
Dry Matter	g/100g as rcvd	92	90	72	86	69
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.4	< 0.3	< 0.4	< 0.3	< 0.4
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	< 0.012	< 0.015
2-Methylnaphthalene	mg/kg dry wt	< 0.016	< 0.017	< 0.014	< 0.012	< 0.03
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	< 0.012	< 0.015
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	< 0.012	< 0.015
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	< 0.012	< 0.015
Benzo[a]anthracene	mg/kg dry wt	0.027	< 0.011	< 0.014	< 0.012	< 0.015
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.034	< 0.011	< 0.014	< 0.012	< 0.015
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.049	< 0.027	< 0.033	< 0.028	< 0.036
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.048	< 0.027	< 0.033	< 0.028	< 0.036
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.043	0.011	< 0.014	< 0.012	< 0.015
Benzo[e]pyrene	mg/kg dry wt	0.022	< 0.011	< 0.014	< 0.012	< 0.015
Benzo[g,h,i]perylene	mg/kg dry wt	0.024	< 0.011	< 0.014	< 0.012	< 0.015
Benzo[k]fluoranthene	mg/kg dry wt	0.017	< 0.011	< 0.014	< 0.012	< 0.015
Chrysene	mg/kg dry wt	0.025	< 0.011	< 0.014	< 0.012	< 0.015
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	< 0.012	< 0.015
Fluoranthene	mg/kg dry wt	0.057	< 0.011	< 0.014	< 0.012	< 0.015
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	< 0.012	< 0.015
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.024	< 0.011	< 0.014	< 0.012	< 0.015
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.07	< 0.06	< 0.08
Perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	< 0.012	< 0.015
Phenanthrene	mg/kg dry wt	0.014	< 0.011	< 0.014	< 0.012	< 0.015
Pyrene	mg/kg dry wt	0.057	< 0.011	< 0.014	< 0.012	< 0.015
Sample Name:		FTL35C	FTL36C	FTL37C	FTL38C	FTL40C
Lab Number:		3594800.63	3594800.64	3594800.65	3594800.66	3594800.67
Individual Tests						
Dry Matter	g/100g as rcvd	65	67	61	66	76
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	1.3	< 0.4	14.2	0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.015	< 0.015	< 0.016	0.045	< 0.013
2-Methylnaphthalene	mg/kg dry wt	< 0.03	< 0.03	< 0.03	0.05	< 0.02
Acenaphthylene	mg/kg dry wt	< 0.015	< 0.015	< 0.016	0.038	< 0.013
Acenaphthene	mg/kg dry wt	< 0.015	< 0.015	< 0.016	0.186	< 0.013
Anthracene	mg/kg dry wt	< 0.015	< 0.015	< 0.016	0.39	< 0.013
Benzo[a]anthracene	mg/kg dry wt	< 0.015	0.070	< 0.016	0.99	0.026
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.015	0.153	< 0.016	1.02	0.027
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.037	0.22	< 0.039	1.55	0.040
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.037	0.22	< 0.039	1.52	0.040
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.015	0.177	< 0.016	1.29	0.031
Benzo[e]pyrene	mg/kg dry wt	< 0.015	0.084	< 0.016	0.59	0.017
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.015	0.144	< 0.016	0.57	0.015
Benzo[k]fluoranthene	mg/kg dry wt	< 0.015	0.063	< 0.016	0.48	0.013
Chrysene	mg/kg dry wt	< 0.015	0.069	< 0.016	0.83	0.023
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.015	0.019	< 0.016	0.153	< 0.013
Fluoranthene	mg/kg dry wt	< 0.015	0.128	0.019	2.7	0.056
Fluorene	mg/kg dry wt	< 0.015	< 0.015	< 0.016	0.145	< 0.013
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.015	0.135	< 0.016	0.62	0.016
Naphthalene	mg/kg dry wt	< 0.08	< 0.08	< 0.08	< 0.08	< 0.07
Perylene	mg/kg dry wt	< 0.015	0.049	< 0.016	0.23	< 0.013

Sample Type: Soil						
Sample Name:		FTL35C	FTL36C	FTL37C	FTL38C	FTL40C
Lab Number:		3594800.63	3594800.64	3594800.65	3594800.66	3594800.67
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Phenanthrene	mg/kg dry wt	< 0.015	< 0.015	< 0.016	1.38	0.021
Pyrene	mg/kg dry wt	< 0.015	0.169	0.021	2.4	0.051
Sample Name:		FTL41C	FTL42C	FTL44C	FTL45C	FTL46C
Lab Number:		3594800.68	3594800.69	3594800.70	3594800.71	3594800.72
Individual Tests						
Dry Matter	g/100g as rcvd	60	65	79	81	74
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	26	< 0.4	< 0.3	< 0.3	< 0.4
1-Methylnaphthalene	mg/kg dry wt	0.027	< 0.015	< 0.013	< 0.013	< 0.014
2-Methylnaphthalene	mg/kg dry wt	< 0.03	< 0.03	< 0.019	< 0.013	< 0.02
Acenaphthylene	mg/kg dry wt	0.053	< 0.015	< 0.013	< 0.013	< 0.014
Acenaphthene	mg/kg dry wt	0.37	< 0.015	< 0.013	< 0.013	< 0.014
Anthracene	mg/kg dry wt	0.69	< 0.015	< 0.013	< 0.013	< 0.014
Benzo[a]anthracene	mg/kg dry wt	1.69	0.018	< 0.013	< 0.013	< 0.014
Benzo[a]pyrene (BAP)	mg/kg dry wt	2.2	0.022	< 0.013	< 0.013	< 0.014
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	3.2	< 0.036	< 0.030	< 0.030	< 0.032
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	3.2	< 0.036	< 0.030	< 0.030	< 0.032
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	2.7	0.026	< 0.013	0.017	< 0.014
Benzo[e]pyrene	mg/kg dry wt	1.07	< 0.015	< 0.013	0.029	< 0.014
Benzo[g,h,i]perylene	mg/kg dry wt	1.32	0.016	< 0.013	< 0.013	< 0.014
Benzo[k]fluoranthene	mg/kg dry wt	0.91	< 0.015	< 0.013	< 0.013	< 0.014
Chrysene	mg/kg dry wt	1.53	0.015	< 0.013	< 0.013	< 0.014
Dibenzo[a,h]anthracene	mg/kg dry wt	0.29	< 0.015	< 0.013	< 0.013	< 0.014
Fluoranthene	mg/kg dry wt	4.1	0.044	< 0.013	< 0.013	< 0.014
Fluorene	mg/kg dry wt	0.29	< 0.015	< 0.013	< 0.013	< 0.014
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	1.51	0.016	< 0.013	< 0.013	< 0.014
Naphthalene	mg/kg dry wt	< 0.09	< 0.08	< 0.07	< 0.07	< 0.07
Perylene	mg/kg dry wt	0.60	< 0.015	< 0.013	0.018	< 0.014
Phenanthrene	mg/kg dry wt	2.0	0.021	< 0.013	0.045	< 0.014
Pyrene	mg/kg dry wt	4.1	0.044	< 0.013	0.018	< 0.014
Sample Name:		FTL47C	FTL48C	FTL49C	FTL50C	FTL51C
Lab Number:		3594800.73	3594800.74	3594800.75	3594800.76	3594800.77
Individual Tests						
Dry Matter	g/100g as rcvd	64	35	59	79	73
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	< 0.7	< 0.4	13.3	63
1-Methylnaphthalene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.069	0.095
2-Methylnaphthalene	mg/kg dry wt	< 0.03	< 0.03	< 0.017	0.078	0.06
Acenaphthylene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.036	0.154
Acenaphthene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.29	0.88
Anthracene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.58	2.4
Benzo[a]anthracene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.89	5.0
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.83	4.6
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.038	< 0.067	< 0.040	1.25	6.9
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.038	< 0.067	< 0.040	1.22	6.8
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.96	5.5
Benzo[e]pyrene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.45	2.7
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.46	2.6
Benzo[k]fluoranthene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.39	2.1
Chrysene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.67	4.0

Sample Type: Soil						
Sample Name:		FTL47C	FTL48C	FTL49C	FTL50C	FTL51C
Lab Number:		3594800.73	3594800.74	3594800.75	3594800.76	3594800.77
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.113	0.67
Fluoranthene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	2.4	10.8
Fluorene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.39	0.78
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.51	3.0
Naphthalene	mg/kg dry wt	< 0.08	< 0.14	< 0.09	0.09	< 0.07
Perylene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	0.178	1.11
Phenanthrene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	2.0	7.3
Pyrene	mg/kg dry wt	< 0.016	< 0.03	< 0.017	1.99	9.7
Sample Name:		FTL52C	FTL53C	FTL54C	FTL55C	FTL56C
Lab Number:		3594800.78	3594800.79	3594800.80	3594800.81	3594800.82
Individual Tests						
Dry Matter	g/100g as rcvd	68	67	68	64	53
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	< 0.4	< 0.4	< 0.4	< 0.5
1-Methylnaphthalene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
2-Methylnaphthalene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.03
Acenaphthylene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Acenaphthene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Anthracene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Benzo[a]anthracene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.036	< 0.035	< 0.036	< 0.037	< 0.045
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.036	< 0.035	< 0.035	< 0.037	< 0.045
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Benzo[e]pyrene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Benzo[k]fluoranthene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Chrysene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Fluoranthene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Fluorene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Naphthalene	mg/kg dry wt	< 0.08	< 0.08	< 0.08	< 0.08	< 0.10
Perylene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Phenanthrene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Pyrene	mg/kg dry wt	< 0.015	< 0.015	< 0.015	< 0.016	< 0.019
Sample Name:		FTL57C	FTL58C	FTL60C	FTL61C	FTL62C
Lab Number:		3594800.83	3594800.84	3594800.85	3594800.86	3594800.87
Individual Tests						
Dry Matter	g/100g as rcvd	64	92	89	64	45
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	39	< 0.3	< 0.4	< 0.6
1-Methylnaphthalene	mg/kg dry wt	< 0.016	0.109	< 0.011	< 0.015	< 0.03
2-Methylnaphthalene	mg/kg dry wt	< 0.03	0.092	< 0.017	< 0.015	< 0.03
Acenaphthylene	mg/kg dry wt	< 0.016	0.062	< 0.011	< 0.015	< 0.03
Acenaphthene	mg/kg dry wt	< 0.016	0.51	< 0.011	< 0.015	< 0.03
Anthracene	mg/kg dry wt	< 0.016	1.28	< 0.011	< 0.015	< 0.03
Benzo[a]anthracene	mg/kg dry wt	< 0.016	2.9	< 0.011	< 0.015	< 0.03
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.016	2.9	< 0.011	< 0.015	< 0.03
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.038	4.4	< 0.027	< 0.037	< 0.054
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.038	4.3	< 0.027	< 0.036	< 0.054

Sample Type: Soil						
Sample Name:		FTL57C	FTL58C	FTL60C	FTL61C	FTL62C
Lab Number:		3594800.83	3594800.84	3594800.85	3594800.86	3594800.87
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.016	3.5	< 0.011	0.020	< 0.03
Benzo[e]pyrene	mg/kg dry wt	< 0.016	1.57	< 0.011	< 0.015	< 0.03
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.016	1.66	< 0.011	< 0.015	< 0.03
Benzo[k]fluoranthene	mg/kg dry wt	< 0.016	1.32	< 0.011	< 0.015	< 0.03
Chrysene	mg/kg dry wt	< 0.016	2.3	< 0.011	< 0.015	< 0.03
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.016	0.41	< 0.011	< 0.015	< 0.03
Fluoranthene	mg/kg dry wt	< 0.016	6.9	< 0.011	0.019	< 0.03
Fluorene	mg/kg dry wt	< 0.016	0.49	< 0.011	< 0.015	< 0.03
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.016	1.95	< 0.011	< 0.015	< 0.03
Naphthalene	mg/kg dry wt	< 0.08	0.11	< 0.06	< 0.08	< 0.12
Perylene	mg/kg dry wt	< 0.016	0.69	< 0.011	< 0.015	< 0.03
Phenanthrene	mg/kg dry wt	< 0.016	4.4	< 0.011	< 0.015	< 0.03
Pyrene	mg/kg dry wt	< 0.016	5.6	< 0.011	0.018	< 0.03
Sample Name:		FTL61D	FTL61E	FTL61F		
Lab Number:		3594800.88	3594800.89	3594800.90		
Individual Tests						
Dry Matter	g/100g as rcvd	83		65	65	
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	14.7		< 0.4	< 0.4	
1-Methylnaphthalene	mg/kg dry wt	< 0.012		< 0.016	< 0.015	
2-Methylnaphthalene	mg/kg dry wt	< 0.018		< 0.03	< 0.03	
Acenaphthylene	mg/kg dry wt	0.043		< 0.016	< 0.015	
Acenaphthene	mg/kg dry wt	0.071		< 0.016	< 0.015	
Anthracene	mg/kg dry wt	0.30		< 0.016	< 0.015	
Benzo[a]anthracene	mg/kg dry wt	1.09		0.022	< 0.015	
Benzo[a]pyrene (BAP)	mg/kg dry wt	1.08		0.022	0.018	
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	1.65		< 0.037	< 0.036	
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	1.62		< 0.037	< 0.036	
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	1.40		0.025	0.022	
Benzo[e]pyrene	mg/kg dry wt	0.65		< 0.016	< 0.015	
Benzo[g,h,i]perylene	mg/kg dry wt	0.72		< 0.016	< 0.015	
Benzo[k]fluoranthene	mg/kg dry wt	0.51		< 0.016	< 0.015	
Chrysene	mg/kg dry wt	0.98		0.016	< 0.015	
Dibenzo[a,h]anthracene	mg/kg dry wt	0.156		< 0.016	< 0.015	
Fluoranthene	mg/kg dry wt	2.7		0.050	0.027	
Fluorene	mg/kg dry wt	0.057		< 0.016	< 0.015	
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.80		< 0.016	< 0.015	
Naphthalene	mg/kg dry wt	< 0.06		< 0.08	< 0.08	
Perylene	mg/kg dry wt	0.27		< 0.016	< 0.015	
Phenanthrene	mg/kg dry wt	1.42		0.017	< 0.015	
Pyrene	mg/kg dry wt	2.4		0.047	0.028	
Sample Type: Rock or Mineral						
Sample Name:		FTL48A	FTL49A	FTL53A	FTL56A	
Lab Number:		3594800.16	3594800.17	3594800.21	3594800.24	
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene	mg/kg as rcvd	< 0.010	< 0.010	< 0.010	0.012	
2-Methylnaphthalene	mg/kg as rcvd	< 0.010	< 0.010	< 0.010	< 0.010	
Acenaphthylene	mg/kg as rcvd	< 0.010	< 0.010	< 0.010	< 0.010	
Acenaphthene	mg/kg as rcvd	< 0.010	< 0.010	< 0.010	< 0.010	
Anthracene	mg/kg as rcvd	< 0.010	0.022	0.032	< 0.010	
Benzo[a]anthracene	mg/kg as rcvd	< 0.010	0.027	0.187	< 0.010	
Benzo[a]pyrene (BAP)	mg/kg as rcvd	< 0.010	0.076	0.22	0.013	

Sample Type: Rock or Mineral					
Sample Name:		FTL48A	FTL49A	FTL53A	FTL56A
Lab Number:		3594800.16	3594800.17	3594800.21	3594800.24
Polycyclic Aromatic Hydrocarbons Screening in Rock*					
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.025	0.122	0.33	< 0.025
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.03	0.12	0.32	< 0.03
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg as rcvd	< 0.010	0.118	0.28	0.023
Benzo[e]pyrene	mg/kg as rcvd	< 0.010	0.141	0.139	0.067
Benzo[g,h,i]perylene	mg/kg as rcvd	< 0.010	0.085	0.161	0.069
Benzo[k]fluoranthene	mg/kg as rcvd	< 0.010	0.033	0.107	< 0.010
Chrysene	mg/kg as rcvd	< 0.010	0.027	0.163	< 0.010
Dibenzo[a,h]anthracene	mg/kg as rcvd	< 0.010	0.021	0.029	< 0.010
Fluoranthene	mg/kg as rcvd	< 0.010	0.024	0.42	< 0.010
Fluorene	mg/kg as rcvd	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)pyrene	mg/kg as rcvd	< 0.010	0.070	0.162	0.020
Naphthalene	mg/kg as rcvd	< 0.05	< 0.05	< 0.05	< 0.05
Perylene	mg/kg as rcvd	< 0.010	0.038	0.054	< 0.010
Phenanthrene	mg/kg as rcvd	< 0.010	< 0.010	0.131	< 0.010
Pyrene	mg/kg as rcvd	< 0.010	0.049	0.37	< 0.010
Total of Reported PAHs	mg/kg as rcvd	< 0.3	0.7	2.5	< 0.3
Sample Type: Roading Material					
Sample Name:		FTL32A	FTL33A	FTL34A	FTL35A
Lab Number:		3594800.1	3594800.2	3594800.3	3594800.4
Polycyclic Aromatic Hydrocarbons Screening in Rock*					
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	1.09
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.37
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	4.9
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	28
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	33
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.25	< 0.24	< 0.24	49
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	49
Benzo[b]fluoranthene + Benzo[j]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	42
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	18.7
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	22
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	14.9
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	26
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	4.7
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	64
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.14
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	24
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	9.3
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	15.4
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	61
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	370
Sample Name:		FTL37A	FTL38A	FTL40A	FTL41A
Lab Number:		3594800.6	3594800.7	3594800.9	3594800.10
Polycyclic Aromatic Hydrocarbons Screening in Rock*					
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	10.3	< 0.10	0.18
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	11.9	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	1.56	< 0.10	2.9
Acenaphthene*	mg/kg as rcvd	< 0.10	32	< 0.10	8.2

Sample Type: Roading Material						
Sample Name:		FTL37A	FTL38A	FTL40A	FTL41A	FTL42A
Lab Number:		3594800.6	3594800.7	3594800.9	3594800.10	3594800.11
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Anthracene*	mg/kg as rcvd	< 0.10	57	< 0.10	13.2	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	0.11	57	< 0.10	72	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	0.10	43	< 0.10	91	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	65	< 0.24	135	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	64	< 0.3	133	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	0.15	50	< 0.10	111	0.10
Benzo[e]pyrene*	mg/kg as rcvd	0.14	23	< 0.10	47	0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.11	19.9	< 0.10	54	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	20	< 0.10	38	< 0.10
Chrysene*	mg/kg as rcvd	0.10	45	< 0.10	66	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	5.3	< 0.10	12.4	< 0.10
Fluoranthene*	mg/kg as rcvd	0.12	168	< 0.10	171	0.10
Fluorene*	mg/kg as rcvd	< 0.10	30	< 0.10	2.7	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	0.14	23	< 0.10	64	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	11.9	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	9.6	< 0.10	27	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	200	< 0.10	35	< 0.10
Pyrene*	mg/kg as rcvd	0.16	121	< 0.10	167	0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	940	< 3	980	< 3
Sample Name:		FTL44A	FTL45A	FTL46A	FTL47A	FTL50A
Lab Number:		3594800.12	3594800.13	3594800.14	3594800.15	3594800.18
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	0.11	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.25	< 0.24	< 0.25	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	0.12	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	0.12	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	0.12	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	0.11	< 0.10	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	< 3	< 3
Sample Name:		FTL51A	FTL52A	FTL54A	FTL55A	FTL57A
Lab Number:		3594800.19	3594800.20	3594800.22	3594800.23	3594800.25
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	4.5	< 0.10	2.2	< 0.10	0.42
2-Methylnaphthalene*	mg/kg as rcvd	1.86	< 0.15	0.86	< 0.15	0.17

Sample Type: Roading Material						
Sample Name:		FTL51A	FTL52A	FTL54A	FTL55A	FTL57A
Lab Number:		3594800.19	3594800.20	3594800.22	3594800.23	3594800.25
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Acenaphthylene*	mg/kg as rcvd	3.8	< 0.10	0.60	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	58	< 0.10	18.9	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	89	< 0.10	43	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	136	< 0.10	50	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	106	< 0.10	39	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	162	< 0.25	61	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	158	< 0.3	59	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	128	< 0.10	50	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	57	< 0.10	23	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	50	< 0.10	22	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	46	< 0.10	17.8	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	113	< 0.10	43	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	14.6	< 0.10	5.0	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	370	< 0.10	178	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	36	< 0.10	12.0	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	58	< 0.10	25	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	0.8	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	24	< 0.10	10.5	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	250	< 0.10	170	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	300	< 0.10	129	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	1,850	< 3	840	< 3	< 3
Sample Name:		FTL58A	FTL60A	FTL61A	FTL62A	FTL37B
Lab Number:		3594800.26	3594800.27	3594800.28	3594800.29	3594800.36
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	5.4
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	3.5
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	2.2
Acenaphthene*	mg/kg as rcvd	0.22	< 0.10	< 0.10	< 0.10	37
Anthracene*	mg/kg as rcvd	0.21	< 0.10	< 0.10	< 0.10	90
Benzo[a]anthracene*	mg/kg as rcvd	0.14	< 0.10	< 0.10	< 0.10	175
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	0.12	< 0.10	< 0.10	< 0.10	196
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	0.25	< 0.24	< 0.24	< 0.24	280
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	0.2	< 0.3	< 0.3	< 0.3	280
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	0.13	< 0.10	< 0.10	< 0.10	199
Benzo[e]pyrene*	mg/kg as rcvd	0.16	< 0.10	< 0.10	< 0.10	107
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.17	< 0.10	< 0.10	< 0.10	115
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	73
Chrysene*	mg/kg as rcvd	0.12	< 0.10	< 0.10	< 0.10	159
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	26
Fluoranthene*	mg/kg as rcvd	0.38	< 0.10	< 0.10	< 0.10	400
Fluorene*	mg/kg as rcvd	0.14	< 0.10	< 0.10	< 0.10	28
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	0.13	< 0.10	< 0.10	< 0.10	116
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	3.0
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	48
Phenanthrene*	mg/kg as rcvd	0.68	< 0.10	< 0.10	< 0.10	320
Pyrene*	mg/kg as rcvd	0.39	< 0.10	< 0.10	< 0.10	420
Total of Reported PAHs*	mg/kg as rcvd	3	< 3	< 3	< 3	2,500

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	31-35, 37-58, 60-90
Polycyclic Aromatic Hydrocarbons Screening in Soil*	Sonication extraction, GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8270.	0.010 - 0.05 mg/kg dry wt	31-35, 37-58, 60-90
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	31-35, 37-58, 60-90
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	BaP Potency Equivalence calculated from; Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a)pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	31-35, 37-58, 60-90
Benzo[a]pyrene Toxic Equivalence (TEF)*	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	31-35, 37-58, 60-90
Sample Type: Roadway Material			
Test	Method Description	Default Detection Limit	Sample No
Polycyclic Aromatic Hydrocarbons Screening in Rock*	Sonication extraction, GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8270.	0.002 - 0.3 mg/kg as rcvd	1-7, 9-29, 36

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 31-May-2024 and 05-Jun-2024. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

Ara Heron BSc (Tech)
Client Services Manager - Environmental

Certificate of Analysis

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Client:	Fraser Thomas Limited	Lab No:	3631528	SPV3
Contact:	Elliot Bish	Date Received:	19-Jul-2024	
	C/- Fraser Thomas Limited	Date Reported:	12-Aug-2024	(Amended)
	PO Box 204006	Quote No:	130949	
	Highbrook	Order No:	001146	
	Auckland 2161	Client Reference:	33205	
		Submitted By:	Elliot Bish	

Sample Type: Soil

Sample Name:	FTL64 0.05-0.35m 15-Jul-2024	FTL65 0.03-0.2m 15-Jul-2024	FTL66 0.05-0.35m 15-Jul-2024	FTL67 0.03-0.25m 15-Jul-2024	FTL68 0.03-0.25m 15-Jul-2024
Lab Number:	3631528.2	3631528.4	3631528.6	3631528.8	3631528.10

Individual Tests

Dry Matter	g/100g as rcvd	88	86	92	93	91
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	1.4	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.012	0.038	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.012	0.112	0.016	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.012	0.108	0.025	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.028	0.167	0.033	< 0.025	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.028	0.164	0.033	< 0.025	< 0.026
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.012	0.133	0.030	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.012	0.067	0.016	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.012	0.071	0.020	< 0.011	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.012	0.051	0.012	< 0.011	< 0.011
Chrysene	mg/kg dry wt	< 0.012	0.093	0.013	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.012	0.018	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.012	0.26	0.014	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.012	< 0.012	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.012	0.071	0.020	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.012	0.026	< 0.011	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	< 0.012	0.142	< 0.011	< 0.011	< 0.011
Pyrene	mg/kg dry wt	< 0.012	0.25	0.021	< 0.011	< 0.011

Sample Name:	FTL69 0.05-0.25m 15-Jul-2024	FTL70 0.02-0.12m 15-Jul-2024	FTL72 0.03-0.2m 15-Jul-2024	FTL73 0.06-0.18 15-Jul-2024	FTL74 0.05-0.2m 15-Jul-2024
Lab Number:	3631528.12	3631528.14	3631528.18	3631528.20	3631528.22

Individual Tests

Dry Matter	g/100g as rcvd	83	90	89	92	90
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Sample Type: Soil						
Sample Name:		FTL69 0.05-0.25m 15-Jul-2024	FTL70 0.02-0.12m 15-Jul-2024	FTL72 0.03-0.2m 15-Jul-2024	FTL73 0.06-0.18 15-Jul-2024	FTL74 0.05-0.2m 15-Jul-2024
Lab Number:		3631528.12	3631528.14	3631528.18	3631528.20	3631528.22
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	2.2	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.012	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.012	0.060	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.012	0.138	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.032	0.192	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.040	0.28	< 0.027	< 0.026	< 0.027
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.040	0.28	< 0.027	< 0.026	< 0.026
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.027	0.21	< 0.011	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	0.022	0.113	< 0.011	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.030	0.142	< 0.011	< 0.011	0.018
Benzo[k]fluoranthene	mg/kg dry wt	< 0.012	0.087	< 0.011	< 0.011	< 0.011
Chrysene	mg/kg dry wt	< 0.012	0.131	< 0.011	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.012	0.028	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.012	0.35	< 0.011	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.012	0.014	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.034	0.144	< 0.011	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.012	0.049	< 0.011	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	< 0.012	0.186	< 0.011	< 0.011	< 0.011
Pyrene	mg/kg dry wt	0.021	0.32	< 0.011	< 0.011	< 0.011
Sample Name:		FTL75 0.06-0.2m 15-Jul-2024	FTL76 0.04-0.2m 15-Jul-2024	FTL77 0.03-0.15m 15-Jul-2024	FTL78 0.03-0.25m 15-Jul-2024	FTL79 0.03-0.31m 15-Jul-2024
Lab Number:		3631528.24	3631528.26	3631528.28	3631528.30	3631528.32
Individual Tests						
Dry Matter	g/100g as rcvd	90	83	79	93	94
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	< 0.029	< 0.030	< 0.026	< 0.025
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	< 0.029	< 0.030	< 0.026	< 0.025
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.011	< 0.012	< 0.013	< 0.011	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Chrysene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.07	< 0.06	< 0.06

Sample Type: Soil						
Sample Name:		FTL75 0.06-0.2m 15-Jul-2024	FTL76 0.04-0.2m 15-Jul-2024	FTL77 0.03-0.15m 15-Jul-2024	FTL78 0.03-0.25m 15-Jul-2024	FTL79 0.03-0.31m 15-Jul-2024
Lab Number:		3631528.24	3631528.26	3631528.28	3631528.30	3631528.32
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.013	< 0.011	< 0.011
Sample Name:		FTL80 0.05-0.3m 15-Jul-2024	FTL80 0.3-0.4m 15-Jul-2024	FTL81 0.02-0.2m 15-Jul-2024	FTL82 0.03-0.07m 15-Jul-2024	FTL82 0.09-0.11m 15-Jul-2024
Lab Number:		3631528.34	3631528.35	3631528.37	3631528.39	3631528.41
Individual Tests						
Dry Matter	g/100g as rcvd	93	93	94	93	94
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	1.3	9.4	2.9	47	4.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.014	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.014	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	0.019	< 0.011	0.111	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	0.099	< 0.011	0.134	0.026
Anthracene	mg/kg dry wt	0.034	0.28	0.030	0.90	0.117
Benzo[a]anthracene	mg/kg dry wt	0.097	0.67	0.22	3.5	0.32
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.106	0.76	0.28	4.5	0.33
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.159	1.13	0.45	6.7	0.49
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.157	1.12	0.45	6.7	0.48
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.131	0.86	0.40	5.4	0.39
Benzo[e]pyrene	mg/kg dry wt	0.065	0.42	0.195	2.6	0.191
Benzo[g,h,i]perylene	mg/kg dry wt	0.066	0.42	0.24	3.0	0.186
Benzo[k]fluoranthene	mg/kg dry wt	0.049	0.36	0.144	2.1	0.142
Chrysene	mg/kg dry wt	0.081	0.57	0.171	3.0	0.27
Dibenzo[a,h]anthracene	mg/kg dry wt	0.015	0.108	0.060	0.75	0.046
Fluoranthene	mg/kg dry wt	0.23	1.48	0.33	6.6	0.79
Fluorene	mg/kg dry wt	0.013	0.111	< 0.011	0.165	0.031
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.073	0.48	0.26	3.2	0.22
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.025	0.183	0.074	1.10	0.087
Phenanthrene	mg/kg dry wt	0.116	0.86	0.086	2.5	0.32
Pyrene	mg/kg dry wt	0.21	1.64	0.36	7.7	0.78
Sample Name:		FTL82 0.11-0.13m 15-Jul-2024	FTL82 0.13-0.26m 15-Jul-2024	FTL83 0.05-0.09m 15-Jul-2024	FTL83 0.13-0.23m 15-Jul-2024	FTL84 0.06-0.30m 15-Jul-2024
Lab Number:		3631528.42	3631528.43	3631528.45	3631528.47	3631528.50
Individual Tests						
Dry Matter	g/100g as rcvd	95	82	94	90	91
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	310	6.2	137	50	67
1-Methylnaphthalene	mg/kg dry wt	0.24	0.023	0.014	< 0.012	0.31
2-Methylnaphthalene	mg/kg dry wt	0.162	0.024	0.017	0.013	0.33
Acenaphthylene	mg/kg dry wt	0.75	< 0.012	0.47	0.162	0.149
Acenaphthene	mg/kg dry wt	3.0	0.082	0.37	0.125	1.61
Anthracene	mg/kg dry wt	8.8	0.22	1.36	0.42	3.2
Benzo[a]anthracene	mg/kg dry wt	21	0.44	9.1	2.9	4.0
Benzo[a]pyrene (BAP)	mg/kg dry wt	26	0.47	15.4	5.5	3.8
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	39	0.70	23	8.1	5.8
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	39	0.69	23	8.0	5.7

Sample Type: Soil						
Sample Name:		FTL82 0.11-0.13m 15-Jul-2024	FTL82 0.13-0.26m 15-Jul-2024	FTL83 0.05-0.09m 15-Jul-2024	FTL83 0.13-0.23m 15-Jul-2024	FTL84 0.06-0.30m 15-Jul-2024
Lab Number:		3631528.42	3631528.43	3631528.45	3631528.47	3631528.50
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	35	0.54	18.5	6.6	4.6
Benzo[e]pyrene	mg/kg dry wt	15.1	0.28	8.9	3.3	2.1
Benzo[g,h,i]perylene	mg/kg dry wt	17.3	0.30	11.4	3.9	2.2
Benzo[k]fluoranthene	mg/kg dry wt	11.0	0.21	6.4	2.2	1.88
Chrysene	mg/kg dry wt	17.7	0.36	7.8	2.5	3.5
Dibenzo[a,h]anthracene	mg/kg dry wt	4.3	0.064	2.7	0.93	0.56
Fluoranthene	mg/kg dry wt	49	1.06	14.7	4.9	11.4
Fluorene	mg/kg dry wt	2.6	0.092	0.30	0.100	1.81
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	18.0	0.31	12.0	4.3	2.5
Naphthalene	mg/kg dry wt	0.09	< 0.06	< 0.06	< 0.06	0.28
Perylene	mg/kg dry wt	7.1	0.115	3.9	1.31	0.95
Phenanthrene	mg/kg dry wt	24	0.70	2.9	0.93	10.8
Pyrene	mg/kg dry wt	47	0.87	21	9.5	11.1
Sample Name:		FTL85 0.05-0.18m 15-Jul-2024	FTL86 0.05-0.15m 15-Jul-2024	FTL87 0.04-0.2m 15-Jul-2024	FTL88 0.06-0.28m 15-Jul-2024	FTL89 0.05-0.26m 15-Jul-2024
Lab Number:		3631528.52	3631528.54	3631528.56	3631528.59	3631528.62
Individual Tests						
Dry Matter	g/100g as rcvd	92	91	95	93	94
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	7.3	11.2	< 0.3	11.3	1.0
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.027	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.024	< 0.011
Acenaphthylene	mg/kg dry wt	0.011	0.038	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	0.015	0.047	< 0.011	0.22	< 0.011
Anthracene	mg/kg dry wt	0.113	0.21	< 0.011	0.58	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.52	0.77	< 0.011	0.61	0.071
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.76	1.05	< 0.011	0.64	0.105
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	1.12	1.54	< 0.025	0.96	0.157
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	1.11	1.53	< 0.025	0.94	0.156
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.92	1.23	0.011	0.73	0.118
Benzo[e]pyrene	mg/kg dry wt	0.46	0.61	< 0.011	0.38	0.062
Benzo[g,h,i]perylene	mg/kg dry wt	0.47	0.64	0.016	0.40	0.085
Benzo[k]fluoranthene	mg/kg dry wt	0.31	0.47	< 0.011	0.27	0.047
Chrysene	mg/kg dry wt	0.46	0.66	< 0.011	0.53	0.060
Dibenzo[a,h]anthracene	mg/kg dry wt	0.128	0.164	< 0.011	0.087	0.019
Fluoranthene	mg/kg dry wt	0.95	1.54	< 0.011	2.0	0.107
Fluorene	mg/kg dry wt	0.020	0.044	< 0.011	0.22	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.50	0.67	< 0.011	0.42	0.085
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.189	0.26	< 0.011	0.167	0.028
Phenanthrene	mg/kg dry wt	0.28	0.63	< 0.011	1.98	0.015
Pyrene	mg/kg dry wt	1.19	2.1	0.014	1.92	0.145
Sample Name:		FTL90 0.05-0.2m 16-Jul-2024	FTL91 0.04-0.22m 16-Jul-2024	FTL91 0.27-0.4m 16-Jul-2024	FTL92 0.05-0.16m 16-Jul-2024	FTL92 0.29-0.4m 16-Jul-2024
Lab Number:		3631528.64	3631528.66	3631528.68	3631528.70	3631528.75
Individual Tests						
Dry Matter	g/100g as rcvd	94	95	96	97	86

Sample Type: Soil						
Sample Name:		FTL90 0.05-0.2m 16-Jul-2024	FTL91 0.04-0.22m 16-Jul-2024	FTL91 0.27-0.4m 16-Jul-2024	FTL92 0.05-0.16m 16-Jul-2024	FTL92 0.29-0.4m 16-Jul-2024
Lab Number:		3631528.64	3631528.66	3631528.68	3631528.70	3631528.75
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	7.2	4.1	39	7.6	63
1-Methylnaphthalene	mg/kg dry wt	0.016	< 0.011	< 0.011	< 0.010	0.121
2-Methylnaphthalene	mg/kg dry wt	0.013	< 0.014	< 0.013	< 0.010	0.107
Acenaphthylene	mg/kg dry wt	< 0.011	0.020	0.143	0.018	0.129
Acenaphthene	mg/kg dry wt	0.121	0.011	0.123	< 0.010	1.04
Anthracene	mg/kg dry wt	0.30	0.050	0.75	0.20	3.4
Benzo[a]anthracene	mg/kg dry wt	0.46	0.37	3.7	0.59	4.2
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.42	0.38	3.2	0.63	3.4
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.64	0.58	4.9	0.94	5.3
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.63	0.58	4.8	0.93	5.1
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.50	0.47	3.9	0.76	4.4
Benzo[e]pyrene	mg/kg dry wt	0.27	0.24	1.89	0.41	2.0
Benzo[g,h,i]perylene	mg/kg dry wt	0.26	0.23	1.84	0.41	2.0
Benzo[k]fluoranthene	mg/kg dry wt	0.21	0.190	1.53	0.27	1.63
Chrysene	mg/kg dry wt	0.40	0.29	2.8	0.47	3.4
Dibenzo[a,h]anthracene	mg/kg dry wt	0.061	0.062	0.53	0.091	0.48
Fluoranthene	mg/kg dry wt	1.26	0.67	6.9	1.28	11.8
Fluorene	mg/kg dry wt	0.131	< 0.011	0.079	0.014	1.18
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.27	0.25	2.1	0.44	2.2
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.05	< 0.06
Perylene	mg/kg dry wt	0.120	0.082	0.72	0.159	0.76
Phenanthrene	mg/kg dry wt	1.19	0.117	2.1	0.56	11.7
Pyrene	mg/kg dry wt	1.18	0.65	6.6	1.29	9.1

Sample Name:		FTL93 0.03-0.08m 16-Jul-2024	FTL93 0.08-0.17m 16-Jul-2024	FTL93 0.2-0.24m 16-Jul-2024	FTL93 0.24-0.37m 16-Jul-2024	FTL94 0.06-0.15m 16-Jul-2024
Lab Number:		3631528.77	3631528.78	3631528.80	3631528.81	3631528.83
Individual Tests						
Dry Matter	g/100g as rcvd	97	96	96	86	94
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.3	29	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	0.020	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.013	< 0.013	< 0.010	0.025	< 0.013
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	0.096	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	0.159	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	1.20	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.011	0.014	2.5	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.012	0.015	0.024	2.0	0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.025	< 0.026	0.036	3.1	< 0.025
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.025	< 0.025	0.035	3.0	< 0.025
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.014	0.017	0.027	2.4	0.014
Benzo[e]pyrene	mg/kg dry wt	< 0.011	0.013	0.020	1.14	0.013
Benzo[g,h,i]perylene	mg/kg dry wt	0.011	0.014	0.023	1.09	0.036
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	0.99	< 0.011
Chrysene	mg/kg dry wt	< 0.011	< 0.011	0.011	1.85	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	0.30	< 0.011
Fluoranthene	mg/kg dry wt	0.019	0.012	0.021	5.4	0.027
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	0.29	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.011	0.013	0.022	1.23	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.05	< 0.06	< 0.06

Sample Type: Soil						
Sample Name:		FTL93 0.03-0.08m 16-Jul-2024	FTL93 0.08-0.17m 16-Jul-2024	FTL93 0.2-0.24m 16-Jul-2024	FTL93 0.24-0.37m 16-Jul-2024	FTL94 0.06-0.15m 16-Jul-2024
Lab Number:		3631528.77	3631528.78	3631528.80	3631528.81	3631528.83
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.010	0.43	< 0.011
Phenanthrene	mg/kg dry wt	0.014	< 0.011	< 0.010	3.7	0.022
Pyrene	mg/kg dry wt	0.022	0.014	0.023	4.4	0.021
Sample Name:		FTL94 0.15-0.45m 16-Jul-2024	FTL95 0.04-0.25m 16-Jul-2024	FTL96 0.02-0.13m 16-Jul-2024	FTL97 0.03-0.25m 16-Jul-2024	FTL98 0.05-0.2m 16-Jul-2024
Lab Number:		3631528.84	3631528.86	3631528.88	3631528.90	3631528.92
Individual Tests						
Dry Matter	g/100g as rcvd	93	91	96	89	89
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	1.5	< 0.3	390
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	1.98
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.012	2.6
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	1.18
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	8.3
Anthracene	mg/kg dry wt	< 0.011	< 0.011	0.012	< 0.012	16.4
Benzo[a]anthracene	mg/kg dry wt	< 0.011	0.014	0.078	< 0.012	32
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	0.016	0.190	< 0.012	25
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	< 0.026	0.29	< 0.027	38
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	< 0.026	0.29	< 0.027	38
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	0.016	0.23	< 0.012	30
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.011	0.134	< 0.012	13.6
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	< 0.011	0.192	< 0.012	13.5
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	0.085	< 0.012	12.7
Chrysene	mg/kg dry wt	< 0.011	< 0.011	0.074	< 0.012	25
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	0.040	< 0.012	3.8
Fluoranthene	mg/kg dry wt	< 0.011	0.027	0.082	< 0.012	70
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	8.2
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.011	0.179	< 0.012	15.0
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	3.5
Perylene	mg/kg dry wt	< 0.011	< 0.011	0.069	< 0.012	6.0
Phenanthrene	mg/kg dry wt	< 0.011	0.013	< 0.011	< 0.012	46
Pyrene	mg/kg dry wt	< 0.011	0.024	0.127	< 0.012	60
Sample Name:		FTL99 0.03-0.23m 16-Jul-2024	FTL99 0.23-0.27m 16-Jul-2024	FTL99 0.27-0.35m 16-Jul-2024	FTL100 0.04-0.2m 16-Jul-2024	FTL101 0.03-0.2m 16-Jul-2024
Lab Number:		3631528.94	3631528.95	3631528.96	3631528.98	3631528.100
Individual Tests						
Dry Matter	g/100g as rcvd	96	88	95	93	95
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	68	30	0.4	0.7
1-Methylnaphthalene	mg/kg dry wt	< 0.011	0.014	0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.013	0.012	< 0.014	< 0.013	< 0.013
Acenaphthylene	mg/kg dry wt	< 0.011	0.31	0.131	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	0.180	0.098	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	0.89	0.42	0.023	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	6.3	2.8	0.025	0.061
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	6.5	2.8	0.020	0.062
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.025	9.9	4.2	0.028	0.095
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.025	9.8	4.2	0.027	0.094

Sample Type: Soil						
Sample Name:		FTL99 0.03-0.23m 16-Jul-2024	FTL99 0.23-0.27m 16-Jul-2024	FTL99 0.27-0.35m 16-Jul-2024	FTL100 0.04-0.2m 16-Jul-2024	FTL101 0.03-0.2m 16-Jul-2024
Lab Number:		3631528.94	3631528.95	3631528.96	3631528.98	3631528.100
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.011	8.3	3.4	0.023	0.078
Benzo[e]pyrene	mg/kg dry wt	< 0.011	3.9	1.60	< 0.011	0.039
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	4.1	1.61	< 0.011	0.041
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	3.2	1.33	< 0.011	0.031
Chrysene	mg/kg dry wt	< 0.011	4.8	2.1	0.021	0.054
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	1.02	0.46	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.011	9.8	4.7	0.076	0.114
Fluorene	mg/kg dry wt	< 0.011	0.127	0.061	0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	4.4	1.72	< 0.011	0.043
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	1.53	0.60	< 0.011	0.016
Phenanthrene	mg/kg dry wt	< 0.011	2.4	1.18	0.075	0.017
Pyrene	mg/kg dry wt	< 0.011	10.4	4.6	0.054	0.091
Sample Name:		FTL102 0.03-0.11m 16-Jul-2024	FTL102 0.11-0.3m 16-Jul-2024	FTL103 0.03-0.15m 16-Jul-2024	FTL103 0.15-0.3m 16-Jul-2024	FTL104 0.03-0.09m 16-Jul-2024
Lab Number:		3631528.102	3631528.103	3631528.105	3631528.106	3631528.108
Individual Tests						
Dry Matter	g/100g as rcvd	95	96	95	94	95
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	0.7	0.3	< 0.3	3.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.013	< 0.010	< 0.013	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.010	< 0.011	< 0.011	0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.010	< 0.011	< 0.011	0.037
Benzo[a]anthracene	mg/kg dry wt	< 0.011	0.068	0.019	< 0.011	0.163
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	0.072	0.026	< 0.011	0.42
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.025	0.109	0.040	< 0.025	0.63
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.025	0.108	0.040	< 0.025	0.63
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.011	0.099	0.036	< 0.011	0.47
Benzo[e]pyrene	mg/kg dry wt	< 0.011	0.046	0.019	< 0.011	0.27
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	0.046	0.021	< 0.011	0.45
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	0.039	0.016	< 0.011	0.163
Chrysene	mg/kg dry wt	< 0.011	0.059	0.022	< 0.011	0.166
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	0.010	< 0.011	< 0.011	0.081
Fluoranthene	mg/kg dry wt	< 0.011	0.096	0.035	< 0.011	0.20
Fluorene	mg/kg dry wt	< 0.011	< 0.010	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	0.049	0.019	< 0.011	0.41
Naphthalene	mg/kg dry wt	< 0.06	< 0.05	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	0.018	< 0.011	< 0.011	0.158
Phenanthrene	mg/kg dry wt	< 0.011	0.011	0.015	< 0.011	0.052
Pyrene	mg/kg dry wt	< 0.011	0.092	0.030	< 0.011	0.26
Sample Name:		FTL104 0.09-0.14m 16-Jul-2024	FTL104 0.14-0.3m 16-Jul-2024	FTL105 0.04-0.1m 16-Jul-2024	FTL105 0.1-0.4m 16-Jul-2024	FTL105 0.4-0.7m 16-Jul-2024
Lab Number:		3631528.109	3631528.110	3631528.112	3631528.113	3631528.114
Individual Tests						
Dry Matter	g/100g as rcvd	95	70	93	90	73

Sample Type: Soil						
Sample Name:		FTL104 0.09-0.14m 16-Jul-2024	FTL104 0.14-0.3m 16-Jul-2024	FTL105 0.04-0.1m 16-Jul-2024	FTL105 0.1-0.4m 16-Jul-2024	FTL105 0.4-0.7m 16-Jul-2024
Lab Number:		3631528.109	3631528.110	3631528.112	3631528.113	3631528.114
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.4	< 0.3	< 0.3	< 0.4
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.014
2-Methylnaphthalene	mg/kg dry wt	< 0.013	< 0.014	< 0.014	< 0.011	< 0.017
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.014
Acenaphthene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.014
Anthracene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.014
Benzo[a]anthracene	mg/kg dry wt	0.018	< 0.014	< 0.011	< 0.011	0.019
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.031	< 0.014	< 0.011	< 0.011	0.023
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.045	< 0.034	< 0.026	< 0.026	< 0.033
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.045	< 0.033	< 0.026	< 0.026	< 0.033
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.036	< 0.014	< 0.011	< 0.011	0.029
Benzo[e]pyrene	mg/kg dry wt	0.018	< 0.014	< 0.011	< 0.011	0.015
Benzo[g,h,i]perylene	mg/kg dry wt	0.022	< 0.014	< 0.011	< 0.011	0.016
Benzo[k]fluoranthene	mg/kg dry wt	0.014	< 0.014	< 0.011	< 0.011	< 0.014
Chrysene	mg/kg dry wt	0.019	< 0.014	< 0.011	< 0.011	0.019
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.014
Fluoranthene	mg/kg dry wt	0.019	< 0.014	< 0.011	< 0.011	0.055
Fluorene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.014
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.023	< 0.014	< 0.011	< 0.011	0.018
Naphthalene	mg/kg dry wt	< 0.06	< 0.07	< 0.06	< 0.06	< 0.07
Perylene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.014
Phenanthrene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	0.041
Pyrene	mg/kg dry wt	0.018	< 0.014	< 0.011	< 0.011	0.045

Sample Name:		FTL106 0.03-0.1m 16-Jul-2024	FTL106 0.1-0.18m 16-Jul-2024	FTL108 0.03-0.1m 16-Jul-2024	FTL108 0.1-0.3m 16-Jul-2024	FTL109 0.03-0.15m 16-Jul-2024
Lab Number:		3631528.116	3631528.117	3631528.119	3631528.120	3631528.122
Individual Tests						
Dry Matter	g/100g as rcvd	94	85	94	91	95
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.015	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.025	< 0.028	< 0.025	< 0.027	< 0.025
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.025	< 0.028	< 0.025	< 0.027	< 0.025
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Chrysene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06

Sample Type: Soil						
Sample Name:		FTL106 0.03-0.1m 16-Jul-2024	FTL106 0.1-0.18m 16-Jul-2024	FTL108 0.03-0.1m 16-Jul-2024	FTL108 0.1-0.3m 16-Jul-2024	FTL109 0.03-0.15m 16-Jul-2024
Lab Number:		3631528.116	3631528.117	3631528.119	3631528.120	3631528.122
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Pyrene	mg/kg dry wt	< 0.011	< 0.012	< 0.011	< 0.011	< 0.011
Sample Name:		FTL109 0.15-0.65m 16-Jul-2024	FTL110 0.03-0.15m 16-Jul-2024	FTL110 0.15-0.45m 16-Jul-2024	FTL111 0.05-0.2m 16-Jul-2024	FTL112 0.03-0.2m 16-Jul-2024
Lab Number:		3631528.123	3631528.125	3631528.126	3631528.128	3631528.130
Individual Tests						
Dry Matter	g/100g as rcvd	91	92	93	92	92
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	1.0	0.4	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	0.024	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.011	0.049	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	0.017	0.065	0.025	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	0.022	0.060	0.047	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.027	0.030	0.090	0.068	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.027	0.029	0.088	0.067	< 0.026
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	0.024	0.066	0.057	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.011	0.013	0.028	0.029	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	0.018	0.032	0.033	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	0.029	0.022	< 0.011
Chrysene	mg/kg dry wt	< 0.011	0.016	0.057	0.024	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.011	0.033	0.187	0.029	< 0.011
Fluorene	mg/kg dry wt	< 0.011	< 0.011	0.023	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	0.016	0.037	0.035	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	< 0.011	0.016	0.013	< 0.011
Phenanthrene	mg/kg dry wt	< 0.011	0.014	0.163	< 0.011	< 0.011
Pyrene	mg/kg dry wt	< 0.011	0.031	0.151	0.037	< 0.011
Sample Name:		FTL113 0.05-0.2m 16-Jul-2024	FTL113 0.2-0.45m 16-Jul-2024	FTL114 0.06-0.3m 16-Jul-2024	FTL115 0.05-0.11m 16-Jul-2024	FTL115 0.11-0.23m 16-Jul-2024
Lab Number:		3631528.132	3631528.133	3631528.136	3631528.138	3631528.139
Individual Tests						
Dry Matter	g/100g as rcvd	90	95	74	94	93
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.3	< 0.3	< 0.4	3.9	47
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.047	0.27
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.056	0.27
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.014	0.144
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.150	1.22
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.22	2.4
Benzo[a]anthracene	mg/kg dry wt	0.031	< 0.011	< 0.014	0.23	3.3
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.039	< 0.011	< 0.014	0.190	2.5
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.057	< 0.026	< 0.033	0.29	3.9
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.057	< 0.026	< 0.033	0.28	3.8

Sample Type: Soil						
Sample Name:		FTL113 0.05-0.2m 16-Jul-2024	FTL113 0.2-0.45m 16-Jul-2024	FTL114 0.06-0.3m 16-Jul-2024	FTL115 0.05-0.11m 16-Jul-2024	FTL115 0.11-0.23m 16-Jul-2024
Lab Number:		3631528.132	3631528.133	3631528.136	3631528.138	3631528.139
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.048	< 0.011	< 0.014	0.22	3.1
Benzo[e]pyrene	mg/kg dry wt	0.023	< 0.011	< 0.014	0.103	1.41
Benzo[g,h,i]perylene	mg/kg dry wt	0.024	< 0.011	< 0.014	0.092	1.35
Benzo[k]fluoranthene	mg/kg dry wt	0.020	< 0.011	< 0.014	0.096	1.21
Chrysene	mg/kg dry wt	0.025	< 0.011	< 0.014	0.177	2.5
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.024	0.39
Fluoranthene	mg/kg dry wt	0.032	< 0.011	< 0.014	0.64	8.2
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.158	1.27
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.025	< 0.011	< 0.014	0.100	1.55
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.07	< 0.06	0.15
Perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.042	0.61
Phenanthrene	mg/kg dry wt	< 0.011	< 0.011	< 0.014	0.77	8.5
Pyrene	mg/kg dry wt	0.034	< 0.011	< 0.014	0.53	6.8
Sample Name:		FTL116 0.03-0.11m 16-Jul-2024	FTL116 0.11-0.23m 16-Jul-2024	FTL117 0.03-0.12m 16-Jul-2024	FTL117 0.12-0.3m 16-Jul-2024	FTL118 0.02-0.08m 16-Jul-2024
Lab Number:		3631528.141	3631528.142	3631528.144	3631528.145	3631528.147
Individual Tests						
Dry Matter	g/100g as rcvd	93	89	96	96	96
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	2.3	0.5	47
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.013
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.020
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	0.011	< 0.011	0.129
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	0.011	< 0.011	0.43
Anthracene	mg/kg dry wt	< 0.011	< 0.011	0.027	< 0.011	0.74
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.011	0.140	0.034	3.2
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.011	0.25	0.046	4.5
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	< 0.027	0.37	0.070	6.7
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	< 0.027	0.37	0.069	6.6
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	0.28	0.063	5.4
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.011	0.155	0.032	2.4
Benzo[g,h,i]perylene	mg/kg dry wt	0.015	< 0.011	0.184	0.029	2.7
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	0.116	0.027	2.1
Chrysene	mg/kg dry wt	< 0.011	< 0.011	0.138	0.042	2.9
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	0.041	< 0.011	0.70
Fluoranthene	mg/kg dry wt	< 0.011	< 0.011	0.25	0.077	6.5
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.24
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.011	0.22	0.031	3.4
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	0.06
Perylene	mg/kg dry wt	< 0.011	< 0.011	0.071	< 0.011	1.41
Phenanthrene	mg/kg dry wt	< 0.011	< 0.011	0.090	0.018	1.14
Pyrene	mg/kg dry wt	< 0.011	< 0.011	0.30	0.077	8.7
Sample Name:		FTL118 0.08-0.25m 16-Jul-2024	FTL119 0.03-0.2m 16-Jul-2024	FTL120 0.05-0.18m 16-Jul-2024	FTL121 0.05-0.15m 16-Jul-2024	FTL121 0.15-0.3m 16-Jul-2024
Lab Number:		3631528.148	3631528.150	3631528.152	3631528.154	3631528.155
Individual Tests						
Dry Matter	g/100g as rcvd	72	92	94	95	88

Sample Type: Soil						
Sample Name:		FTL118 0.08-0.25m 16-Jul-2024	FTL119 0.03-0.2m 16-Jul-2024	FTL120 0.05-0.18m 16-Jul-2024	FTL121 0.05-0.15m 16-Jul-2024	FTL121 0.15-0.3m 16-Jul-2024
Lab Number:		3631528.148	3631528.150	3631528.152	3631528.154	3631528.155
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	4.5	1.4	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.017	< 0.011	< 0.011	< 0.013	< 0.011
Acenaphthylene	mg/kg dry wt	0.021	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	0.036	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	0.061	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.28	0.103	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.48	0.162	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.71	0.24	< 0.025	< 0.025	< 0.027
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.71	0.24	< 0.025	< 0.025	< 0.027
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.60	0.197	< 0.011	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	0.29	0.105	< 0.011	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.33	0.120	< 0.011	< 0.011	0.040
Benzo[k]fluoranthene	mg/kg dry wt	0.23	0.079	< 0.011	< 0.011	< 0.011
Chrysene	mg/kg dry wt	0.28	0.099	< 0.011	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	0.074	0.024	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	0.57	0.149	< 0.011	< 0.011	< 0.011
Fluorene	mg/kg dry wt	0.020	< 0.011	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.39	0.120	< 0.011	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.155	0.044	< 0.011	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	0.097	0.011	< 0.011	< 0.011	< 0.011
Pyrene	mg/kg dry wt	0.64	0.176	< 0.011	< 0.011	< 0.011
Sample Name:		FTL122 0.03-0.17m 16-Jul-2024	FTL123 0.02-0.3m 16-Jul-2024	FTL124 0.03-0.23m 16-Jul-2024	FTL125 0.02-0.25m 16-Jul-2024	FTL125 0.25-0.35m 16-Jul-2024
Lab Number:		3631528.157	3631528.159	3631528.161	3631528.163	3631528.164
Individual Tests						
Dry Matter	g/100g as rcvd	91	93	94	92	90
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.9	1.0	< 0.3	32	510
1-Methylnaphthalene	mg/kg dry wt	< 0.011	0.052	< 0.011	0.070	0.57
2-Methylnaphthalene	mg/kg dry wt	< 0.011	0.073	< 0.014	0.037	0.51
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.148	1.55
Acenaphthene	mg/kg dry wt	< 0.011	0.021	< 0.011	0.49	3.4
Anthracene	mg/kg dry wt	0.014	0.011	< 0.011	0.94	17.4
Benzo[a]anthracene	mg/kg dry wt	0.026	0.034	< 0.011	2.5	48
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.088	0.041	< 0.011	2.5	39
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.133	0.062	< 0.026	3.8	58
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.132	0.062	< 0.026	3.7	57
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.097	0.049	< 0.011	2.9	45
Benzo[e]pyrene	mg/kg dry wt	0.073	0.030	< 0.011	1.43	17.2
Benzo[g,h,i]perylene	mg/kg dry wt	0.21	0.035	< 0.011	1.45	17.3
Benzo[k]fluoranthene	mg/kg dry wt	0.032	0.020	< 0.011	1.20	14.3
Chrysene	mg/kg dry wt	0.026	0.031	< 0.011	1.90	37
Dibenzo[a,h]anthracene	mg/kg dry wt	0.017	< 0.011	< 0.011	0.38	5.4
Fluoranthene	mg/kg dry wt	0.038	0.057	< 0.011	5.2	103
Fluorene	mg/kg dry wt	< 0.011	0.014	< 0.011	0.54	4.8
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.111	0.031	< 0.011	1.60	18.8
Naphthalene	mg/kg dry wt	< 0.06	0.35	< 0.06	< 0.06	0.23

Sample Type: Soil						
Sample Name:		FTL122 0.03-0.17m 16-Jul-2024	FTL123 0.02-0.3m 16-Jul-2024	FTL124 0.03-0.23m 16-Jul-2024	FTL125 0.02-0.25m 16-Jul-2024	FTL125 0.25-0.35m 16-Jul-2024
Lab Number:		3631528.157	3631528.159	3631528.161	3631528.163	3631528.164
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	0.035	< 0.011	< 0.011	0.59	8.2
Phenanthrene	mg/kg dry wt	< 0.011	0.049	< 0.011	3.3	49
Pyrene	mg/kg dry wt	0.057	0.055	< 0.011	4.5	84
Sample Name:		FTL126 0.03-0.4m 16-Jul-2024	FTL127 0.03-0.08m 16-Jul-2024	FTL127 0.08-0.21m 16-Jul-2024	FTL130 0.03-0.08m 16-Jul-2024	FTL130 0.08-0.33m 16-Jul-2024
Lab Number:		3631528.166	3631528.168	3631528.169	3631528.171	3631528.172
Individual Tests						
Dry Matter	g/100g as rcvd	89	89	86	93	81
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	4.4	< 0.3	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.012	< 0.011	< 0.013
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.015	< 0.013	< 0.016
Acenaphthylene	mg/kg dry wt	0.025	< 0.011	< 0.012	< 0.011	< 0.013
Acenaphthene	mg/kg dry wt	0.013	< 0.011	< 0.012	< 0.011	< 0.013
Anthracene	mg/kg dry wt	0.057	< 0.011	< 0.012	< 0.011	< 0.013
Benzo[a]anthracene	mg/kg dry wt	0.31	< 0.011	< 0.012	< 0.011	< 0.013
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.46	< 0.011	< 0.012	< 0.011	< 0.013
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.70	< 0.027	< 0.028	< 0.026	< 0.030
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.69	< 0.027	< 0.028	< 0.025	< 0.030
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.57	< 0.011	< 0.012	< 0.011	< 0.013
Benzo[e]pyrene	mg/kg dry wt	0.35	< 0.011	< 0.012	< 0.011	< 0.013
Benzo[g,h,i]perylene	mg/kg dry wt	0.37	< 0.011	< 0.012	< 0.011	< 0.013
Benzo[k]fluoranthene	mg/kg dry wt	0.22	< 0.011	< 0.012	< 0.011	< 0.013
Chrysene	mg/kg dry wt	0.27	< 0.011	< 0.012	< 0.011	< 0.013
Dibenzo[a,h]anthracene	mg/kg dry wt	0.085	< 0.011	< 0.012	< 0.011	< 0.013
Fluoranthene	mg/kg dry wt	0.49	< 0.011	0.015	< 0.011	< 0.013
Fluorene	mg/kg dry wt	0.011	< 0.011	< 0.012	< 0.011	< 0.013
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.40	< 0.011	< 0.012	< 0.011	< 0.013
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.07
Perylene	mg/kg dry wt	0.126	< 0.011	< 0.012	< 0.011	< 0.013
Phenanthrene	mg/kg dry wt	0.179	< 0.011	< 0.012	< 0.011	< 0.013
Pyrene	mg/kg dry wt	0.48	< 0.011	0.013	< 0.011	< 0.013
Sample Name:		FTL131 0.03-0.08m 16-Jul-2024	FTL131 0.08-0.27m 16-Jul-2024	FTL132 0.03-0.12m 16-Jul-2024	FTL132 0.12-0.3m 16-Jul-2024	FTL133 0.04-0.09m 16-Jul-2024
Lab Number:		3631528.174	3631528.175	3631528.177	3631528.178	3631528.180
Individual Tests						
Dry Matter	g/100g as rcvd	95	76	90	87	95
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.4	1.6	< 0.3	15.6
1-Methylnaphthalene	mg/kg dry wt	0.015	< 0.014	< 0.011	< 0.012	< 0.011
2-Methylnaphthalene	mg/kg dry wt	0.015	< 0.017	< 0.011	< 0.015	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.012	0.043
Acenaphthene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.012	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.014	0.040	< 0.012	0.080
Benzo[a]anthracene	mg/kg dry wt	0.015	< 0.014	0.112	< 0.012	0.64
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.021	< 0.014	0.136	0.011	1.73
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.033	< 0.032	0.21	< 0.028	2.7
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.032	< 0.032	0.21	< 0.028	2.7

Sample Type: Soil						
Sample Name:		FTL131 0.03-0.08m 16-Jul-2024	FTL131 0.08-0.27m 16-Jul-2024	FTL132 0.03-0.12m 16-Jul-2024	FTL132 0.12-0.3m 16-Jul-2024	FTL133 0.04-0.09m 16-Jul-2024
Lab Number:		3631528.174	3631528.175	3631528.177	3631528.178	3631528.180
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.024	< 0.014	0.179	0.013	2.4
Benzo[e]pyrene	mg/kg dry wt	0.015	< 0.014	0.098	< 0.012	1.67
Benzo[g,h,i]perylene	mg/kg dry wt	0.016	< 0.014	0.103	< 0.012	1.51
Benzo[k]fluoranthene	mg/kg dry wt	0.010	< 0.014	0.066	< 0.012	0.79
Chrysene	mg/kg dry wt	0.013	< 0.014	0.103	< 0.012	0.52
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.014	0.022	< 0.012	0.38
Fluoranthene	mg/kg dry wt	0.021	< 0.014	0.22	< 0.012	0.41
Fluorene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.012	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.016	< 0.014	0.109	< 0.012	1.74
Naphthalene	mg/kg dry wt	< 0.06	< 0.07	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	< 0.014	0.037	< 0.012	0.38
Phenanthrene	mg/kg dry wt	< 0.011	< 0.014	0.114	< 0.012	0.025
Pyrene	mg/kg dry wt	0.020	< 0.014	0.23	< 0.012	3.2
Sample Name:		FTL133 0.09-0.42m 16-Jul-2024	FTL134 0.04-0.14m 16-Jul-2024	FTL135 0.05-0.11m 16-Jul-2024	FTL135 0.11-0.24m 16-Jul-2024	FTL136 0.05-0.15m 16-Jul-2024
Lab Number:		3631528.181	3631528.183	3631528.185	3631528.186	3631528.188
Individual Tests						
Dry Matter	g/100g as rcvd	93	81	95	91	91
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	2.2	1.34	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	1.67	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	1.83	< 0.013	< 0.014	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	0.23	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	0.011	5.2	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	0.032	8.1	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.137	8.6	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.24	6.2	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.34	9.7	< 0.025	< 0.027	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.34	9.4	< 0.025	< 0.027	< 0.026
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.27	7.2	< 0.011	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	0.149	3.2	< 0.011	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.140	3.1	0.032	< 0.011	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	0.097	2.9	< 0.011	< 0.011	< 0.011
Chrysene	mg/kg dry wt	0.118	6.5	< 0.011	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	0.033	0.91	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	0.24	22	< 0.011	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.011	5.3	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.144	3.6	0.011	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	1.97	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.055	1.38	< 0.011	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	0.086	26	< 0.011	< 0.011	< 0.011
Pyrene	mg/kg dry wt	0.43	17.2	< 0.011	< 0.011	< 0.011
Sample Name:		FTL138 0.03-0.25m 16-Jul-2024	FTL139 0.04-0.23m 17-Jul-2024	FTL139 0.04-0.23m 17-Jul-2024	FTL140 0.05-0.15m 17-Jul-2024	FTL140 0.15-0.50m 17-Jul-2024
Lab Number:		3631528.190	3631528.193	3631528.194	3631528.196	3631528.197
Individual Tests						
Dry Matter	g/100g as rcvd	93	91	91	93	92

Sample Type: Soil						
Sample Name:		FTL138 0.03-0.25m 16-Jul-2024	FTL139 0.04-0.23m 17-Jul-2024	FTL139 0.04-0.23m 17-Jul-2024	FTL140 0.05-0.15m 17-Jul-2024	FTL140 0.15-0.50m 17-Jul-2024
Lab Number:		3631528.190	3631528.193	3631528.194	3631528.196	3631528.197
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	4.1	2.3	0.8	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.014	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	0.020	0.012	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	0.019	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	0.051	0.027	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	0.30	0.183	0.059	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	0.39	0.22	0.089	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	0.58	0.34	0.134	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	0.57	0.34	0.133	< 0.026
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	0.48	0.29	0.106	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.011	0.25	0.143	0.060	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	0.24	0.143	0.088	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	0.188	0.113	0.045	< 0.011
Chrysene	mg/kg dry wt	< 0.011	0.27	0.159	0.050	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	0.062	0.039	0.015	< 0.011
Fluoranthene	mg/kg dry wt	< 0.011	0.55	0.27	0.092	< 0.011
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	0.25	0.155	0.072	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	0.087	0.054	0.022	< 0.011
Phenanthrene	mg/kg dry wt	< 0.011	0.121	0.066	< 0.011	< 0.011
Pyrene	mg/kg dry wt	< 0.011	0.79	0.40	0.091	< 0.011
Sample Name:		FTL141 0.04-0.10m 17-Jul-2024	FTL141 0.10-0.35m 17-Jul-2024	FTL142 0.03-0.1m 17-Jul-2024	FTL142 0.15-0.3m 17-Jul-2024	FTL143 0.04-0.09m 17-Jul-2024
Lab Number:		3631528.199	3631528.200	3631528.202	3631528.204	3631528.206
Individual Tests						
Dry Matter	g/100g as rcvd	92	92	90	83	93
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	34	22	9.4	61	183
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.044	0.56
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.021	0.57
Acenaphthylene	mg/kg dry wt	0.057	0.035	0.018	0.053	0.20
Acenaphthene	mg/kg dry wt	0.091	0.190	0.043	0.75	3.1
Anthracene	mg/kg dry wt	0.34	0.29	0.115	1.23	9.1
Benzo[a]anthracene	mg/kg dry wt	2.5	1.49	0.70	4.6	12.9
Benzo[a]pyrene (BAP)	mg/kg dry wt	3.7	2.1	1.00	5.4	11.3
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	5.4	3.1	1.48	7.9	17.4
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	5.4	3.0	1.47	7.8	17.1
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	4.4	2.5	1.09	5.7	13.3
Benzo[e]pyrene	mg/kg dry wt	2.3	1.25	0.68	3.0	6.6
Benzo[g,h,i]perylene	mg/kg dry wt	2.3	1.27	0.83	3.4	7.3
Benzo[k]fluoranthene	mg/kg dry wt	1.51	0.97	0.40	2.1	5.1
Chrysene	mg/kg dry wt	2.1	1.18	0.62	3.4	10.4
Dibenzo[a,h]anthracene	mg/kg dry wt	0.60	0.32	0.169	0.81	1.81
Fluoranthene	mg/kg dry wt	3.7	3.5	1.09	9.5	31
Fluorene	mg/kg dry wt	0.068	0.076	0.026	0.35	3.7
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	2.5	1.34	0.78	3.4	7.6
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	0.42

Sample Type: Soil						
Sample Name:		FTL141 0.04-0.10m 17-Jul-2024	FTL141 0.10-0.35m 17-Jul-2024	FTL142 0.03-0.1m 17-Jul-2024	FTL142 0.15-0.3m 17-Jul-2024	FTL143 0.04-0.09m 17-Jul-2024
Lab Number:		3631528.199	3631528.200	3631528.202	3631528.204	3631528.206
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	0.89	0.50	0.27	1.31	2.8
Phenanthrene	mg/kg dry wt	0.77	0.77	0.31	3.4	30
Pyrene	mg/kg dry wt	6.5	4.1	1.24	12.8	25
Sample Name:		FTL143 0.09-0.34m 17-Jul-2024	FTL144 0.03-0.1m 17-Jul-2024	FTL144 0.14-0.25m 17-Jul-2024	FTL145 0.04-0.09m 17-Jul-2024	FTL145 0.09-0.25m 17-Jul-2024
Lab Number:		3631528.207	3631528.209	3631528.211	3631528.213	3631528.214
Individual Tests						
Dry Matter	g/100g as rcvd	92	91	92	93	91
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	8.3	68	162	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	0.014	0.042	0.064	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	0.027	0.033	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	0.056	0.195	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	0.145	0.64	1.12	< 0.011	< 0.011
Anthracene	mg/kg dry wt	0.43	1.66	2.5	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.55	5.1	10.8	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.48	6.0	16.5	< 0.011	0.017
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.74	8.8	24	< 0.026	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.73	8.7	24	< 0.026	< 0.026
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.56	6.2	17.9	< 0.011	0.019
Benzo[e]pyrene	mg/kg dry wt	0.28	3.4	9.5	< 0.011	0.012
Benzo[g,h,i]perylene	mg/kg dry wt	0.27	4.0	14.4	< 0.011	0.028
Benzo[k]fluoranthene	mg/kg dry wt	0.23	2.4	6.0	< 0.011	< 0.011
Chrysene	mg/kg dry wt	0.43	4.4	9.9	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	0.074	0.90	2.6	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	1.51	11.2	21	< 0.011	0.013
Fluorene	mg/kg dry wt	0.180	0.49	0.52	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.31	3.9	12.3	< 0.011	0.017
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	0.07	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.110	1.47	4.7	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	1.48	4.2	5.8	< 0.011	< 0.011
Pyrene	mg/kg dry wt	1.16	12.1	25	< 0.011	0.017
Sample Name:		FTL146 0.04-0.1m 17-Jul-2024	FTL146 0.1-0.2m 17-Jul-2024	FTL147 0.03-0.11m 17-Jul-2024	FTL147 0.11-0.33m 17-Jul-2024	FTL148 0.05-0.19m 17-Jul-2024
Lab Number:		3631528.216	3631528.217	3631528.219	3631528.220	3631528.223
Individual Tests						
Dry Matter	g/100g as rcvd	70	90	94	83	89
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.4	< 0.3	< 0.3	0.5	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
Acenaphthene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
Anthracene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.038	0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.050	0.012
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.034	< 0.026	< 0.025	0.073	< 0.027
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.034	< 0.026	< 0.025	0.072	< 0.027

Sample Type: Soil						
Sample Name:		FTL146 0.04-0.1m 17-Jul-2024	FTL146 0.1-0.2m 17-Jul-2024	FTL147 0.03-0.11m 17-Jul-2024	FTL147 0.11-0.33m 17-Jul-2024	FTL148 0.05-0.19m 17-Jul-2024
Lab Number:		3631528.216	3631528.217	3631528.219	3631528.220	3631528.223
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.056	0.012
Benzo[e]pyrene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.031	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.039	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.020	< 0.011
Chrysene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.031	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
Fluoranthene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.070	0.023
Fluorene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.037	< 0.011
Naphthalene	mg/kg dry wt	< 0.07	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	< 0.012	< 0.011
Phenanthrene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.015	< 0.011
Pyrene	mg/kg dry wt	< 0.014	< 0.011	< 0.011	0.074	0.029
Sample Name:		FTL149 0.03-0.13m 17-Jul-2024	FTL149 0.03-0.13m 17-Jul-2024	FTL149 0.13-0.33m 17-Jul-2024	FTL149 0.13-0.33m 17-Jul-2024	FTL150 0.03-0.09m 17-Jul-2024
Lab Number:		3631528.226	3631528.227	3631528.228	3631528.229	3631528.231
Individual Tests						
Dry Matter	g/100g as rcvd	95	93	94	93	94
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	< 0.026	< 0.026	< 0.026	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	< 0.026	< 0.025	< 0.026	< 0.026
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Chrysene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Sample Name:		FTL150 0.09-0.18m 17-Jul-2024	FTL151 0.09-0.29m 17-Jul-2024	FTL152 0.05-0.25m 17-Jul-2024	FTL152 0.2-0.6m 17-Jul-2024	FTL153 0.07-0.2m 17-Jul-2024
Lab Number:		3631528.232	3631528.235	3631528.237	3631528.238	3631528.241
Individual Tests						
Dry Matter	g/100g as rcvd	93	92	92	89	73

Sample Type: Soil						
Sample Name:		FTL150 0.09-0.18m 17-Jul-2024	FTL151 0.09-0.29m 17-Jul-2024	FTL152 0.05-0.25m 17-Jul-2024	FTL152 0.2-0.6m 17-Jul-2024	FTL153 0.07-0.2m 17-Jul-2024
Lab Number:		3631528.232	3631528.235	3631528.237	3631528.238	3631528.241
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	1.5	2.6	1.9	4.5
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	< 0.014
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	< 0.014
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	0.015	< 0.012	< 0.014
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	0.065
Anthracene	mg/kg dry wt	< 0.011	< 0.011	0.019	< 0.012	0.083
Benzo[a]anthracene	mg/kg dry wt	< 0.011	0.064	0.131	0.079	0.34
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	0.157	0.29	0.27	0.39
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	0.23	0.44	0.40	0.58
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.025	0.23	0.44	0.39	0.57
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	0.191	0.34	0.31	0.47
Benzo[e]pyrene	mg/kg dry wt	< 0.011	0.092	0.168	0.151	0.192
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	0.21	0.37	0.22	0.20
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	0.056	0.132	0.113	0.195
Chrysene	mg/kg dry wt	< 0.011	0.063	0.127	0.088	0.30
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	0.026	0.051	0.048	0.052
Fluoranthene	mg/kg dry wt	< 0.011	0.140	0.196	0.084	0.77
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.012	0.030
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	0.172	0.32	0.25	0.26
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.07
Perylene	mg/kg dry wt	< 0.011	0.062	0.100	0.083	0.103
Phenanthrene	mg/kg dry wt	< 0.011	0.015	0.026	< 0.012	0.176
Pyrene	mg/kg dry wt	< 0.011	0.21	0.28	0.173	0.84
Sample Name:		FTL154 0.08-0.25m 17-Jul-2024	FTL155 0.06-0.25m 17-Jul-2024	FTL156 0.04-0.11m 17-Jul-2024	FTL156 0.11-0.3m 17-Jul-2024	FTL157 0.04-0.2m 17-Jul-2024
Lab Number:		3631528.244	3631528.246	3631528.248	3631528.249	3631528.251
Individual Tests						
Dry Matter	g/100g as rcvd	90	92	94	91	94
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.3	< 0.3	5.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.029
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.044
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.24
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.60
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	< 0.027	< 0.025	< 0.027	0.94
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	< 0.026	< 0.025	< 0.026	0.93
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.76
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.48
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.77
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.23
Chrysene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.24
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.135
Fluoranthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.31
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.74
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06

Sample Type: Soil						
Sample Name:		FTL154 0.08-0.25m 17-Jul-2024	FTL155 0.06-0.25m 17-Jul-2024	FTL156 0.04-0.11m 17-Jul-2024	FTL156 0.11-0.3m 17-Jul-2024	FTL157 0.04-0.2m 17-Jul-2024
Lab Number:		3631528.244	3631528.246	3631528.248	3631528.249	3631528.251
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.181
Phenanthrene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	0.044
Pyrene	mg/kg dry wt	0.013	< 0.011	< 0.011	< 0.011	0.47
Sample Name:		FTL157 0.23-0.45m 17-Jul-2024	FTL158 0.04-0.09m 17-Jul-2024	FTL158 0.15-0.35m 17-Jul-2024	FTL158 0.35-0.37m 17-Jul-2024	FTL158 0.37-0.7m 17-Jul-2024
Lab Number:		3631528.253	3631528.255	3631528.257	3631528.258	3631528.259
Individual Tests						
Dry Matter	g/100g as rcvd	86	94	93	88	93
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.4	4.8	4.2	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.012	0.021	< 0.011	< 0.012	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.012	0.021	< 0.011	< 0.012	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.012	< 0.011	0.012	< 0.012	< 0.011
Acenaphthene	mg/kg dry wt	< 0.012	0.20	0.021	< 0.012	< 0.011
Anthracene	mg/kg dry wt	< 0.012	0.28	0.102	< 0.012	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.035	0.23	0.31	< 0.012	0.012
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.041	0.21	0.25	< 0.012	0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.059	0.33	0.39	< 0.027	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.058	0.32	0.38	< 0.027	< 0.026
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.049	0.27	0.32	0.013	0.014
Benzo[e]pyrene	mg/kg dry wt	0.021	0.147	0.147	< 0.012	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.021	0.146	0.139	< 0.012	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	0.018	0.103	0.132	< 0.012	< 0.011
Chrysene	mg/kg dry wt	0.031	0.23	0.28	< 0.012	0.012
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.012	0.037	0.036	< 0.012	< 0.011
Fluoranthene	mg/kg dry wt	0.060	0.78	0.94	0.018	0.042
Fluorene	mg/kg dry wt	< 0.012	0.198	0.029	< 0.012	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.026	0.171	0.158	< 0.012	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.012	0.055	0.055	< 0.012	< 0.011
Phenanthrene	mg/kg dry wt	< 0.012	1.07	0.52	< 0.012	0.033
Pyrene	mg/kg dry wt	0.062	0.59	0.73	0.017	0.030
Sample Name:		FTL159 0.04-0.14m 17-Jul-2024	FTL160 0.04-0.09m 17-Jul-2024	FTL160 0.14-0.19m 17-Jul-2024	FTL161 0.05-0.22m 17-Jul-2024	FTL162 0.03-0.26m 17-Jul-2024
Lab Number:		3631528.261	3631528.263	3631528.265	3631528.267	3631528.269
Individual Tests						
Dry Matter	g/100g as rcvd	92	94	92	92	92
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	5.9	3.1	1.5	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	0.014	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	0.094	0.015	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	0.181	0.047	0.020	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.011	0.38	0.24	0.112	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	0.46	0.28	0.174	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.027	0.69	0.41	0.25	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	0.68	0.41	0.25	< 0.026

Sample Type: Soil						
Sample Name:		FTL159 0.04-0.14m 17-Jul-2024	FTL160 0.04-0.09m 17-Jul-2024	FTL160 0.14-0.19m 17-Jul-2024	FTL161 0.05-0.22m 17-Jul-2024	FTL162 0.03-0.26m 17-Jul-2024
Lab Number:		3631528.261	3631528.263	3631528.265	3631528.267	3631528.269
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.011	0.54	0.32	0.191	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.011	0.29	0.156	0.117	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	0.32	0.165	0.142	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	0.22	0.118	0.072	< 0.011
Chrysene	mg/kg dry wt	< 0.011	0.31	0.20	0.097	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	0.069	0.037	0.025	< 0.011
Fluoranthene	mg/kg dry wt	< 0.011	1.02	0.58	0.177	< 0.011
Fluorene	mg/kg dry wt	< 0.011	0.069	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	0.35	0.183	0.133	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	0.123	0.068	0.052	< 0.011
Phenanthrene	mg/kg dry wt	< 0.011	0.50	0.116	0.050	< 0.011
Pyrene	mg/kg dry wt	< 0.011	0.92	0.53	0.175	< 0.011
Sample Name:		FTL163 0.05-0.3m 17-Jul-2024	FTL164 0.04-0.3m 17-Jul-2024	FTL165 0.04-0.12m 17-Jul-2024	FTL166 0.06-0.3m 17-Jul-2024	FTL167 0.04-0.22m 18-Jul-2024
Lab Number:		3631528.271	3631528.273	3631528.275	3631528.277	3631528.279
Individual Tests						
Dry Matter	g/100g as rcvd	91	93	91	96	92
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	2.3	3.6	80	< 0.3	0.9
1-Methylnaphthalene	mg/kg dry wt	< 0.011	0.031	0.031	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	0.032	0.018	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	0.018	0.087	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	0.084	0.173	< 0.011	< 0.011
Anthracene	mg/kg dry wt	0.021	0.101	1.12	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.149	0.26	5.9	0.013	0.057
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.26	0.27	6.7	0.020	0.107
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.39	0.41	10.0	0.026	0.154
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.39	0.40	9.9	0.026	0.153
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.33	0.33	8.0	0.021	0.126
Benzo[e]pyrene	mg/kg dry wt	0.193	0.165	4.4	0.014	0.075
Benzo[g,h,i]perylene	mg/kg dry wt	0.21	0.168	4.9	0.016	0.078
Benzo[k]fluoranthene	mg/kg dry wt	0.133	0.142	3.0	< 0.011	0.050
Chrysene	mg/kg dry wt	0.139	0.22	5.0	< 0.011	0.062
Dibenzo[a,h]anthracene	mg/kg dry wt	0.051	0.042	1.03	< 0.011	0.015
Fluoranthene	mg/kg dry wt	0.199	0.59	12.3	0.016	0.106
Fluorene	mg/kg dry wt	< 0.011	0.063	0.069	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.22	0.180	4.8	0.016	0.076
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.069	0.066	1.49	< 0.011	0.024
Phenanthrene	mg/kg dry wt	0.041	0.29	3.5	< 0.011	< 0.011
Pyrene	mg/kg dry wt	0.21	0.49	17.2	0.023	0.130
Sample Name:		FTL168 0.03-0.15m 18-Jul-2024	FTL168 0.2-0.35m 18-Jul-2024	FTL169 0.03-0.32m 18-Jul-2024	FTL170 0.04-0.14m 18-Jul-2024	FTL170 0.14-0.4m 18-Jul-2024
Lab Number:		3631528.281	3631528.283	3631528.285	3631528.287	3631528.288
Individual Tests						
Dry Matter	g/100g as rcvd	95	93	91	91	88

Sample Type: Soil						
Sample Name:		FTL168 0.03-0.15m 18-Jul-2024	FTL168 0.2-0.35m 18-Jul-2024	FTL169 0.03-0.32m 18-Jul-2024	FTL170 0.04-0.14m 18-Jul-2024	FTL170 0.14-0.4m 18-Jul-2024
Lab Number:		3631528.281	3631528.283	3631528.285	3631528.287	3631528.288
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	1.4	< 0.3	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
Anthracene	mg/kg dry wt	0.014	< 0.011	< 0.011	< 0.011	< 0.012
Benzo[a]anthracene	mg/kg dry wt	0.077	< 0.011	0.012	< 0.011	< 0.012
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.099	0.016	0.017	0.012	< 0.012
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.147	< 0.026	< 0.026	< 0.026	< 0.027
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.144	< 0.026	< 0.026	< 0.026	< 0.027
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.125	0.020	0.024	0.015	< 0.012
Benzo[e]pyrene	mg/kg dry wt	0.068	< 0.011	0.012	< 0.011	< 0.012
Benzo[g,h,i]perylene	mg/kg dry wt	0.070	< 0.011	0.013	< 0.011	< 0.012
Benzo[k]fluoranthene	mg/kg dry wt	0.050	< 0.011	< 0.011	< 0.011	< 0.012
Chrysene	mg/kg dry wt	0.090	< 0.011	0.011	< 0.011	< 0.012
Dibenzo[a,h]anthracene	mg/kg dry wt	0.012	< 0.011	< 0.011	< 0.011	< 0.012
Fluoranthene	mg/kg dry wt	0.30	0.016	0.029	0.013	< 0.012
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.012
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.071	< 0.011	0.014	< 0.011	< 0.012
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.024	< 0.011	< 0.011	< 0.011	< 0.012
Phenanthrene	mg/kg dry wt	0.162	< 0.011	< 0.011	< 0.011	< 0.012
Pyrene	mg/kg dry wt	0.24	0.019	0.026	0.016	< 0.012
Sample Name:		FTL171 0.04-0.1m 18-Jul-2024	FTL171 0.1-0.2m 18-Jul-2024	FTL172 0.03-0.06m 18-Jul-2024	FTL172 0.06-0.15m 18-Jul-2024	FTL173 0.03-0.25m 18-Jul-2024
Lab Number:		3631528.290	3631528.291	3631528.293	3631528.294	3631528.296
Individual Tests						
Dry Matter	g/100g as rcvd	88	94	95	91	93
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.6	< 0.3	< 0.3	0.4	0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Anthracene	mg/kg dry wt	0.012	< 0.011	< 0.011	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.041	< 0.011	< 0.011	0.027	0.021
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.064	< 0.011	< 0.011	0.050	0.028
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.093	< 0.025	< 0.025	0.070	0.045
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.092	< 0.025	< 0.025	0.069	0.045
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.070	< 0.011	< 0.011	0.055	0.032
Benzo[e]pyrene	mg/kg dry wt	0.038	< 0.011	< 0.011	0.034	0.017
Benzo[g,h,i]perylene	mg/kg dry wt	0.049	< 0.011	< 0.011	0.041	0.029
Benzo[k]fluoranthene	mg/kg dry wt	0.024	< 0.011	< 0.011	0.018	0.018
Chrysene	mg/kg dry wt	0.036	< 0.011	< 0.011	0.025	0.016
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	0.079	< 0.011	< 0.011	0.046	0.024
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.047	< 0.011	< 0.011	0.035	0.025
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06

Sample Type: Soil						
Sample Name:		FTL171 0.04-0.1m 18-Jul-2024	FTL171 0.1-0.2m 18-Jul-2024	FTL172 0.03-0.06m 18-Jul-2024	FTL172 0.06-0.15m 18-Jul-2024	FTL173 0.03-0.25m 18-Jul-2024
Lab Number:		3631528.290	3631528.291	3631528.293	3631528.294	3631528.296
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	0.017	< 0.011	< 0.011	0.011	< 0.011
Phenanthrene	mg/kg dry wt	0.028	< 0.011	< 0.011	< 0.011	< 0.011
Pyrene	mg/kg dry wt	0.085	< 0.011	< 0.011	0.068	0.025
Sample Name:		FTL174 0.03-0.25m 18-Jul-2024	FTL175 0.03-0.17m 18-Jul-2024	FTL176 0.05-0.3m 18-Jul-2024	FTL177 0.03-0.25m 18-Jul-2024	FTL178 0.04-0.20m 18-Jul-2024
Lab Number:		3631528.298	3631528.300	3631528.302	3631528.305	3631528.307
Individual Tests						
Dry Matter	g/100g as rcvd	94	93	90	91	96
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.9	2.5	< 0.3	26	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.044	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.042	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.011	0.028	< 0.011
Acenaphthene	mg/kg dry wt	0.046	< 0.011	< 0.011	0.48	< 0.011
Anthracene	mg/kg dry wt	0.053	0.013	< 0.011	1.17	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.041	0.119	< 0.011	1.69	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.040	0.35	0.021	1.71	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.059	0.51	0.031	2.6	< 0.025
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.057	0.51	0.031	2.5	< 0.025
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.048	0.39	0.027	2.0	< 0.011
Benzo[e]pyrene	mg/kg dry wt	0.023	0.28	0.013	0.94	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.020	0.30	0.013	0.93	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	0.019	0.148	< 0.011	0.82	< 0.011
Chrysene	mg/kg dry wt	0.037	0.111	< 0.011	1.39	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	0.066	< 0.011	0.24	< 0.011
Fluoranthene	mg/kg dry wt	0.139	0.100	< 0.011	4.6	< 0.011
Fluorene	mg/kg dry wt	0.035	< 0.011	< 0.011	0.49	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.023	0.32	0.017	1.06	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	0.101	< 0.011	0.37	< 0.011
Phenanthrene	mg/kg dry wt	0.165	< 0.011	< 0.011	3.9	< 0.011
Pyrene	mg/kg dry wt	0.118	0.167	< 0.011	4.0	< 0.011
Sample Name:		FTL179 0.03-0.15m 18-Jul-2024	FTL179 0.15-0.3m 18-Jul-2024	FTL180 0.02-0.14m 18-Jul-2024	FTL180 0.14-0.25m 18-Jul-2024	FTL181 0.03-0.1m 18-Jul-2024
Lab Number:		3631528.309	3631528.310	3631528.312	3631528.313	3631528.315
Individual Tests						
Dry Matter	g/100g as rcvd	90	79	94	87	89
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	0.4	0.4	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
Acenaphthene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
Anthracene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
Benzo[a]anthracene	mg/kg dry wt	< 0.011	0.023	0.024	0.016	< 0.012
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.017	0.037	0.038	0.028	0.013
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	0.054	0.057	0.041	< 0.028
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	0.053	0.057	0.041	< 0.028

Sample Type: Soil						
Sample Name:		FTL179 0.03-0.15m 18-Jul-2024	FTL179 0.15-0.3m 18-Jul-2024	FTL180 0.02-0.14m 18-Jul-2024	FTL180 0.14-0.25m 18-Jul-2024	FTL181 0.03-0.1m 18-Jul-2024
Lab Number:		3631528.309	3631528.310	3631528.312	3631528.313	3631528.315
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.021	0.045	0.048	0.035	0.013
Benzo[e]pyrene	mg/kg dry wt	0.014	0.025	0.030	0.020	< 0.012
Benzo[g,h,i]perylene	mg/kg dry wt	0.016	0.027	0.047	0.024	< 0.012
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	0.016	0.020	0.012	< 0.012
Chrysene	mg/kg dry wt	< 0.011	0.024	0.023	0.014	< 0.012
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
Fluoranthene	mg/kg dry wt	0.014	0.053	0.047	0.024	< 0.012
Fluorene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.016	0.027	0.033	0.021	< 0.012
Naphthalene	mg/kg dry wt	< 0.06	< 0.07	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	< 0.013	< 0.011	< 0.011	< 0.012
Phenanthrene	mg/kg dry wt	< 0.011	0.014	< 0.011	< 0.011	< 0.012
Pyrene	mg/kg dry wt	0.017	0.061	0.042	0.027	< 0.012
Sample Name:		FTL182 0.04-0.2m 18-Jul-2024	FTL183 0.05-0.15m 18-Jul-2024	FTL183 0.15-0.20m 18-Jul-2024	FTL184 0.04-0.1m 18-Jul-2024	FTL184 0.1-0.19m 18-Jul-2024
Lab Number:		3631528.317	3631528.319	3631528.320	3631528.322	3631528.323
Individual Tests						
Dry Matter	g/100g as rcvd	92	91	84	95	96
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	0.5	0.9	< 0.3	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	0.027	0.066	0.017	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.035	0.090	0.031	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	0.054	0.132	0.040	< 0.025	< 0.025
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	0.053	0.131	0.040	< 0.025	< 0.025
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.050	0.104	0.033	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	0.036	0.057	0.021	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	0.035	0.062	0.025	< 0.011	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	0.016	0.040	0.014	< 0.011	< 0.011
Chrysene	mg/kg dry wt	0.033	0.068	0.017	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	0.013	< 0.012	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	0.084	0.131	0.027	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.011	< 0.011	< 0.012	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.029	0.062	0.024	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Perylene	mg/kg dry wt	0.011	0.023	< 0.012	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	0.068	0.043	< 0.012	< 0.011	< 0.011
Pyrene	mg/kg dry wt	0.076	0.135	0.032	< 0.011	< 0.011
Sample Name:		FTL185 0.02-0.47m 18-Jul-2024	FTL186 0.03-0.27m 18-Jul-2024	FTL186 0.27-0.5m 18-Jul-2024	FTL187 0.02-0.40m 18-Jul-2024	FTL188 0.02-0.22m 18-Jul-2024
Lab Number:		3631528.325	3631528.327	3631528.328	3631528.330	3631528.332
Individual Tests						
Dry Matter	g/100g as rcvd	88	88	73	90	93

Sample Type: Soil						
Sample Name:		FTL185 0.02-0.47m 18-Jul-2024	FTL186 0.03-0.27m 18-Jul-2024	FTL186 0.27-0.5m 18-Jul-2024	FTL187 0.02-0.40m 18-Jul-2024	FTL188 0.02-0.22m 18-Jul-2024
Lab Number:		3631528.325	3631528.327	3631528.328	3631528.330	3631528.332
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	< 0.4	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.012	< 0.014	< 0.014	< 0.011	< 0.014
Acenaphthylene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Acenaphthene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Benzo[a]anthracene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.027	< 0.028	< 0.032	< 0.027	< 0.026
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.027	< 0.027	< 0.032	< 0.027	< 0.026
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Benzo[e]pyrene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Benzo[k]fluoranthene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Chrysene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Fluoranthene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Fluorene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.07	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Phenanthrene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Pyrene	mg/kg dry wt	< 0.012	< 0.012	< 0.014	< 0.011	< 0.011
Sample Name:		FTL188 0.22-0.4m 18-Jul-2024	FTL188 0.4-0.5m 18-Jul-2024	FTL189 0.05-0.12m 18-Jul-2024	FTL189 0.17-0.36m 18-Jul-2024	FTL190 0.06-0.13m 18-Jul-2024
Lab Number:		3631528.333	3631528.334	3631528.336	3631528.338	3631528.340
Individual Tests						
Dry Matter	g/100g as rcvd	89	88	93	93	95
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	< 0.3	31	< 0.3	6.5
1-Methylnaphthalene	mg/kg dry wt	< 0.011	< 0.012	0.081	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.014	< 0.015	0.066	< 0.013	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	< 0.012	0.032	< 0.011	0.015
Acenaphthene	mg/kg dry wt	< 0.011	< 0.012	1.32	< 0.011	< 0.011
Anthracene	mg/kg dry wt	< 0.011	< 0.012	1.37	< 0.011	0.118
Benzo[a]anthracene	mg/kg dry wt	< 0.011	< 0.012	1.87	< 0.011	0.26
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.011	< 0.012	1.59	0.012	0.62
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.027	< 0.028	2.5	< 0.025	0.98
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.027	< 0.028	2.4	< 0.025	0.97
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	< 0.011	< 0.012	1.99	0.014	0.89
Benzo[e]pyrene	mg/kg dry wt	< 0.011	< 0.012	0.83	< 0.011	0.42
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.011	< 0.012	0.89	0.012	0.72
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	< 0.012	0.70	< 0.011	0.31
Chrysene	mg/kg dry wt	< 0.011	< 0.012	1.82	< 0.011	0.32
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	< 0.012	0.25	< 0.011	0.142
Fluoranthene	mg/kg dry wt	< 0.011	< 0.012	6.0	0.013	0.67
Fluorene	mg/kg dry wt	< 0.011	< 0.012	0.76	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.011	< 0.012	1.03	0.011	0.64
Naphthalene	mg/kg dry wt	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06

Sample Type: Soil						
Sample Name:		FTL188 0.22-0.4m 18-Jul-2024	FTL188 0.4-0.5m 18-Jul-2024	FTL189 0.05-0.12m 18-Jul-2024	FTL189 0.17-0.36m 18-Jul-2024	FTL190 0.06-0.13m 18-Jul-2024
Lab Number:		3631528.333	3631528.334	3631528.336	3631528.338	3631528.340
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Perylene	mg/kg dry wt	< 0.011	< 0.012	0.43	< 0.011	0.21
Phenanthrene	mg/kg dry wt	< 0.011	< 0.012	4.8	< 0.011	0.119
Pyrene	mg/kg dry wt	< 0.011	< 0.012	5.2	0.015	1.02
Sample Name:		FTL190 0.16-0.37m 18-Jul-2024	FTL191 0.02-0.2m 18-Jul-2024	FTL191 0.24-0.45m 18-Jul-2024	FTL192 0.03-0.27m 18-Jul-2024	FTL193 0.05-0.17m 18-Jul-2024
Lab Number:		3631528.342	3631528.344	3631528.346	3631528.348	3631528.351
Individual Tests						
Dry Matter	g/100g as rcvd	94	93	92	92	93
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3	23	14.4	3.9	16.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	0.163	0.065	< 0.011	< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.011	0.172	0.062	< 0.011	< 0.011
Acenaphthylene	mg/kg dry wt	< 0.011	0.031	0.019	< 0.011	0.082
Acenaphthene	mg/kg dry wt	< 0.011	0.75	0.42	< 0.011	0.026
Anthracene	mg/kg dry wt	< 0.011	1.00	0.69	0.017	0.107
Benzo[a]anthracene	mg/kg dry wt	< 0.011	1.32	0.87	0.26	1.03
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.012	1.16	0.75	0.43	1.77
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.026	1.79	1.14	0.63	2.6
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.026	1.76	1.12	0.62	2.6
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg dry wt	0.018	1.41	0.88	0.50	2.1
Benzo[e]pyrene	mg/kg dry wt	< 0.011	0.64	0.39	0.29	0.93
Benzo[g,h,i]perylene	mg/kg dry wt	0.012	0.65	0.39	0.32	1.89
Benzo[k]fluoranthene	mg/kg dry wt	< 0.011	0.58	0.36	0.191	0.81
Chrysene	mg/kg dry wt	< 0.011	1.26	0.79	0.28	1.01
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.011	0.173	0.102	0.064	0.28
Fluoranthene	mg/kg dry wt	0.016	3.8	2.5	0.46	1.66
Fluorene	mg/kg dry wt	< 0.011	0.72	0.43	< 0.011	< 0.011
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.011	0.76	0.45	0.31	1.63
Naphthalene	mg/kg dry wt	< 0.06	0.27	0.07	< 0.06	< 0.06
Perylene	mg/kg dry wt	< 0.011	0.30	0.171	0.094	0.59
Phenanthrene	mg/kg dry wt	< 0.011	4.3	2.8	0.083	0.109
Pyrene	mg/kg dry wt	0.020	3.2	2.2	0.61	2.3
Sample Name:		1.FTL194 0.03-0.17m 19-Jul-2024	2.FTL194 0.03-0.17m 19-Jul-2024	3.FTL194 0.03-0.17m 19-Jul-2024	1.FTL194 0.17-0.27m 19-Jul-2024	2.FTL194 0.17-0.27m 19-Jul-2024
Lab Number:		3631528.355	3631528.356	3631528.357	3631528.358	3631528.359
Individual Tests						
Dry Matter	g/100g as rcvd	88	89	88	83	81
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	7.0	66	11.0	< 0.3	< 0.3
1-Methylnaphthalene	mg/kg dry wt	< 0.011	0.022	< 0.011	< 0.012	< 0.013
2-Methylnaphthalene	mg/kg dry wt	< 0.014	0.025	< 0.011	< 0.015	< 0.013
Acenaphthylene	mg/kg dry wt	0.037	0.084	0.054	< 0.012	< 0.013
Acenaphthene	mg/kg dry wt	0.015	0.197	0.023	< 0.012	< 0.013
Anthracene	mg/kg dry wt	0.111	3.1	0.181	< 0.012	< 0.013
Benzo[a]anthracene	mg/kg dry wt	0.58	4.5	0.94	< 0.012	< 0.013
Benzo[a]pyrene (BAP)	mg/kg dry wt	0.74	4.8	1.07	< 0.012	< 0.013
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	1.10	7.1	1.61	< 0.029	< 0.030
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	1.09	6.9	1.59	< 0.029	< 0.029

Sample Type: Soil						
Sample Name:		1.FTL194 0.03-0.17m 19-Jul-2024	2.FTL194 0.03-0.17m 19-Jul-2024	3.FTL194 0.03-0.17m 19-Jul-2024	1.FTL194 0.17-0.27m 19-Jul-2024	2.FTL194 0.17-0.27m 19-Jul-2024
Lab Number:		3631528.355	3631528.356	3631528.357	3631528.358	3631528.359
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	0.87	4.9	1.29	< 0.012	< 0.013
Benzo[e]pyrene	mg/kg dry wt	0.45	2.6	0.66	< 0.012	< 0.013
Benzo[g,h,i]perylene	mg/kg dry wt	0.49	2.9	0.70	< 0.012	< 0.013
Benzo[k]fluoranthene	mg/kg dry wt	0.34	1.82	0.52	< 0.012	< 0.013
Chrysene	mg/kg dry wt	0.52	3.8	0.81	< 0.012	< 0.013
Dibenzo[a,h]anthracene	mg/kg dry wt	0.116	0.69	0.166	< 0.012	< 0.013
Fluoranthene	mg/kg dry wt	0.87	10.3	1.42	< 0.012	< 0.013
Fluorene	mg/kg dry wt	0.019	0.52	0.027	< 0.012	< 0.013
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	0.49	2.9	0.73	< 0.012	< 0.013
Naphthalene	mg/kg dry wt	< 0.06	0.06	< 0.06	< 0.06	< 0.07
Perylene	mg/kg dry wt	0.178	1.00	0.27	< 0.012	< 0.013
Phenanthrene	mg/kg dry wt	0.31	9.6	0.51	< 0.012	< 0.013
Pyrene	mg/kg dry wt	0.86	12.1	1.53	< 0.012	< 0.013
Sample Name:		3.FTL194 0.17-0.27m 19-Jul-2024		FTL196 0.05-0.08m 19-Jul-2024		FTL196 0.08-0.35m 19-Jul-2024
Lab Number:		3631528.360		3631528.365		3631528.366
Individual Tests						
Dry Matter	g/100g as rcvd	82		92		91
Polycyclic Aromatic Hydrocarbons Screening in Soil*						
Total of Reported PAHs in Soil	mg/kg dry wt	< 0.3		50		15.2
1-Methylnaphthalene	mg/kg dry wt	< 0.012		0.032		< 0.011
2-Methylnaphthalene	mg/kg dry wt	< 0.012		0.029		< 0.014
Acenaphthylene	mg/kg dry wt	< 0.012		0.059		0.019
Acenaphthene	mg/kg dry wt	< 0.012		0.24		0.039
Anthracene	mg/kg dry wt	< 0.012		0.92		0.198
Benzo[a]anthracene	mg/kg dry wt	< 0.012		3.7		0.99
Benzo[a]pyrene (BAP)	mg/kg dry wt	< 0.012		4.8		1.71
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg dry wt	< 0.029		7.1		2.5
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg dry wt	< 0.029		7.0		2.4
Benzo[b]fluoranthene + Benzo[j]fluoranthene	mg/kg dry wt	< 0.012		5.3		1.77
Benzo[e]pyrene	mg/kg dry wt	< 0.012		3.1		1.11
Benzo[g,h,i]perylene	mg/kg dry wt	< 0.012		3.9		1.36
Benzo[k]fluoranthene	mg/kg dry wt	< 0.012		1.88		0.62
Chrysene	mg/kg dry wt	< 0.012		3.2		0.87
Dibenzo[a,h]anthracene	mg/kg dry wt	< 0.012		0.78		0.27
Fluoranthene	mg/kg dry wt	< 0.012		5.8		1.58
Fluorene	mg/kg dry wt	< 0.012		0.23		0.036
Indeno(1,2,3-c,d)pyrene	mg/kg dry wt	< 0.012		3.5		1.27
Naphthalene	mg/kg dry wt	< 0.06		< 0.06		< 0.06
Perylene	mg/kg dry wt	< 0.012		1.32		0.42
Phenanthrene	mg/kg dry wt	< 0.012		3.1		0.64
Pyrene	mg/kg dry wt	< 0.012		7.9		2.3
Sample Type: Miscellaneous						
Sample Name:		FTL71 0.02-0.2m 15-Jul-2024				
Lab Number:		3631528.16				
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene	mg/kg as rcvd	< 0.010				
2-Methylnaphthalene	mg/kg as rcvd	< 0.015				
Acenaphthylene	mg/kg as rcvd	< 0.010				
Acenaphthene	mg/kg as rcvd	< 0.010				

Sample Type: Miscellaneous		
Sample Name:	FTL71 0.02-0.2m 15-Jul-2024	
Lab Number:	3631528.16	
Polycyclic Aromatic Hydrocarbons Screening in Rock*		
Anthracene	mg/kg as rcvd	< 0.010
Benzo[a]anthracene	mg/kg as rcvd	< 0.010
Benzo[a]pyrene (BAP)	mg/kg as rcvd	< 0.010
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.025
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.03
Benzo[b]fluoranthene + Benzo[j] fluoranthene	mg/kg as rcvd	< 0.010
Benzo[e]pyrene	mg/kg as rcvd	< 0.010
Benzo[g,h,i]perylene	mg/kg as rcvd	0.011
Benzo[k]fluoranthene	mg/kg as rcvd	< 0.010
Chrysene	mg/kg as rcvd	< 0.010
Dibenzo[a,h]anthracene	mg/kg as rcvd	< 0.010
Fluoranthene	mg/kg as rcvd	< 0.010
Fluorene	mg/kg as rcvd	< 0.010
Indeno(1,2,3-c,d)pyrene	mg/kg as rcvd	< 0.010
Naphthalene	mg/kg as rcvd	< 0.05
Perylene	mg/kg as rcvd	< 0.010
Phenanthrene	mg/kg as rcvd	< 0.010
Pyrene	mg/kg as rcvd	0.016
Total of Reported PAHs	mg/kg as rcvd	< 0.3

Sample Type: Roading Material						
Sample Name:	FTL64 0-0.05m 15-Jul-2024	FTL65 0-0.03m 15-Jul-2024	FTL66 0-0-0.05m 15-Jul-2024	FTL67 0-0.03m 15-Jul-2024	FTL68 0-0.03m 15-Jul-2024	
Lab Number:	3631528.1	3631528.3	3631528.5	3631528.7	3631528.9	
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.10	< 0.15	< 0.10	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	< 0.23	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	< 3	< 3

Sample Name:	FTL69 0-0.05m 15-Jul-2024	FTL70 0.0-0.02m 15-Jul-2024	FTL71 0.0-0.02m 15-Jul-2024	FTL72 0.0-0.3m 15-Jul-2024	FTL73 0.0-0.06m 15-Jul-2024
Lab Number:	3631528.11	3631528.13	3631528.15	3631528.17	3631528.19

Sample Type: Roading Material						
Sample Name:		FTL69 0.0-0.05m 15-Jul-2024	FTL70 0.0-0.02m 15-Jul-2024	FTL71 0.0-0.02m 15-Jul-2024	FTL72 0.0-0.3m 15-Jul-2024	FTL73 0.0-0.06m 15-Jul-2024
Lab Number:		3631528.11	3631528.13	3631528.15	3631528.17	3631528.19
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.13	< 0.10	0.43	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.13	< 0.15	0.25	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	0.37	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	0.70	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	0.81	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	0.79	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	1.17	< 0.24	< 0.25	< 0.25
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	1.1	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	0.90	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	0.43	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	0.46	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	0.38	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	0.72	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	2.3	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	0.41	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	0.44	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	0.20	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	2.5	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	1.76	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	14	< 3	< 3	< 3
Sample Name:		FTL74 0.0-0.05m 15-Jul-2024	FTL75 0.0-0.06m 15-Jul-2024	FTL76 0.0-0.4m 15-Jul-2024	FTL77 0.0-0.03m 15-Jul-2024	FTL78 0.0-0.3m 15-Jul-2024
Lab Number:		3631528.21	3631528.23	3631528.25	3631528.27	3631528.29
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.12	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.2	< 0.15	< 0.10	< 0.10	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.25	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	< 3	< 3

Sample Type: Roading Material						
Sample Name:		FTL79 0.0-0.3m 15-Jul-2024	FTL80 0.0-0.05m 15-Jul-2024	FTL81 0.0-0.02m 15-Jul-2024	FTL82 0.0-0.3m 15-Jul-2024	FTL82 0.07-0.09m 15-Jul-2024
Lab Number:		3631528.31	3631528.33	3631528.36	3631528.38	3631528.40
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.30
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.15	0.34
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	0.10	< 0.10	< 0.10	0.13
Anthracene*	mg/kg as rcvd	< 0.10	0.31	< 0.10	< 0.10	0.24
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	0.52	< 0.10	< 0.10	0.84
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	0.42	< 0.10	< 0.10	0.79
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	0.65	< 0.24	< 0.24	1.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	0.6	< 0.3	< 0.3	1.2
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	0.52	< 0.10	< 0.10	1.06
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	0.22	< 0.10	< 0.10	0.56
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	0.21	< 0.10	< 0.10	0.51
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	0.26	< 0.10	< 0.10	0.45
Chrysene*	mg/kg as rcvd	< 0.10	0.52	< 0.10	< 0.10	0.67
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.13
Fluoranthene*	mg/kg as rcvd	< 0.10	1.52	< 0.10	< 0.10	1.82
Fluorene*	mg/kg as rcvd	< 0.10	0.11	< 0.10	< 0.10	0.13
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	0.23	< 0.10	< 0.10	0.54
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	1.0
Perylene*	mg/kg as rcvd	< 0.10	0.11	< 0.10	< 0.10	0.20
Phenanthrene*	mg/kg as rcvd	< 0.10	0.99	< 0.10	< 0.10	0.39
Pyrene*	mg/kg as rcvd	< 0.10	1.25	< 0.10	< 0.10	1.59
Total of Reported PAHs*	mg/kg as rcvd	< 3	8	< 3	< 3	12
Sample Name:		FTL83 0.0-0.05m 15-Jul-2024	FTL83 0.09-0.13m 15-Jul-2024	FTL84 0.0-0.03m 15-Jul-2024	FTL84 0.03-0.06m 15-Jul-2024	FTL85 0.0-0.05m 15-Jul-2024
Lab Number:		3631528.44	3631528.46	3631528.48	3631528.49	3631528.51
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.88	< 0.10	1.70	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.51	< 0.15	1.01	< 0.10
Acenaphthylene*	mg/kg as rcvd	0.16	1.90	< 0.10	0.42	< 0.10
Acenaphthene*	mg/kg as rcvd	0.74	24	0.23	11.7	< 0.10
Anthracene*	mg/kg as rcvd	2.6	56	0.47	19.3	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	7.2	95	0.50	19.5	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	9.0	89	0.43	13.4	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	13.1	133	0.68	21	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	12.9	131	0.7	21	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	10.2	102	0.53	16.9	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	4.7	48	0.26	7.4	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	4.4	45	0.27	6.4	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	4.0	40	0.19	6.9	< 0.10
Chrysene*	mg/kg as rcvd	6.7	78	0.44	14.3	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	1.17	12.4	< 0.10	1.86	< 0.10
Fluoranthene*	mg/kg as rcvd	18.7	260	2.0	74	< 0.10
Fluorene*	mg/kg as rcvd	0.77	22	0.19	10.7	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	5.0	51	0.30	7.6	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	0.6	< 0.5
Perylene*	mg/kg as rcvd	1.98	20	0.11	3.1	< 0.10
Phenanthrene*	mg/kg as rcvd	8.1	143	2.3	63	< 0.10
Pyrene*	mg/kg as rcvd	17.6	200	1.38	48	< 0.10

Sample Type: Roading Material						
Sample Name:		FTL83 0.0-0.05m 15-Jul-2024	FTL83 0.09-0.13m 15-Jul-2024	FTL84 0.0-0.03m 15-Jul-2024	FTL84 0.03-0.06m 15-Jul-2024	FTL85 0.0-0.05m 15-Jul-2024
Lab Number:		3631528.44	3631528.46	3631528.48	3631528.49	3631528.51
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Total of Reported PAHs* mg/kg as rcvd		103	1,290	10	330	< 3
Sample Name:		FTL86 0.0-0.5m 15-Jul-2024	FTL87 0.0-0.04m 15-Jul-2024	FTL88 0.0-0.03m 15-Jul-2024	FTL88 0.03-0.06m 15-Jul-2024	FTL89 0-0.02m 15-Jul-2024
Lab Number:		3631528.53	3631528.55	3631528.57	3631528.58	3631528.60
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	21	< 0.10	< 0.10	16.7	2.0
2-Methylnaphthalene*	mg/kg as rcvd	27	< 0.15	< 0.15	16.6	0.9
Acenaphthylene*	mg/kg as rcvd	3.3	< 0.10	< 0.10	1.81	0.76
Acenaphthene*	mg/kg as rcvd	68	< 0.10	< 0.10	96	23
Anthracene*	mg/kg as rcvd	128	< 0.10	< 0.10	181	41
Benzo[a]anthracene*	mg/kg as rcvd	121	< 0.10	< 0.10	177	67
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	93	< 0.10	< 0.10	158	54
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	143	< 0.24	< 0.24	240	84
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	140	< 0.3	< 0.3	230	82
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	115	< 0.10	0.10	181	63
Benzo[e]pyrene*	mg/kg as rcvd	50	< 0.10	0.11	89	30
Benzo[g,h,i]perylene*	mg/kg as rcvd	47	< 0.10	< 0.10	96	34
Benzo[k]fluoranthene*	mg/kg as rcvd	44	< 0.10	< 0.10	70	23
Chrysene*	mg/kg as rcvd	101	< 0.10	< 0.10	139	53
Dibenzo[a,h]anthracene*	mg/kg as rcvd	12.2	< 0.10	< 0.10	23	8.1
Fluoranthene*	mg/kg as rcvd	380	< 0.10	0.21	550	210
Fluorene*	mg/kg as rcvd	71	< 0.10	< 0.10	94	17.9
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	52	< 0.10	< 0.10	99	37
Naphthalene*	mg/kg as rcvd	41	< 0.5	< 0.5	14.1	< 0.5
Perylene*	mg/kg as rcvd	23	< 0.10	< 0.10	42	14.0
Phenanthrene*	mg/kg as rcvd	450	< 0.10	0.14	620	154
Pyrene*	mg/kg as rcvd	300	< 0.10	0.19	440	158
Total of Reported PAHs*	mg/kg as rcvd	2,100	< 3	< 3	3,100	990
Sample Name:		FTL89 0.02-0.05m 15-Jul-2024	FTL90 0.0-0.05m 16-Jul-2024	FTL91 0.0-0.04m 16-Jul-2024	FTL91 0.22-0.27m 16-Jul-2024	FTL92 0-0.05m 16-Jul-2024
Lab Number:		3631528.61	3631528.63	3631528.65	3631528.67	3631528.69
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	2.1	< 0.10	0.60	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.2	1.13	< 0.10	0.31	< 0.15
Acenaphthylene*	mg/kg as rcvd	0.18	1.35	< 0.10	2.9	< 0.10
Acenaphthene*	mg/kg as rcvd	1.57	23	< 0.10	5.6	0.34
Anthracene*	mg/kg as rcvd	5.2	54	< 0.10	19.7	0.23
Benzo[a]anthracene*	mg/kg as rcvd	12.1	109	< 0.10	75	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	11.4	99	< 0.10	66	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	17.6	153	< 0.25	101	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	17.2	149	< 0.3	100	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	13.8	118	< 0.10	81	0.10
Benzo[e]pyrene*	mg/kg as rcvd	6.5	58	< 0.10	40	0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	8.0	66	< 0.10	36	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	4.9	44	< 0.10	34	< 0.10
Chrysene*	mg/kg as rcvd	9.8	89	< 0.10	65	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	1.79	15.4	< 0.10	10.3	< 0.10
Fluoranthene*	mg/kg as rcvd	33	370	< 0.10	155	0.30

Sample Type: Roading Material						
Sample Name:		FTL89 0.02-0.05m 15-Jul-2024	FTL90 0.0-0.05m 16-Jul-2024	FTL91 0.0-0.04m 16-Jul-2024	FTL91 0.22-0.27m 16-Jul-2024	FTL92 0-0.05m 16-Jul-2024
Lab Number:		3631528.61	3631528.63	3631528.65	3631528.67	3631528.69
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Fluorene*	mg/kg as rcvd	1.00	18.7	< 0.10	3.9	0.22
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	8.5	70	< 0.10	40	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	0.9	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	3.0	28	< 0.10	17.1	< 0.10
Phenanthrene*	mg/kg as rcvd	16.7	154	< 0.10	53	1.11
Pyrene*	mg/kg as rcvd	29	280	< 0.10	145	0.26
Total of Reported PAHs*	mg/kg as rcvd	168	1,590	< 3	850	3
Sample Name:		FTL92 0.13-0.14m 16-Jul-2024	FTL92 0.16-0.18m 16-Jul-2024	FTL92 0.18-0.28m 16-Jul-2024	FTL92 0.24-0.29m 16-Jul-2024	FTL93 0-0.03m 16-Jul-2024
Lab Number:		3631528.71	3631528.72	3631528.73	3631528.74	3631528.76
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.55	< 0.10	< 0.10	12.0	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	0.28	< 0.15	< 0.15	13.6	< 0.15
Acenaphthylene*	mg/kg as rcvd	2.6	< 0.10	< 0.10	2.3	< 0.10
Acenaphthene*	mg/kg as rcvd	6.5	< 0.10	< 0.10	50	< 0.10
Anthracene*	mg/kg as rcvd	24	< 0.10	< 0.10	89	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	75	0.23	< 0.10	75	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	67	0.29	< 0.10	58	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	102	0.44	< 0.24	91	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	101	0.4	< 0.3	88	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	79	0.32	< 0.10	71	0.10
Benzo[e]pyrene*	mg/kg as rcvd	35	0.20	< 0.10	32	0.11
Benzo[g,h,i]perylene*	mg/kg as rcvd	35	0.20	< 0.10	28	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	28	0.12	< 0.10	30	< 0.10
Chrysene*	mg/kg as rcvd	68	0.20	< 0.10	65	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	10.8	< 0.10	< 0.10	8.5	< 0.10
Fluoranthene*	mg/kg as rcvd	152	0.40	< 0.10	220	0.11
Fluorene*	mg/kg as rcvd	6.5	< 0.10	< 0.10	47	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	41	0.21	< 0.10	32	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	9.2	< 0.5
Perylene*	mg/kg as rcvd	16.1	< 0.10	< 0.10	13.3	< 0.10
Phenanthrene*	mg/kg as rcvd	70	< 0.10	< 0.10	310	< 0.10
Pyrene*	mg/kg as rcvd	139	0.35	< 0.10	155	0.18
Total of Reported PAHs*	mg/kg as rcvd	860	3	< 3	1,330	< 3
Sample Name:		FTL93 0.17-0.2m 16-Jul-2024	FTL94 0-0.06m 16-Jul-2024	FTL95 0-0.04m 16-Jul-2024	FTL96 0-0.02m 16-Jul-2024	FTL97 0-0.03m 16-Jul-2024
Lab Number:		3631528.79	3631528.82	3631528.85	3631528.87	3631528.89
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.16	0.19
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	1.40	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	4.7	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	11.4	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	49	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	50	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.25	< 0.24	< 0.24	75	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	74	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	0.14	< 0.10	58	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	0.12	< 0.10	26	< 0.10

Sample Type: Roading Material						
Sample Name:		FTL93 0.17-0.2m 16-Jul-2024	FTL94 0-0.06m 16-Jul-2024	FTL95 0-0.04m 16-Jul-2024	FTL96 0-0.02m 16-Jul-2024	FTL97 0-0.03m 16-Jul-2024
Lab Number:		3631528.79	3631528.82	3631528.85	3631528.87	3631528.89
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	0.10	< 0.10	24	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	24	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	46	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	7.0	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	0.12	< 0.10	98	0.15
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	2.2	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	28	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	13.4	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	26	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	0.11	< 0.10	112	0.14
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	580	< 3
Sample Name:		FTL98 0-0.05m 16-Jul-2024	FTL99 0-0.03m 16-Jul-2024	FTL100 0-0.04m 16-Jul-2024	FTL101 0-0.03m 16-Jul-2024	FTL102 0-0.03m 16-Jul-2024
Lab Number:		3631528.91	3631528.93	3631528.97	3631528.99	3631528.101
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	35	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	45	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	4.9	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	99	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	148	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	144	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	108	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	169	< 0.24	< 0.24	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	165	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	134	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	61	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	55	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	55	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	118	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	16.4	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	400	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	100	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	62	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	66	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	26	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	480	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	320	< 0.10	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	2,500	< 3	< 3	< 3	< 3
Sample Name:		FTL103 0-0.03m 16-Jul-2024	FTL104 0-0.03m 16-Jul-2024	FTL105 0-0.04m 16-Jul-2024	FTL106 0-0.03m 16-Jul-2024	FTL108 0-0.03m 16-Jul-2024
Lab Number:		3631528.104	3631528.107	3631528.111	3631528.115	3631528.118
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.11	< 0.10	< 0.10	< 0.10	0.20
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24

Sample Type: Roading Material						
Sample Name:		FTL103 0-0.03m 16-Jul-2024	FTL104 0-0.03m 16-Jul-2024	FTL105 0-0.04m 16-Jul-2024	FTL106 0-0.03m 16-Jul-2024	FTL108 0-0.03m 16-Jul-2024
Lab Number:		3631528.104	3631528.107	3631528.111	3631528.115	3631528.118
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	0.6	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	< 3	< 3
Sample Name:		FTL109 0-0.03m 16-Jul-2024	FTL110 0-0.03m 16-Jul-2024	FTL111 0-0.05m 16-Jul-2024	FTL112 0-0.03m 16-Jul-2024	FTL113 0-0.05m 16-Jul-2024
Lab Number:		3631528.121	3631528.124	3631528.127	3631528.129	3631528.131
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	3.2	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	2.9	< 0.15	< 0.15	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.10	0.44	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	14.3	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	16.7	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	24	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	21	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	32	< 0.24	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	32	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j]fluoranthene*	mg/kg as rcvd	< 0.10	26	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	10.6	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	11.9	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	10.4	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	21	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	2.9	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	72	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	9.5	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	14.4	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	3.2	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	5.7	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	58	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	56	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	380	< 3	< 3	< 3
Sample Name:		FTL114 0-0.3m 16-Jul-2024	FTL114 0.03-0.06m 16-Jul-2024	FTL115 0-0.05m 16-Jul-2024	FTL116 0-0.03m 16-Jul-2024	FTL117 0-0.03m 16-Jul-2024
Lab Number:		3631528.134	3631528.135	3631528.137	3631528.140	3631528.143
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	17.6	0.68	< 0.10	0.17
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	19.7	0.48	< 0.10	0.20
Acenaphthylene*	mg/kg as rcvd	< 0.10	5.7	0.11	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	65	2.8	< 0.10	< 0.10

Sample Type: Roading Material						
Sample Name:		FTL114 0-0.3m 16-Jul-2024	FTL114 0.03-0.06m 16-Jul-2024	FTL115 0-0.05m 16-Jul-2024	FTL116 0-0.03m 16-Jul-2024	FTL117 0-0.03m 16-Jul-2024
Lab Number:		3631528.134	3631528.135	3631528.137	3631528.140	3631528.143
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Anthracene*	mg/kg as rcvd	0.11	114	1.71	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	0.14	127	1.61	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	0.26	103	0.83	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	0.33	157	1.35	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	0.3	154	1.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	0.26	126	1.01	< 0.10	0.14
Benzo[e]pyrene*	mg/kg as rcvd	0.13	54	0.42	< 0.10	0.11
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.19	50	0.33	< 0.10	0.14
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	47	0.47	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	0.12	104	1.38	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	13.8	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	0.38	350	6.6	< 0.10	0.19
Fluorene*	mg/kg as rcvd	< 0.10	76	1.70	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	0.18	55	0.37	< 0.10	0.11
Naphthalene*	mg/kg as rcvd	< 0.5	24	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	26	0.16	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	0.34	340	5.1	< 0.10	0.13
Pyrene*	mg/kg as rcvd	0.32	280	5.1	< 0.10	0.16
Total of Reported PAHs*	mg/kg as rcvd	3	2,000	31	< 3	< 3
Sample Name:		FTL118 0-0.02m 16-Jul-2024	FTL119 0-0.03m 16-Jul-2024	FTL120 0-0.05m 16-Jul-2024	FTL121 0-0.05m 16-Jul-2024	FTL122 0-0.03m 16-Jul-2024
Lab Number:		3631528.146	3631528.149	3631528.151	3631528.153	3631528.156
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.15	< 0.10
Acenaphthylene*	mg/kg as rcvd	1.35	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	3.0	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	6.2	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	36	< 0.10	< 0.10	< 0.10	0.35
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	47	< 0.10	< 0.10	< 0.10	0.49
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	70	< 0.24	< 0.24	< 0.24	0.77
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	69	< 0.3	< 0.3	< 0.3	0.8
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	62	< 0.10	< 0.10	< 0.10	0.64
Benzo[e]pyrene*	mg/kg as rcvd	25	< 0.10	< 0.10	< 0.10	0.35
Benzo[g,h,i]perylene*	mg/kg as rcvd	27	< 0.10	< 0.10	< 0.10	0.44
Benzo[k]fluoranthene*	mg/kg as rcvd	24	< 0.10	< 0.10	< 0.10	0.24
Chrysene*	mg/kg as rcvd	38	< 0.10	< 0.10	< 0.10	0.45
Dibenzo[a,h]anthracene*	mg/kg as rcvd	6.4	< 0.10	< 0.10	< 0.10	0.10
Fluoranthene*	mg/kg as rcvd	81	< 0.10	< 0.10	< 0.10	0.89
Fluorene*	mg/kg as rcvd	1.18	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	32	< 0.10	< 0.10	< 0.10	0.41
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	13.7	< 0.10	< 0.10	< 0.10	0.15
Phenanthrene*	mg/kg as rcvd	19.1	< 0.10	< 0.10	< 0.10	0.30
Pyrene*	mg/kg as rcvd	85	< 0.10	< 0.10	< 0.10	0.87
Total of Reported PAHs*	mg/kg as rcvd	510	< 3	< 3	< 3	6

Sample Type: Roading Material						
Sample Name:		FTL123 0-0.02m 16-Jul-2024	FTL124 0-0.03m 16-Jul-2024	FTL125 0-0.02m 16-Jul-2024	FTL126 0-0.03m 16-Jul-2024	FTL127 0-0.03m 16-Jul-2024
Lab Number:		3631528.158	3631528.160	3631528.162	3631528.165	3631528.167
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.12	0.27
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.15	< 0.15	< 0.15	0.17
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	0.12	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	0.17	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	0.14	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	0.14	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	0.11	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	0.12	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	0.12	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	< 3	< 3
Sample Name:		FTL130 0-0.03m 16-Jul-2024	FTL131 0-0.03m 16-Jul-2024	FTL132 0-0.03m 16-Jul-2024	FTL133 0-0.04m 16-Jul-2024	FTL134 0-0.04m 16-Jul-2024
Lab Number:		3631528.170	3631528.173	3631528.176	3631528.179	3631528.182
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.17	< 0.10	0.36	8.8
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	9.3
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	1.21	0.18
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	9.8	14.2
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	20	14.6
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	63	8.4
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	65	3.2
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	99	5.8
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	98	5.4
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	80	4.4
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	38	1.65
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	39	1.12
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	28	2.1
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	50	7.4
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	10.7	0.43
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	156	38
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	4.7	12.9
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	44	1.50
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	10.0
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	16.0	0.61
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	77	82
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	161	24
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	860	240

Sample Type: Roading Material						
Sample Name:		FTL135 0-0.05m 16-Jul-2024	FTL136 0-0.05m 16-Jul-2024	FTL138 0-0.03m 16-Jul-2024	FTL139 0-0.04m 17-Jul-2024	FTL139 0-0.04m T 17-Jul-2024
Lab Number:		3631528.184	3631528.187	3631528.189	3631528.191	3631528.192
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.55	0.54
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.15	< 0.15	0.22	0.21
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	1.39	1.34
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	13.7	12.0
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	20	23
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	51	59
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	37	43
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	59	68
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	58	67
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	0.15	46	53
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	0.10	21	24
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.15	< 0.10	0.12	20	22
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	18.2	21
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	40	47
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	6.2	6.9
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	139	158
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	5.1	6.2
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	0.11	< 0.10	0.14	23	26
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	8.5	10.0
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	71	87
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	107	123
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	630	720
Sample Name:		FTL140 0-0.05m 17-Jul-2024	FTL141 0-0.04m 17-Jul-2024	FTL142 0-0.03m 17-Jul-2024	FTL142 0.1-0.15m 17-Jul-2024	FTL143 0-0.04m 17-Jul-2024
Lab Number:		3631528.195	3631528.198	3631528.201	3631528.203	3631528.205
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.37	0.57	26	4.0
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	0.23	0.57	20	3.2
Acenaphthylene*	mg/kg as rcvd	< 0.10	1.54	< 0.10	1.78	0.62
Acenaphthene*	mg/kg as rcvd	< 0.10	11.2	< 0.10	94	22
Anthracene*	mg/kg as rcvd	< 0.10	37	< 0.10	156	42
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	106	< 0.10	149	57
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	104	< 0.10	134	41
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	158	< 0.24	200	64
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	156	< 0.3	197	62
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	127	0.13	132	48
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	59	0.10	72	22
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	58	0.12	81	22
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	50	< 0.10	49	18.8
Chrysene*	mg/kg as rcvd	< 0.10	86	< 0.10	125	45
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	15.7	< 0.10	20	6.3
Fluoranthene*	mg/kg as rcvd	< 0.10	250	0.14	400	163
Fluorene*	mg/kg as rcvd	< 0.10	7.3	< 0.10	89	22
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	65	< 0.10	84	26
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	8.4	1.7
Perylene*	mg/kg as rcvd	< 0.10	26	< 0.10	32	9.7
Phenanthrene*	mg/kg as rcvd	< 0.10	108	0.17	490	160
Pyrene*	mg/kg as rcvd	< 0.10	230	0.14	410	121
Total of Reported PAHs*	mg/kg as rcvd	< 3	1,340	3	2,600	840

Sample Type: Roading Material						
Sample Name:		FTL144 0-0.03m 17-Jul-2024	FTL144 0.1-0.14m 17-Jul-2024	FTL145 0-0.04m 17-Jul-2024	FTL146 0-0.04m 17-Jul-2024	FTL147 0-0.03m 17-Jul-2024
Lab Number:		3631528.208	3631528.210	3631528.212	3631528.215	3631528.218
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.24	1.03	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	0.2	0.74	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	0.55	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	5.5	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	11.0	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	25	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	45	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	67	< 0.25	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	66	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	51	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	25	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.11	40	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	16.0	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	23	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	8.1	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	71	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	3.3	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	37	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	0.6	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	12.9	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	39	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	0.11	63	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	480	< 3	< 3	< 3

Sample Name:		FTL148 0-0.02m 17-Jul-2024	FTL148 0.02-0.05m 17-Jul-2024	FTL149 0-0.03m 17-Jul-2024	FTL149 0-0.03m 17-Jul-2024	FTL150 0-0.03m 17-Jul-2024
Lab Number:		3631528.221	3631528.222	3631528.224	3631528.225	3631528.230
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	0.11	< 0.10	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	0.22	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	0.85	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	2.2	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	11.9	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	27	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.25	39	< 0.23	< 0.25	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	39	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	29	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	16.8	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	25	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	9.5	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	11.8	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	4.4	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	26	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	0.45	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	22	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	7.5	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	6.1	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	30	< 0.10	< 0.10	< 0.10

Sample Type: Roading Material						
Sample Name:	FTL148 0-0.02m 17-Jul-2024	FTL148 0.02-0.05m 17-Jul-2024	FTL149 0-0.03m 17-Jul-2024	FTL149 0-0.03m 17-Jul-2024	FTL150 0-0.03m 17-Jul-2024	
Lab Number:	3631528.221	3631528.222	3631528.224	3631528.225	3631528.230	
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Total of Reported PAHs*	mg/kg as rcvd	< 3	230	< 3	< 3	< 3

Sample Name:	FTL151 0-0.04m 17-Jul-2024	FTL151 0.04-0.09m 17-Jul-2024	FTL152 0-0.05m 17-Jul-2024	FTL153 0-0.02m 17-Jul-2024	FTL153 0.02-0.07m 17-Jul-2024	
Lab Number:	3631528.233	3631528.234	3631528.236	3631528.239	3631528.240	
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.15	< 0.10	< 0.10	0.11
2-Methylnaphthalene*	mg/kg as rcvd	< 0.2	0.15	< 0.15	< 0.10	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.10	1.06	0.34	< 0.10	1.55
Acenaphthene*	mg/kg as rcvd	< 0.10	1.12	< 0.10	< 0.10	9.6
Anthracene*	mg/kg as rcvd	0.18	3.5	0.66	< 0.10	9.0
Benzo[a]anthracene*	mg/kg as rcvd	0.56	34	7.4	0.22	56
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	0.65	36	12.9	0.47	65
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	1.02	57	19.2	0.68	96
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	1.0	56	19.1	0.7	95
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	0.79	48	15.0	0.51	75
Benzo[e]pyrene*	mg/kg as rcvd	0.39	21	7.9	0.29	30
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.57	25	9.4	0.50	35
Benzo[k]fluoranthene*	mg/kg as rcvd	0.31	19.8	5.7	0.18	29
Chrysene*	mg/kg as rcvd	0.58	30	7.3	0.22	49
Dibenzo[a,h]anthracene*	mg/kg as rcvd	0.12	6.1	2.2	< 0.10	8.7
Fluoranthene*	mg/kg as rcvd	2.9	71	14.0	0.46	146
Fluorene*	mg/kg as rcvd	< 0.10	0.46	< 0.10	< 0.10	2.2
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	0.56	29	10.8	0.43	43
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	0.19	10.5	4.0	0.17	17.9
Phenanthrene*	mg/kg as rcvd	1.44	11.4	1.08	< 0.10	16.9
Pyrene*	mg/kg as rcvd	2.2	68	15.2	0.47	126
Total of Reported PAHs*	mg/kg as rcvd	12	420	114	4	720

Sample Name:	FTL154 0-0.04m 17-Jul-2024	FTL154 0.04-0.08m 17-Jul-2024	FTL155 0-0.06m 17-Jul-2024	FTL156 0-0.04m 17-Jul-2024	FTL157 0-0.04m 17-Jul-2024	
Lab Number:	3631528.242	3631528.243	3631528.245	3631528.247	3631528.250	
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.12	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.10	1.40	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	0.22	0.77	< 0.10	< 0.10	0.26
Anthracene*	mg/kg as rcvd	0.11	14.0	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	45	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	44	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	70	< 0.24	< 0.24	< 0.25
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	68	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	60	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	25	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	32	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	24	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	41	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	7.3	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	136	< 0.10	< 0.10	0.10

Sample Type: Roading Material						
Sample Name:		FTL154 0-0.04m 17-Jul-2024	FTL154 0.04-0.08m 17-Jul-2024	FTL155 0-0.06m 17-Jul-2024	FTL156 0-0.04m 17-Jul-2024	FTL157 0-0.04m 17-Jul-2024
Lab Number:		3631528.242	3631528.243	3631528.245	3631528.247	3631528.250
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Fluorene*	mg/kg as rcvd	< 0.10	0.42	< 0.10	< 0.10	0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	36	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	12.6	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	1.41	58	< 0.10	< 0.10	0.20
Pyrene*	mg/kg as rcvd	< 0.10	105	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	3	640	< 3	< 3	< 3

Sample Name:		FTL157 0.2-0.23m 17-Jul-2024	FTL158 0-0.04m 17-Jul-2024	FTL158 0.09-0.15m 17-Jul-2024	FTL159 0-0.04m 17-Jul-2024	FTL160 0-0.04m 17-Jul-2024
Lab Number:		3631528.252	3631528.254	3631528.256	3631528.260	3631528.262
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.77	< 0.08	4.4	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	0.52	< 0.08	4.2	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	0.11	< 0.08	0.90	< 0.10	0.29
Acenaphthene*	mg/kg as rcvd	9.6	< 0.08	24	< 0.10	2.3
Anthracene*	mg/kg as rcvd	8.4	< 0.08	32	< 0.10	2.9
Benzo[a]anthracene*	mg/kg as rcvd	10.9	< 0.08	50	< 0.10	14.7
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	7.3	< 0.08	39	< 0.10	16.5
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	11.4	< 0.19	61	< 0.24	25
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	11.0	< 0.19	60	< 0.3	25
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	9.0	< 0.08	47	< 0.10	20
Benzo[e]pyrene*	mg/kg as rcvd	3.4	< 0.08	21	< 0.10	9.4
Benzo[g,h,i]perylene*	mg/kg as rcvd	2.5	< 0.08	22	< 0.10	9.3
Benzo[k]fluoranthene*	mg/kg as rcvd	3.7	< 0.08	17.8	< 0.10	7.7
Chrysene*	mg/kg as rcvd	9.5	< 0.08	48	< 0.10	11.5
Dibenzo[a,h]anthracene*	mg/kg as rcvd	0.86	< 0.08	6.2	< 0.10	2.7
Fluoranthene*	mg/kg as rcvd	43	< 0.08	152	< 0.10	49
Fluorene*	mg/kg as rcvd	5.0	< 0.08	23	< 0.10	0.56
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	3.4	< 0.08	27	< 0.10	10.5
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.4	4.0	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	1.54	< 0.08	9.6	< 0.10	4.0
Phenanthrene*	mg/kg as rcvd	27	< 0.08	155	< 0.10	7.3
Pyrene*	mg/kg as rcvd	34	< 0.08	113	< 0.10	46
Total of Reported PAHs*	mg/kg as rcvd	181	< 1.9	800	< 3	220

Sample Name:		FTL160 0.09-0.14m 17-Jul-2024	FTL161 0-0.05m 17-Jul-2024	FTL162 0-0.03m 17-Jul-2024	FTL163 0-0.05m 17-Jul-2024	FTL164 0-0.04m 17-Jul-2024
Lab Number:		3631528.264	3631528.266	3631528.268	3631528.270	3631528.272
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	0.64	0.16	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	1.15	0.13	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	8.0	1.30	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	35	7.2	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	38	13.2	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	59	19.5	< 0.24	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	59	19.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	49	16.1	< 0.10	< 0.10	< 0.10

Sample Type: Roading Material						
Sample Name:		FTL160 0.09-0.14m 17-Jul-2024	FTL161 0-0.05m 17-Jul-2024	FTL162 0-0.03m 17-Jul-2024	FTL163 0-0.05m 17-Jul-2024	FTL164 0-0.04m 17-Jul-2024
Lab Number:		3631528.264	3631528.266	3631528.268	3631528.270	3631528.272
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Benzo[e]pyrene*	mg/kg as rcvd	22	7.9	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	25	9.4	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	18.5	5.2	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	28	6.1	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	6.7	2.2	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	84	16.3	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	0.98	0.15	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	28	10.0	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	10.2	3.6	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	22	2.6	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	65	14.3	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	440	116	< 3	< 3	< 3
Sample Name:		FTL165 0-0.04m 17-Jul-2024	FTL166 0-0.06m 17-Jul-2024	FTL167 0-0.04m 18-Jul-2024	FTL168 0-0.03m 18-Jul-2024	FTL168 0.15-0.2m 18-Jul-2024
Lab Number:		3631528.274	3631528.276	3631528.278	3631528.280	3631528.282
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	6.1	< 0.10	0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	5.1	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene*	mg/kg as rcvd	1.61	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	31	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	84	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	174	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	173	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	260	< 0.25	< 0.24	< 0.24	< 0.23
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	260	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	187	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	104	< 0.10	< 0.10	< 0.10	0.16
Benzo[g,h,i]perylene*	mg/kg as rcvd	108	< 0.10	< 0.10	< 0.10	0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	75	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	166	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	26	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	370	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	17.8	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	108	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	3.1	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	42	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	350	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	420	< 0.10	0.11	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	2,500	< 3	< 3	< 3	< 3
Sample Name:		FTL169 0-0.03m 18-Jul-2024	FTL170 0-0.04m 18-Jul-2024	FTL171 0-0.04m 18-Jul-2024	FTL172 0-0.03m 18-Jul-2024	FTL173 0-0.03m 18-Jul-2024
Lab Number:		3631528.284	3631528.286	3631528.289	3631528.292	3631528.295
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.28	< 0.10	0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	0.27	< 0.10	0.16	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Sample Type: Roading Material						
Sample Name:		FTL169 0-0.03m 18-Jul-2024	FTL170 0-0.04m 18-Jul-2024	FTL171 0-0.04m 18-Jul-2024	FTL172 0-0.03m 18-Jul-2024	FTL173 0-0.03m 18-Jul-2024
Lab Number:		3631528.284	3631528.286	3631528.289	3631528.292	3631528.295
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	< 0.25	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	0.26	< 0.10	0.15	< 0.10
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.11	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	< 3	< 3
Sample Name:		FTL174 0-0.05m 18-Jul-2024	FTL175 0-0.03m 18-Jul-2024	FTL176 0-0.05m 18-Jul-2024	FTL176 0.35-0.45m 18-Jul-2024	FTL177 0-0.03m 18-Jul-2024
Lab Number:		3631528.297	3631528.299	3631528.301	3631528.303	3631528.304
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.25	< 0.10	< 0.10	< 0.10	0.11
2-Methylnaphthalene*	mg/kg as rcvd	< 0.2	< 0.15	< 0.10	< 0.15	0.15
Acenaphthylene*	mg/kg as rcvd	0.11	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	2.7	< 0.10	< 0.10	< 0.10	0.29
Anthracene*	mg/kg as rcvd	3.1	< 0.10	0.11	< 0.10	0.36
Benzo[a]anthracene*	mg/kg as rcvd	7.6	< 0.10	0.70	< 0.10	1.33
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	5.2	< 0.10	1.37	< 0.10	1.94
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	8.5	< 0.24	2.2	< 0.24	3.1
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	8.2	< 0.3	2.2	< 0.3	3.1
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	7.5	< 0.10	1.92	< 0.10	2.7
Benzo[e]pyrene*	mg/kg as rcvd	3.1	< 0.10	1.18	< 0.10	1.56
Benzo[g,h,i]perylene*	mg/kg as rcvd	2.5	< 0.10	1.52	< 0.10	2.3
Benzo[k]fluoranthene*	mg/kg as rcvd	2.9	< 0.10	0.76	< 0.10	0.95
Chrysene*	mg/kg as rcvd	7.8	< 0.10	0.71	< 0.10	1.37
Dibenzo[a,h]anthracene*	mg/kg as rcvd	0.80	< 0.10	0.32	< 0.10	0.42
Fluoranthene*	mg/kg as rcvd	27	< 0.10	0.93	0.14	3.4
Fluorene*	mg/kg as rcvd	1.20	< 0.10	< 0.10	< 0.10	0.15
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	3.3	< 0.10	1.42	< 0.10	1.91
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	1.01	< 0.10	0.40	< 0.10	0.55
Phenanthrene*	mg/kg as rcvd	11.6	< 0.10	0.16	0.22	1.11
Pyrene*	mg/kg as rcvd	24	< 0.10	1.02	0.10	2.5
Total of Reported PAHs*	mg/kg as rcvd	111	< 3	13	< 3	23
Sample Name:		FTL178 0-0.04m 18-Jul-2024	FTL179 0-0.03m 18-Jul-2024	FTL180 0-0.02m 18-Jul-2024	FTL181 0-0.03m 18-Jul-2024	FTL182 0-0.04m 18-Jul-2024
Lab Number:		3631528.306	3631528.308	3631528.311	3631528.314	3631528.316
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.52	< 0.10	0.40	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	0.37	< 0.15	0.30	< 0.10	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Sample Type: Roading Material						
Sample Name:		FTL178 0-0.04m 18-Jul-2024	FTL179 0-0.03m 18-Jul-2024	FTL180 0-0.02m 18-Jul-2024	FTL181 0-0.03m 18-Jul-2024	FTL182 0-0.04m 18-Jul-2024
Lab Number:		3631528.306	3631528.308	3631528.311	3631528.314	3631528.316
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Acenaphthene*	mg/kg as rcvd	0.13	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.33
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.72
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.70
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	< 0.24	1.17
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	1.2
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	0.11	< 0.10	< 0.10	< 0.10	1.06
Benzo[e]pyrene*	mg/kg as rcvd	0.12	< 0.10	< 0.10	< 0.10	0.62
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.65
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.38
Chrysene*	mg/kg as rcvd	0.17	< 0.10	< 0.10	< 0.10	0.76
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.17
Fluoranthene*	mg/kg as rcvd	0.16	< 0.10	< 0.10	< 0.10	2.2
Fluorene*	mg/kg as rcvd	0.12	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.62
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	0.18	< 0.10	< 0.10	< 0.10	0.23
Phenanthrene*	mg/kg as rcvd	0.71	< 0.10	0.11	< 0.10	1.59
Pyrene*	mg/kg as rcvd	0.25	< 0.10	< 0.10	< 0.10	1.68
Total of Reported PAHs*	mg/kg as rcvd	3	< 3	< 3	< 3	12

Sample Name:		FTL183 0-0.05m 18-Jul-2024	FTL184 0-0.04m 18-Jul-2024	FTL185 0-0.02m 18-Jul-2024	FTL186 0-0.03m 18-Jul-2024	FTL187 0-0.02m 18-Jul-2024
Lab Number:		3631528.318	3631528.321	3631528.324	3631528.326	3631528.329
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.09	0.58	< 0.10	0.16	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.09	0.3	< 0.15	< 0.10	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.09	0.12	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.09	0.25	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	0.22	0.17	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	0.33	0.32	< 0.24	< 0.25	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	0.3	0.3	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	0.29	0.22	< 0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	0.27	0.27	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.36	0.22	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.09	0.36	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.09	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	0.18	0.62	< 0.10	< 0.10	< 0.10
Fluorene*	mg/kg as rcvd	< 0.09	0.19	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	0.24	0.11	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.09	0.41	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.09	1.35	< 0.10	< 0.10	< 0.10
Pyrene*	mg/kg as rcvd	0.28	0.66	< 0.10	< 0.10	< 0.10
Total of Reported PAHs*	mg/kg as rcvd	2	6	< 3	< 3	< 3

Sample Type: Roading Material						
Sample Name:		FTL188 0-0.02m 18-Jul-2024	FTL189 0-0.05m 18-Jul-2024	FTL189 0.12-0.17m 18-Jul-2024	FTL190 0-0.06m 18-Jul-2024	FTL190 0.13-0.16m 18-Jul-2024
Lab Number:		3631528.331	3631528.335	3631528.337	3631528.339	3631528.341
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.55	1.10	< 0.10	0.20
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	0.27	0.61	< 0.2	< 0.10
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	0.19	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	0.15	0.38	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	0.14	0.22	2.6	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	0.18	0.54	5.6	0.16
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	0.19	0.53	< 0.10	0.21
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	0.32	0.87	0.65	0.34
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	0.3	0.9	0.6	0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	0.24	0.76	< 0.10	0.23
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	0.26	0.57	< 0.10	0.27
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	0.22	0.49	0.10	0.23
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	0.22	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	< 0.10	0.24	0.63	< 0.10	0.21
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	0.12	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	0.58	1.83	0.18	0.21
Fluorene*	mg/kg as rcvd	< 0.10	0.21	0.51	0.51	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	0.17	0.41	< 0.10	0.17
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	0.11	0.26	< 0.10	0.13
Phenanthrene*	mg/kg as rcvd	< 0.10	1.02	2.6	0.30	0.28
Pyrene*	mg/kg as rcvd	< 0.10	0.45	1.54	0.17	0.32
Total of Reported PAHs*	mg/kg as rcvd	< 3	5	14	10	3
Sample Name:		FTL191 0-0.02m 18-Jul-2024	FTL191 0.2-0.24m 18-Jul-2024	FTL192 0-0.03m 18-Jul-2024	FTL193 0-0.02m 18-Jul-2024	FTL193 0.02-0.05m 18-Jul-2024
Lab Number:		3631528.343	3631528.345	3631528.347	3631528.349	3631528.350
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	10.5	0.12	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	11.6	0.16	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	1.33	< 0.10	< 0.10	1.73
Acenaphthene*	mg/kg as rcvd	< 0.10	48	< 0.10	< 0.10	0.53
Anthracene*	mg/kg as rcvd	< 0.10	58	< 0.10	0.17	3.4
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	71	0.11	1.97	45
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	55	0.20	1.08	63
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	87	0.26	1.87	95
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	85	0.3	1.8	94
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	68	0.25	1.71	78
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	30	0.17	0.64	35
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	31	0.16	0.57	45
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	26	< 0.10	0.75	29
Chrysene*	mg/kg as rcvd	< 0.10	67	0.13	1.99	42
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	8.7	< 0.10	0.17	10.0
Fluoranthene*	mg/kg as rcvd	< 0.10	240	0.23	8.5	78
Fluorene*	mg/kg as rcvd	< 0.10	45	< 0.10	< 0.10	0.34
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	37	0.14	0.75	51
Naphthalene*	mg/kg as rcvd	< 0.5	15.8	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	14.1	< 0.10	0.24	19.4
Phenanthrene*	mg/kg as rcvd	< 0.10	250	< 0.10	1.79	5.9
Pyrene*	mg/kg as rcvd	< 0.10	164	0.30	7.2	85

Sample Type: Roading Material						
Sample Name:		FTL191 0-0.02m 18-Jul-2024	FTL191 0.2-0.24m 18-Jul-2024	FTL192 0-0.03m 18-Jul-2024	FTL193 0-0.02m 18-Jul-2024	FTL193 0.02-0.05m 18-Jul-2024
Lab Number:		3631528.343	3631528.345	3631528.347	3631528.349	3631528.350
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Total of Reported PAHs* mg/kg as rcvd		< 3	1,250	< 3	28	590
Sample Name:		1.FTL194 0-0.03m 19-Jul-2024	2.FTL194 0-0.03m 19-Jul-2024	3.FTL194 0-0.03m 19-Jul-2024	1.FTL195 0-0.05m 19-Jul-2024	2.FTL195 0-0.05m 19-Jul-2024
Lab Number:		3631528.352	3631528.353	3631528.354	3631528.361	3631528.362
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.15
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.12
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.27
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.28
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.24	< 0.24	< 0.24	< 0.24	0.44
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	< 0.3	0.4
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.41
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.22
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.23
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.14
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.21
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.84
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.23
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	0.54
Pyrene*	mg/kg as rcvd	0.13	0.16	0.15	< 0.10	0.76
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	< 3	5
Sample Name:		3.FTL195 0-0.05m 19-Jul-2024	FTL196 0-0.05m 19-Jul-2024	1.FTL197 0.03-0.06m 19-Jul-2024	2.FTL197 0.03-0.06m 19-Jul-2024	3.FTL197 0.03-0.06m 19-Jul-2024
Lab Number:		3631528.363	3631528.364	3631528.367	3631528.368	3631528.369
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.14	< 0.10	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	0.17	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	0.16	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	0.13	0.27	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	0.15	0.23	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	0.25	0.37	< 0.24	< 0.24	< 0.24
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	0.2	0.4	< 0.3	< 0.3	< 0.3
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	0.22	0.38	0.10	< 0.10	< 0.10
Benzo[e]pyrene*	mg/kg as rcvd	0.13	0.22	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene*	mg/kg as rcvd	0.16	0.20	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	0.11	< 0.10	< 0.10	< 0.10
Chrysene*	mg/kg as rcvd	0.11	0.30	< 0.10	< 0.10	< 0.10
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	0.51	1.05	< 0.10	< 0.10	0.20

Sample Type: Roading Material						
Sample Name:		3.FTL195 0-0.05m 19-Jul-2024	FTL196 0-0.05m 19-Jul-2024	1.FTL197 0.03-0.06m 19-Jul-2024	2.FTL197 0.03-0.06m 19-Jul-2024	3.FTL197 0.03-0.06m 19-Jul-2024
Lab Number:		3631528.363	3631528.364	3631528.367	3631528.368	3631528.369
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Fluorene*	mg/kg as rcvd	0.17	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	0.15	0.19	< 0.10	< 0.10	< 0.10
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene*	mg/kg as rcvd	0.64	0.75	< 0.10	0.10	0.31
Pyrene*	mg/kg as rcvd	0.47	0.84	0.13	< 0.10	0.26
Total of Reported PAHs*	mg/kg as rcvd	4	5	< 3	< 3	< 3

Analyst's Comments

Amended Report: This certificate of analysis replaces report '3631528-SPv2' issued on 12-Aug-2024 at 1:17 pm.
Reason for amendment: Sample names amended as per clients request.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Total of Reported PAHs in Soil	Sonication extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.03 mg/kg dry wt	2, 4, 6, 8, 10, 12, 14, 18, 20, 22, 24, 26, 28, 30, 32, 34-35, 37, 39, 41-43, 45, 47, 50, 52, 54, 56, 59, 62, 64, 66, 68, 70, 75, 77-78, 80-81, 83-84, 86, 88, 90, 92, 94-96, 98, 100, 102-103, 105-106, 108-110, 112-114, 116-117, 119-120, 122-123, 125-126, 128, 130, 132-133, 136, 138-139, 141-142, 144-145, 147-148, 150, 152, 154-155, 157, 159, 161, 163-164, 166, 168-169, 171-172, 174-175, 177-178, 180-181, 183, 185-186, 188, 190, 193-194, 196-197, 199-200,

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
			202, 204, 206-207, 209, 211, 213-214, 216-217, 219-220, 223, 226-229, 231-232, 235, 237-238, 241, 244, 246, 248-249, 251, 253, 255, 257-259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287-288, 290-291, 293-294, 296, 298, 300, 302, 305, 307, 309-310, 312-313, 315, 317, 319-320, 322-323, 325, 327-328, 330, 332-334, 336, 338, 340, 342, 344, 346, 348, 351, 355-360, 365-366

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Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Polycyclic Aromatic Hydrocarbons Screening in Soil*	Sonication extraction, GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8270.	0.010 - 0.05 mg/kg dry wt	2, 4, 6, 8, 10, 12, 14, 18, 20, 22, 24, 26, 28, 30, 32, 34-35, 37, 39, 41-43, 45, 47, 50, 52, 54, 56, 59, 62, 64, 66, 68, 70, 75, 77-78, 80-81, 83-84, 86, 88, 90, 92, 94-96, 98, 100, 102-103, 105-106, 108-110, 112-114, 116-117, 119-120, 122-123, 125-126, 128, 130, 132-133, 136, 138-139, 141-142, 144-145, 147-148, 150, 152, 154-155, 157, 159, 161, 163-164, 166, 168-169, 171-172, 174-175, 177-178, 180-181, 183, 185-186, 188, 190, 193-194, 196-197, 199-200, 202, 204, 206-207, 209, 211, 213-214, 216-217, 219-220, 223, 226-229, 231-232, 235, 237-238, 241, 244, 246, 248-249, 251, 253, 255, 257-259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287-288, 290-291, 293-294,

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
			296, 298, 300, 302, 305, 307, 309-310, 312-313, 315, 317, 319-320, 322-323, 325, 327-328, 330, 332-334, 336, 338, 340, 342, 344, 346, 348, 351, 355-360, 365-366

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Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	2, 4, 6, 8, 10, 12, 14, 18, 20, 22, 24, 26, 28, 30, 32, 34-35, 37, 39, 41-43, 45, 47, 50, 52, 54, 56, 59, 62, 64, 66, 68, 70, 75, 77-78, 80-81, 83-84, 86, 88, 90, 92, 94-96, 98, 100, 102-103, 105-106, 108-110, 112-114, 116-117, 119-120, 122-123, 125-126, 128, 130, 132-133, 136, 138-139, 141-142, 144-145, 147-148, 150, 152, 154-155, 157, 159, 161, 163-164, 166, 168-169, 171-172, 174-175, 177-178, 180-181, 183, 185-186, 188, 190, 193-194, 196-197, 199-200, 202, 204, 206-207, 209, 211, 213-214, 216-217, 219-220, 223, 226-229, 231-232, 235, 237-238, 241, 244, 246, 248-249, 251, 253, 255, 257-259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287-288, 290-291, 293-294,

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
			296, 298, 300, 302, 305, 307, 309-310, 312-313, 315, 317, 319-320, 322-323, 325, 327-328, 330, 332-334, 336, 338, 340, 342, 344, 346, 348, 351, 355-360, 365-366

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Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	BaP Potency Equivalence calculated from; Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(j)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Benzo(a)pyrene x 1.0 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Fluoranthene x 0.01 + Indeno(1,2,3-c,d)pyrene x 0.1. Ministry for the Environment. 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.	0.024 mg/kg dry wt	2, 4, 6, 8, 10, 12, 14, 18, 20, 22, 24, 26, 28, 30, 32, 34-35, 37, 39, 41-43, 45, 47, 50, 52, 54, 56, 59, 62, 64, 66, 68, 70, 75, 77-78, 80-81, 83-84, 86, 88, 90, 92, 94-96, 98, 100, 102-103, 105-106, 108-110, 112-114, 116-117, 119-120, 122-123, 125-126, 128, 130, 132-133, 136, 138-139, 141-142, 144-145, 147-148, 150, 152, 154-155, 157, 159, 161, 163-164, 166, 168-169, 171-172, 174-175, 177-178, 180-181, 183, 185-186, 188, 190, 193-194, 196-197, 199-200, 202, 204, 206-207, 209, 211, 213-214, 216-217, 219-220, 223, 226-229, 231-232, 235, 237-238, 241, 244, 246, 248-249, 251, 253, 255, 257-259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287-288, 290-291, 293-294,

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
			296, 298, 300, 302, 305, 307, 309-310, 312-313, 315, 317, 319-320, 322-323, 325, 327-328, 330, 332-334, 336, 338, 340, 342, 344, 346, 348, 351, 355-360, 365-366

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Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Benzo[a]pyrene Toxic Equivalence (TEF)*	Benzo[a]pyrene Toxic Equivalence (TEF) calculated from; Benzo[a]pyrene x 1.0 + Benzo(a)anthracene x 0.1 + Benzo(b)fluoranthene x 0.1 + Benzo(k)fluoranthene x 0.1 + Chrysene x 0.01 + Dibenzo(a,h)anthracene x 1.0 + Indeno(1,2,3-c,d)pyrene x 0.1. Guidelines for assessing and managing contaminated gasworks sites in New Zealand (GMG) (MfE, 1997).	0.024 mg/kg dry wt	2, 4, 6, 8, 10, 12, 14, 18, 20, 22, 24, 26, 28, 30, 32, 34-35, 37, 39, 41-43, 45, 47, 50, 52, 54, 56, 59, 62, 64, 66, 68, 70, 75, 77-78, 80-81, 83-84, 86, 88, 90, 92, 94-96, 98, 100, 102-103, 105-106, 108-110, 112-114, 116-117, 119-120, 122-123, 125-126, 128, 130, 132-133, 136, 138-139, 141-142, 144-145, 147-148, 150, 152, 154-155, 157, 159, 161, 163-164, 166, 168-169, 171-172, 174-175, 177-178, 180-181, 183, 185-186, 188, 190, 193-194, 196-197, 199-200, 202, 204, 206-207, 209, 211, 213-214, 216-217, 219-220, 223, 226-229, 231-232, 235, 237-238, 241, 244, 246, 248-249, 251, 253, 255, 257-259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287-288, 290-291, 293-294,

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
			296, 298, 300, 302, 305, 307, 309-310, 312-313, 315, 317, 319-320, 322-323, 325, 327-328, 330, 332-334, 336, 338, 340, 342, 344, 346, 348, 351, 355-360, 365-366
Sample Type: Roadway Material			
Test	Method Description	Default Detection Limit	Sample No

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Sample Type: Roding Material			
Test	Method Description	Default Detection Limit	Sample No
SHOC Macro Extraction 10x Dilution*		-	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 36, 38, 40, 44, 46, 48-49, 51, 53, 55, 57-58, 60-61, 63, 65, 67, 69, 71-74, 76, 79, 82, 85, 87, 89, 91, 93, 97, 99, 101, 104, 107, 111, 115, 118, 121, 124, 127, 129, 131, 134-135, 137, 140, 143, 146, 149, 151, 153, 156, 158, 160, 162, 165, 167, 170, 173, 176, 179, 182, 184, 187, 189, 191-192, 195, 198, 201, 203, 205, 208, 210, 212, 215, 218, 221-222, 224-225, 230, 233-234, 236, 239-240, 242-243, 245, 247, 250, 252, 254, 256, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 289, 292, 295, 297, 299, 301, 303-304, 306, 308, 311, 314, 316, 318, 321, 324, 326, 329, 331, 335, 337, 339, 341, 343, 345, 347, 349-350, 352-354, 361-364, 367-369

Sample Type: Roadway Material			
Test	Method Description	Default Detection Limit	Sample No
Polycyclic Aromatic Hydrocarbons Screening in Rock*	Sonication extraction, GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8270.	0.002 - 0.3 mg/kg as rcvd	1, 3, 5, 7, 9, 11, 13, 15-17, 19, 21, 23, 25, 27, 29, 31, 33, 36, 38, 40, 44, 46, 48-49, 51, 53, 55, 57-58, 60-61, 63, 65, 67, 69, 71-74, 76, 79, 82, 85, 87, 89, 91, 93, 97, 99, 101, 104, 107, 111, 115, 118, 121, 124, 127, 129, 131, 134-135, 137, 140, 143, 146, 149, 151, 153, 156, 158, 160, 162, 165, 167, 170, 173, 176, 179, 182, 184, 187, 189, 191-192, 195, 198, 201, 203, 205, 208, 210, 212, 215, 218, 221-222, 224-225, 230, 233-234, 236, 239-240, 242-243, 245, 247, 250, 252, 254, 256, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 289, 292, 295, 297, 299, 301, 303-304, 306, 308, 311, 314, 316, 318, 321, 324, 326, 329, 331, 335, 337, 339, 341, 343, 345, 347, 349-350, 352-354, 361-364, 367-369

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 23-Jul-2024 and 12-Aug-2024. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

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Ara Heron BSc (Tech)
Client Services Manager - Environmental

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Certificate of Analysis

Page 1 of 4

Client:	Fraser Thomas Limited	Lab No:	3574957	SPV2
Contact:	Elliot Bish	Date Received:	09-May-2024	
	C/- Fraser Thomas Limited	Date Reported:	30-Sep-2024	(Amended)
	PO Box 204006	Quote No:	130949	
	Highbrook	Order No:	001110	
	Auckland 2161	Client Reference:	33097	
		Submitted By:	Ben Laing-McConnell	

Sample Type: Aqueous

Sample Name:	FTL06 0.1m [TCLP Extract]	FTL06 0.2m [TCLP Extract]	FTL14 0.1m [TCLP Extract]	FTL22 0.1m [TCLP Extract]	
Lab Number:	3574957.17	3574957.18	3574957.19	3574957.20	
Polycyclic Aromatic Hydrocarbons Screening in Water, By Liq/Liq*					
Acenaphthene*	g/m³	0.0135	0.0026	0.0191	0.00114
Acenaphthylene*	g/m³	0.00015	< 0.00010	0.00042	< 0.00010
Anthracene*	g/m³	0.0042	0.0021	0.0060	0.00064
Benzo[a]anthracene*	g/m³	0.00036	0.00031	0.00040	0.00020
Benzo[a]pyrene (BAP)*	g/m³	< 0.00010	0.00013	< 0.00010	< 0.00010
Benzo[b]fluoranthene + Benzo[j]fluoranthene*	g/m³	0.00010	0.00016	< 0.00010	< 0.00010
Benzo[g,h,i]perylene*	g/m³	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo[k]fluoranthene*	g/m³	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene*	g/m³	0.00028	0.00021	0.00031	0.00016
Dibenzo[a,h]anthracene*	g/m³	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene*	g/m³	0.0060	0.0033	0.0067	0.0024
Fluorene*	g/m³	0.0054	0.0013	0.0129	0.0002
Indeno(1,2,3-c,d)pyrene*	g/m³	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Naphthalene*	g/m³	0.0010	< 0.0005	0.0089	< 0.0005
Phenanthrene*	g/m³	0.0171	0.0069	0.026	0.0027
Pyrene*	g/m³	0.0046	0.0026	0.0048	0.0021

Sample Type: Roading Material

Sample Name:		FTL01 0.1m 01-May-2024	FTL01 0.3m 01-May-2024	FTL02 0.1m 01-May-2024	FTL06 0.1m 01-May-2024	FTL06 0.2m 01-May-2024
Lab Number:		3574957.1	3574957.2	3574957.3	3574957.4	3574957.5
Individual Tests						
TCLP Weight of Sample Taken	g	-	-	-	50	50
TCLP Initial Sample pH	pH Units	-	-	-	-	7.1
TCLP Acid Adjusted Sample pH	pH Units	-	-	-	-	1.5
TCLP Extractant Type*		-	-	-	Acetic acid solution at pH 2.88 +/- 0.05	NaOH/Acetic acid at pH 4.93 +/- 0.05
TCLP Extraction Fluid pH	pH Units	-	-	-	2.9	5.0
TCLP Post Extraction Sample pH	pH Units	-	-	-	2.9	5.0
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	0.17	1.58	0.83
2-Methylnaphthalene*	mg/kg as rcvd	< 0.10	< 0.10	0.13	0.89	0.48
Acenaphthylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	1.58	3.5
Acenaphthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	20	11.0
Anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	28	32
Benzo[a]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	59	103
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	49	101



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Sample Type: Roading Material						
Sample Name:		FTL01 0.1m 01-May-2024	FTL01 0.3m 01-May-2024	FTL02 0.1m 01-May-2024	FTL06 0.1m 01-May-2024	FTL06 0.2m 01-May-2024
Lab Number:		3574957.1	3574957.2	3574957.3	3574957.4	3574957.5
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	< 0.25	< 0.24	< 0.24	75	152
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	< 0.3	< 0.3	< 0.3	73	150
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	58	117
Benzo[e]pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	26	54
Benzo[g,h,i]perylene*	mg/kg as rcvd	< 0.10	< 0.10	0.12	24	53
Benzo[k]fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	24	44
Chrysene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	49	85
Dibenzo[a,h]anthracene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	6.9	14.9
Fluoranthene*	mg/kg as rcvd	< 0.10	< 0.10	0.10	144	220
Fluorene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	13.4	8.4
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	28	61
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	0.6	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	< 0.10	< 0.10	< 0.10	10.6	24
Phenanthrene*	mg/kg as rcvd	< 0.10	< 0.10	0.10	94	90
Pyrene*	mg/kg as rcvd	< 0.10	< 0.10	0.10	134	200
Total of Reported PAHs*	mg/kg as rcvd	< 3	< 3	< 3	770	1,220
Sample Name:		FTL14 0.1m 01-May-2024	FTL14 0.3m 01-May-2024	FTL20 0.4m 01-May-2024	FTL22 0.1m 01-May-2024	FTL22 0.2m 01-May-2024
Lab Number:		3574957.6	3574957.7	3574957.8	3574957.9	3574957.10
Individual Tests						
TCLP Weight of Sample Taken	g	50	-	-	50	-
TCLP Extractant Type*		Acetic acid solution at pH 2.88 +/- 0.05	-	-	Acetic acid solution at pH 2.88 +/- 0.05	-
TCLP Extraction Fluid pH	pH Units	2.9	-	-	2.9	-
TCLP Post Extraction Sample pH	pH Units	3.2	-	-	3.0	-
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	24	0.14	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	36	0.12	< 0.10	< 0.10	< 0.10
Acenaphthylene*	mg/kg as rcvd	3.9	< 0.10	< 0.10	1.42	0.32
Acenaphthene*	mg/kg as rcvd	67	0.22	< 0.10	0.80	0.42
Anthracene*	mg/kg as rcvd	102	0.25	< 0.10	6.6	2.1
Benzo[a]anthracene*	mg/kg as rcvd	90	0.20	0.11	71	15.6
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	72	0.20	0.23	106	22
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	111	0.31	0.38	155	32
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	108	0.3	0.4	154	32
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	85	0.22	0.23	123	26
Benzo[e]pyrene*	mg/kg as rcvd	38	0.11	0.27	61	12.7
Benzo[g,h,i]perylene*	mg/kg as rcvd	38	0.11	0.25	64	13.0
Benzo[k]fluoranthene*	mg/kg as rcvd	33	< 0.10	< 0.10	45	9.4
Chrysene*	mg/kg as rcvd	72	0.18	0.11	64	14.0
Dibenzo[a,h]anthracene*	mg/kg as rcvd	10.0	< 0.10	< 0.10	16.4	3.2
Fluoranthene*	mg/kg as rcvd	250	0.63	0.18	89	27
Fluorene*	mg/kg as rcvd	80	0.23	< 0.10	0.40	0.17
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	42	0.13	0.25	71	14.4
Naphthalene*	mg/kg as rcvd	50	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	17.1	< 0.10	0.11	28	5.0
Phenanthrene*	mg/kg as rcvd	320	0.81	< 0.10	13.9	4.2
Pyrene*	mg/kg as rcvd	198	0.50	0.28	111	35
Total of Reported PAHs*	mg/kg as rcvd	1,630	4	< 3	870	200

Sample Type: Roading Material						
Sample Name:		FTL27 0.1m 01-May-2024	FTL27 0.2m 01-May-2024	FTL29 0.1m 01-May-2024	FTL29 0.3m 01-May-2024	FTL30 0.1m 01-May-2024
Lab Number:		3574957.11	3574957.12	3574957.13	3574957.14	3574957.15
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	0.22	0.14	< 0.10	< 0.10	< 0.10
2-Methylnaphthalene*	mg/kg as rcvd	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene*	mg/kg as rcvd	1.62	0.13	0.83	< 0.10	< 0.10
Acenaphthene*	mg/kg as rcvd	4.3	0.71	0.73	< 0.10	< 0.10
Anthracene*	mg/kg as rcvd	10.4	1.14	3.2	< 0.10	< 0.10
Benzo[a]anthracene*	mg/kg as rcvd	49	3.8	16.3	< 0.10	0.16
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	61	4.5	19.1	< 0.10	0.42
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	90	6.8	28	< 0.24	0.64
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	89	6.7	28	< 0.3	0.6
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	72	5.4	21	< 0.10	0.51
Benzo[e]pyrene*	mg/kg as rcvd	31	2.4	10.6	< 0.10	0.31
Benzo[g,h,i]perylene*	mg/kg as rcvd	37	3.0	11.7	< 0.10	0.54
Benzo[k]fluoranthene*	mg/kg as rcvd	27	2.3	8.6	< 0.10	0.18
Chrysene*	mg/kg as rcvd	47	3.8	15.2	< 0.10	0.16
Dibenzo[a,h]anthracene*	mg/kg as rcvd	8.5	0.67	2.6	< 0.10	< 0.10
Fluoranthene*	mg/kg as rcvd	111	8.6	37	< 0.10	0.30
Fluorene*	mg/kg as rcvd	1.92	0.27	0.38	< 0.10	< 0.10
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	44	3.4	12.2	< 0.10	0.40
Naphthalene*	mg/kg as rcvd	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Perylene*	mg/kg as rcvd	16.9	1.30	4.8	< 0.10	0.13
Phenanthrene*	mg/kg as rcvd	24	3.3	9.8	< 0.10	0.11
Pyrene*	mg/kg as rcvd	125	8.8	37	< 0.10	0.31
Total of Reported PAHs*	mg/kg as rcvd	670	54	210	< 3	4
Sample Name:		FTL30 0.2m 01-May-2024				
Lab Number:		3574957.16				
Polycyclic Aromatic Hydrocarbons Screening in Rock*						
1-Methylnaphthalene*	mg/kg as rcvd	1.90				
2-Methylnaphthalene*	mg/kg as rcvd	1.96				
Acenaphthylene*	mg/kg as rcvd	0.31				
Acenaphthene*	mg/kg as rcvd	13.4				
Anthracene*	mg/kg as rcvd	17.1				
Benzo[a]anthracene*	mg/kg as rcvd	19.1				
Benzo[a]pyrene (BAP)*	mg/kg as rcvd	18.6				
Benzo[a]pyrene Potency Equivalency Factor (PEF) NES*	mg/kg as rcvd	28				
Benzo[a]pyrene Toxic Equivalence (TEF)*	mg/kg as rcvd	28				
Benzo[b]fluoranthene + Benzo[j] fluoranthene*	mg/kg as rcvd	22				
Benzo[e]pyrene*	mg/kg as rcvd	9.9				
Benzo[g,h,i]perylene*	mg/kg as rcvd	10.4				
Benzo[k]fluoranthene*	mg/kg as rcvd	8.0				
Chrysene*	mg/kg as rcvd	16.1				
Dibenzo[a,h]anthracene*	mg/kg as rcvd	2.8				
Fluoranthene*	mg/kg as rcvd	54				
Fluorene*	mg/kg as rcvd	11.7				
Indeno(1,2,3-c,d)pyrene*	mg/kg as rcvd	12.0				
Naphthalene*	mg/kg as rcvd	1.5				
Perylene*	mg/kg as rcvd	4.2				
Phenanthrene*	mg/kg as rcvd	52				
Pyrene*	mg/kg as rcvd	47				
Total of Reported PAHs*	mg/kg as rcvd	320				

Analyst's Comments

Carbon particulates were observed in the matrix of samples 3574957.1 & .14 and this has absorbed some of the System Monitoring Compounds in the PAH analysis, whereby the recovery for Benzo[a]pyrene-d12 was 68% and 60% respectively. Therefore the results presented for these analytes may not represent the actual concentration in the samples.

Amended Report: This certificate of analysis replaces report '3574957-SPv1' issued on 14-May-2024 at 11:11 am.
Reason for amendment: Additional testing added as per clients request.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Aqueous

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Polycyclic Aromatic Hydrocarbons Screening in Water, By Liq/Liq*	Liquid / liquid extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.00010 - 0.0005 g/m ³	17-20

Sample Type: Roading Material

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
SHOC Macro Extraction 10x Dilution*		-	1-16
TCLP Initial Sample pH	pH meter. US EPA 1311.	0.1 pH Units	5
TCLP Acid Adjusted Sample pH	pH meter. US EPA 1311.	0.1 pH Units	5
Polycyclic Aromatic Hydrocarbons Screening in Rock*	Sonication extraction, GC-MS/MS analysis. Tested on as received sample. In-house based on US EPA 8270.	0.002 - 0.3 mg/kg as rcvd	1-16
TCLP Profile*	Extraction at 30 +/- 2 rpm for 18 +/- 2 hours, (Ratio 1g sample : 20g extraction fluid). US EPA 1311. Please note: Due to the nature of the sample matrix the initial pH of the sample was not measured. The TCLP extraction was performed using TCLP Extraction Fluid 2 (Acetic acid solution at pH 2.88 +/- 0.05) based on previous experience with this sample type..	-	4-6, 9
TCLP Profile			
TCLP Weight of Sample Taken	Gravimetric. US EPA 1311.	0.1 g	4-6, 9
TCLP Extractant Type*	US EPA 1311.	-	4-6, 9
TCLP Extraction Fluid pH	pH meter. US EPA 1311.	0.1 pH Units	4-6, 9
TCLP Post Extraction Sample pH	pH meter. US EPA 1311.	0.1 pH Units	4-6, 9

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 10-May-2024 and 30-Sep-2024. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

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Ara Heron BSc (Tech)
Client Services Manager - Environmental

Certificate of Analysis

Page 1 of 2

Client:	Fraser Thomas Limited	Lab No:	3678546	SPv1
Contact:	Elliot Bish	Date Received:	24-Sep-2024	
	C/- Fraser Thomas Limited	Date Reported:	02-Oct-2024	
	PO Box 204006	Quote No:	130949	
	Highbrook	Order No:	PO 001117	
	Auckland 2161	Client Reference:	33205	
		Submitted By:	Ben Laing-McConnell	

Sample Type: Rock or Mineral

Sample Name:	FTL51A	FTL36B	FTL37B	FTL41B
Lab Number:	3678546.1	3678546.2	3678546.3	3678546.4
Individual Tests				
TCLP Weight of Sample Taken	g	50	50	50
TCLP Initial Sample pH	pH Units	-	7.4	-
TCLP Acid Adjusted Sample pH	pH Units	-	1.5	-
TCLP Extractant Type*	Acetic acid solution at pH 2.88 +/- 0.05	NaOH/Acetic acid at pH 4.93 +/- 0.05	Acetic acid solution at pH 2.88 +/- 0.05	NaOH/Acetic acid at pH 4.93 +/- 0.05
TCLP Extraction Fluid pH	pH Units	2.9	4.9	2.9
TCLP Post Extraction Sample pH	pH Units	3.3	5.0	3.2

Sample Type: Aqueous

Sample Name:	FTL51A [TCLP Extract]	FTL36B [TCLP Extract]	FTL37B [TCLP Extract]	FTL41B [TCLP Extract]
Lab Number:	3678546.5	3678546.6	3678546.7	3678546.8
Polycyclic Aromatic Hydrocarbons Screening in Water, By Liq/Liq*				
Acenaphthene*	g/m ³	0.0185	< 0.00010	0.0099
Acenaphthylene*	g/m ³	0.00017	< 0.00010	< 0.00010
Anthracene*	g/m ³	0.0049	< 0.00010	0.0054
Benzo[a]anthracene*	g/m ³	0.00032	< 0.00010	0.00036
Benzo[a]pyrene (BAP)*	g/m ³	< 0.00010	< 0.00010	< 0.00010
Benzo[b]fluoranthene + Benzo[j]fluoranthene*	g/m ³	< 0.00010	< 0.00010	0.00012
Benzo[g,h,i]perylene*	g/m ³	< 0.00010	< 0.00010	< 0.00010
Benzo[k]fluoranthene*	g/m ³	< 0.00010	< 0.00010	< 0.00010
Chrysene*	g/m ³	0.00028	< 0.00010	0.00033
Dibenzo[a,h]anthracene*	g/m ³	< 0.00010	< 0.00010	< 0.00010
Fluoranthene*	g/m ³	0.0064	0.00011	0.0071
Fluorene*	g/m ³	0.0078	< 0.0002	0.0059
Indeno(1,2,3-c,d)pyrene*	g/m ³	< 0.00010	< 0.00010	< 0.00010
Naphthalene*	g/m ³	0.0019	< 0.0005	0.0028
Phenanthrene*	g/m ³	0.024	< 0.0004	0.027
Pyrene*	g/m ³	0.0054	< 0.0002	0.0070

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Rock or Mineral

Test	Method Description	Default Detection Limit	Sample No
Individual Tests			



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Sample Type: Rock or Mineral			
Test	Method Description	Default Detection Limit	Sample No
TCLP Profile*	Extraction at 30 +/- 2 rpm for 18 +/- 2 hours, (Ratio 1g sample : 20g extraction fluid). US EPA 1311. Please note: Due to the nature of the sample matrix the initial pH of the sample was not measured. The TCLP extraction was performed using TCLP Extraction Fluid 2 (Acetic acid solution at pH 2.88 +/- 0.05) based on previous experience with this sample type..	-	1, 3
TCLP Profile*	Extraction at 30 +/- 2 rpm for 18 +/- 2 hours, (Ratio 1g sample : 20g extraction fluid). US EPA 1311.	-	2, 4
TCLP Profile			
TCLP Weight of Sample Taken	Gravimetric. US EPA 1311.	0.1 g	1-4
TCLP Initial Sample pH	pH meter. US EPA 1311.	0.1 pH Units	2, 4
TCLP Acid Adjusted Sample pH	pH meter. US EPA 1311.	0.1 pH Units	2, 4
TCLP Extractant Type*	US EPA 1311.	-	1-4
TCLP Extraction Fluid pH	pH meter. US EPA 1311.	0.1 pH Units	1-4
TCLP Post Extraction Sample pH	pH meter. US EPA 1311.	0.1 pH Units	1-4
Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Polycyclic Aromatic Hydrocarbons Screening in Water, By Liq/Liq*	Liquid / liquid extraction, GC-MS/MS analysis. In-house based on US EPA 8270.	0.00010 - 0.0005 g/m ³	5-8

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 27-Sep-2024 and 02-Oct-2024. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

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Ara Heron BSc (Tech)
Client Services Manager - Environmental

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Appendix C

Coal Tar Roding Assessment

Sample ID	Depth (m)	Material Code	Road Layer	Strata	Paint Reaction Positive	UV Positive	Coal Tar (Y/N) Guidelines	Comments
FTL01	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	N	Half of test-pit dark brown silty into orange/brown sub-base - other half light brown/yellow sub-base
FTL01	0.1-0.3	B	Basecourse (Layer beneath Road)	Basecourse	N	-	N	-
FTL02	0-0.1	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL06	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL06	0.1-0.2	B	Basecourse (Layer beneath Road)	Hardfill And Light Brown Clay	Y	-	Y	-
FTL14	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL14	0.1-0.3	B	Basecourse (Layer beneath Road)	Hardfill And Intermixed Grey Clay	Y	-	N	-
FTL20	0.1-0.4	B	Basecourse (Layer beneath Road)	Basecourse	N	-	N	-
FTL22	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL22	0.1-0.2	B	Basecourse (Layer beneath Road)	Mixed Hardfill With Clay (Light Brown)	Y	-	Y	-
FTL27	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL27	0.1-0.2	B	Basecourse (Layer beneath Road)	Hardfill With Mixed Clay (Light Brown)	Y	-	Y	-
FTL29	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	Bricks present
FTL29	0.1-0.3	B	Basecourse (Layer beneath Road)	Hardfill With Mixed Clay (Brown/Yellow/Blue)	Y	-	N	Bricks present
FTL30	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	N	Paint reaction likely from basecourse
FTL30	0.1-0.2	B	Basecourse (Layer beneath Road)	Hardfill With Clay And Intermixed Brick (Whole And Shards)	Y	-	Y	-
FTL32	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL32	0.05-0.2	B	Basecourse (Layer beneath Road)	Mixed Hardfill With Clay	N	-	N	-
FTL32	0.2-0.5	S	Sub-Base (Layer beneath Basecourse)	Clay With Mixed Hardfill	N	-	N	-
FTL33	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL33	0.05-0.2	B	Basecourse (Layer beneath Road)	Mixed Hardfill With Clay	N	-	N	-
FTL33	0.2-1.0	S	Sub-Base (Layer beneath Basecourse)	Sand With Some Clay	N	-	N	-
FTL34	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL34	0.05-0.2	B	Basecourse (Layer beneath Road)	Mixed Hardfill With Clay	N	-	N	Minor brick shards within hardfill layer
FTL34	0.2-0.45	S	Sub-Base (Layer beneath Basecourse)	Dark Brown Soil (Potentially Buried Ts)	N	-	N	-
FTL35	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL35	0.05-0.2	B	Basecourse (Layer beneath Road)	Mixed Hardfill (Gravelly) With Clay	N	-	N	-
FTL35	0.2-0.4	S	Sub-Base (Layer beneath Basecourse)	Loose Hardfill, Sandy Clay	N	-	N	-
FTL36	0-0.05	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL36	0.05-0.15	B	Basecourse (Layer beneath Road)	Mixed Hardfill (Gravelly) With Clay	Y	-	Y	-
FTL36	0.15-0.2	S	Sub-Base (Layer beneath Basecourse)	Light Brown Sandy Clay	N	-	N	-
FTL37	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL37	0.05-0.2	B	Basecourse (Layer beneath Road)	Mixed Hardfill (Gravelly) With Clay Atop Deeper Road Layer	Y	-	Y	2 deeper layers of road
FTL37	0.25	S	Sub-Base (Layer beneath Basecourse)	Light Brown Sandy Clay	N	-	N	-
FTL38	0-0.05	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL38	0.05-0.2	B	Basecourse (Layer beneath Road)	Coarse Hardfill With Minor Clay	N	-	N	Yellowing at base of roading layer, above hardfill
FTL38	0.2-0.25	S	Sub-Base (Layer beneath Basecourse)	Dark Brown Soil (Potentially Buried Ts?) Atop Light Brown Sandy Clay	N	-	N	-
FTL40	0-0.1	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL40	0.1-0.2	B	Basecourse (Layer beneath Road)	Coarse Hardfill With Minor Clay	Y	-	Y	Minor - localised yellowing
FTL40	0.2-0.45	S	Sub-Base (Layer beneath Basecourse)	Buried Topsoil & Mixed Clay	Y	-	N	Very strong but localised yellowing of buried road shard in sub-base
FTL41	0-0.05	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL41	0.05-0.1	B	Basecourse (Layer beneath Road)	Thin Layer Hardfill & Gravel	Y	-	Y	Minor - localised yellowing
FTL41	0.1-0.4	S	Sub-Base (Layer beneath Basecourse)	Grey/Brown Clay Atop Light Brown Sandy Clay	N	-	Y	-
FTL42	0-0.05	P	Pavement (Road Interface)	Pavement/Road	Y	-	N	Minor - localised yellowing
FTL42	0.05-0.15	B	Basecourse (Layer beneath Road)	Layers Of Hardfill & Different Mixed Clays	N	-	N	-
FTL42	0.15-0.4	S	Sub-Base (Layer beneath Basecourse)	Light Brown Sandy Clay	N	-	N	-
FTL44	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL44	0.05-0.25	B	Basecourse (Layer beneath Road)	Mixed Layers Of Hardfill And Clay	N	-	N	-
FTL44	0.25	S	Sub-Base (Layer beneath Basecourse)	Layer Of Brown Clay/Buried Ts Atop Light Brown Sandy Clay	N	-	N	Depth is noted as 0.25+. Beginning of natrual ground
FTL45	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL45	0.05-0.25	B	Basecourse (Layer beneath Road)	Mixed Layers Of Hardfill And Clay	N	-	N	-
FTL45	0.25	S	Sub-Base (Layer beneath Basecourse)	Mixed Layers Of Hardfill And Clay - Localised Burnt Material	N	-	N	Depth is noted as 0.25+. Beginning of natrual ground
FTL46	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-

FTL46	0.05-0.45	B	Basecourse (Layer beneath Road)	Mixed Layers Of Hardfill And Clay	N	-	N	-
FTL46	0.45-1.0	S	Sub-Base (Layer beneath Basecourse)	Light Brown Sandy Clay, Buried Ts & Metal	N	-	N	-
FTL47	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL47	0.05-0.3	B	Basecourse (Layer beneath Road)	Mixed Layers Of Hardfill And Clay, Minor Construction Debris	N	-	N	-
FTL47	0.3-0.8	S	Sub-Base (Layer beneath Basecourse)	Buried Topsoil & Mixed Clay	N	-	N	-
FTL48	0-0.2	P	Pavement (Road Interface)	Topsoil	N	-	N	-
FTL48	0.2-0.6	B	Basecourse (Layer beneath Road)	Ts Mixed Gravel & Pebbles Atop Black Organics	N	-	N	-
FTL48	0.6-0.8	S	Sub-Base (Layer beneath Basecourse)	Buried Ts/Dark Brown Clay (Swampy)	N	-	N	-
FTL49	0-0.2	P	Pavement (Road Interface)	Minor Roding	N	-	N	-
FTL49	0.2-0.6	B	Basecourse (Layer beneath Road)	Disturbed Clay Atop Organics	N	-	N	-
FTL49	0.6-0.8	S	Sub-Base (Layer beneath Basecourse)	Natural	N	-	N	-
FTL50	0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL50	0.05-0.4	B	Basecourse (Layer beneath Road)	Multiple Layers Hardfill With Mixed Clays	N	-	Y	-
FTL50	0.4-0.6	S	Sub-Base (Layer beneath Basecourse)	Light Brown Sandy Clay	N	-	N	-
FTL51	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL51	0.1-0.4	B	Basecourse (Layer beneath Road)	Hardfill With Yellow/Grey Clay	N	-	Y	-
FTL51	0.4-0.6	S	Sub-Base (Layer beneath Basecourse)	Orange/Brown Clay	N	-	Y	No note for depth. Beginning of natrual ground
FTL52	0-0.1	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL52	0.1-0.3	B	Basecourse (Layer beneath Road)	Hardfill With Yellow/Grey Clay	Y	-	N	Very minor positive yellowing - localised
FTL52	0.3	S	Sub-Base (Layer beneath Basecourse)	Orange/Brown Clay	N	-	N	Depth is noted as 0.3+. Beginning of natrual ground
FTL53	0-0.3	P	Pavement (Road Interface)	Topsoil With Gravels	N	-	N	No Roding Found
FTL53	0.3-0.5	B	Basecourse (Layer beneath Road)	Orange Clay	N	-	Y	No Roding Found. Depth is noted as 0.5+. Beginning of natrual ground
FTL53	0.5	S	Sub-Base (Layer beneath Basecourse)	Dark Brown Clay	N	-	N	No Roding Found. Depth is noted as 0.5+. Beginning of natrual ground
FTL54	0-0.1	P	Pavement (Road Interface)	Pavement/Road	Y	-	Y	-
FTL54	0.1-0.3	B	Basecourse (Layer beneath Road)	Hardfill	N	-	N	-
FTL54	0.3	S	Sub-Base (Layer beneath Basecourse)	Mixed Orange/Brown Clay Atop & Below Dark Brown Layer	N	-	N	No note for depth. Beginning of natrual ground
FTL55	0-0.05	P	Pavement (Road Interface)	Pavement/Road	Y	-	N	Very minor positive yellowing - localised
FTL55	0.05-0.3	B	Basecourse (Layer beneath Road)	Hardfill	N	-	N	-
FTL55	0.3	S	Sub-Base (Layer beneath Basecourse)	Orange/Brown Clay	N	-	N	No note for depth. Beginning of natrual ground
FTL56	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL56	0.05-0.3	B	Basecourse (Layer beneath Road)	Hardfill In Mixed Clay Layers	N	-	N	-
FTL56	0.3	S	Sub-Base (Layer beneath Basecourse)	Disturbed Mix Of Orange/Brown Clay	N	-	N	No note for depth. Beginning of natrual ground
FTL57	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL57	0.05-0.3	B	Basecourse (Layer beneath Road)	Hardfill In Mixed Clay Layers	N	-	N	-
FTL57	0.3-1.0	S	Sub-Base (Layer beneath Basecourse)	Dry Disturbed Orange/Brown Clay	N	-	N	-
FTL58	0-0.05	P	Pavement (Road Interface)	Pavement/Road	Y	-	N	Very minor positive yellowing - localised
FTL58	0.05-0.3	B	Basecourse (Layer beneath Road)	Hardfill In Mixed Clay Layers	N	-	Y	-
FTL58	0.3-0.5	S	Sub-Base (Layer beneath Basecourse)	Dry Disturbed Brown Clay	N	-	Y	-
FTL60	0-0.1	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL60	0.1-0.3	B	Basecourse (Layer beneath Road)	Fine Gravel Hardfill Mix	N	-	N	-
FTL60	0.3-0.6	S	Sub-Base (Layer beneath Basecourse)	Mixed Clay Fill	N	-	N	-
FTL61	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	Samples taken at 61D
FTL61	0.05-0.3	B	Basecourse (Layer beneath Road)	Fine Gravel Hardfill Mix	N	-	N	Smamples taken at 61E
FTL61	0.3-0.5	S	Sub-Base (Layer beneath Basecourse)	Mixed Clay Fill	N	-	N	Samples taken at 61F
FTL62	0-0.05	P	Pavement (Road Interface)	Pavement/Road	N	-	N	-
FTL62	0.05-0.3	B	Basecourse (Layer beneath Road)	Fine Gravel Hardfill Mix	N	-	N	-
FTL62	0.3	S	Sub-Base (Layer beneath Basecourse)	Light Brown Clay	N	-	N	Depth is noted as 0.3+. Beginning of natrual ground
FTL64	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL64	0.05-0.35	S	Sub-Base (Layer beneath Basecourse)	Mix Of Coarse And Fine Hardfill	N	N	N	-
FTL65	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL65	0.03-0.2	B	Basecourse (Layer beneath Road)	Mix Of Coarse And Fine Hardfill	N	N	N	-
FTL66	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL66	0.05-0.35	S	Sub-Base (Layer beneath Basecourse)	Mix Of Coarse And Fine Hardfill	N	N	N	-
FTL67	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL67	0.03-0.25	S	Sub-Base (Layer beneath Basecourse)	Mix Of Coarse And Fine Hardfill	N	N	N	-
FTL68	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL68	0.03-0.25	S	Sub-Base (Layer beneath Basecourse)	Mix Of Coarse And Fine Hardfill	N	N	N	-
FTL69	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-

FTL69	0.05-0.25	S	Sub-Base (Layer beneath Basecourse)	Mix Of Coarse And Fine Hardfill	N	N	N	-
FTL70	0-0.02	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL70	0.02-0.12	B	Basecourse (Layer beneath Road)	Hardill And Gravels With Orange Clay	N	N	N	
FTL70	0.12-0.22	F	Fill	Mixed Clay (Orange & Grey)	N	N	N	
FTL71	0-0.02	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL71	0.02-0.2	B	Basecourse (Layer beneath Road)	Fine To Moderately Sized Basecourse Comprising Gravels And Hardfill	N	N	N	
FTL72	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL72	0.03-0.2	B	Basecourse (Layer beneath Road)	Fine To Moderately Sized Basecourse Comprising Gravels And Hardfill	N	N	N	
FTL73	0-0.06	P	Pavement (Road Interface)	Asphalt Pavement	N	N	N	-
FTL73	0.06-0.18	B	Basecourse (Layer beneath Road)	Grey Moderately Sized Basecourse	N	N	N	
FTL74	0-0.05	P	Pavement (Road Interface)	Asphalt Pavement	N	N	N	-
FTL74	0.05-0.2	B	Basecourse (Layer beneath Road)	Grey Moderately Sized Basecourse	N	N	N	
FTL75	0-0.06	P	Pavement (Road Interface)	Asphalt Pavement	N	N	N	-
FTL75	0.06-0.2	B	Basecourse (Layer beneath Road)	Grey Moderately Sized Basecourse	N	N	N	
FTL76	0-0.04	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL76	0.04-0.2	B	Basecourse (Layer beneath Road)	Fine To Moderately Sized Basecourse Comprising Gravels And Hardfill	N	N	N	
FTL77	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	Possible Sandy Layer Allophanics
FTL77	0.03-0.15	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand, Minor Coarse Hardfill	N	N	N	
FTL78	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL78	0.03-0.25	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand, Minor Coarse Hardfill	N	N	N	
FTL79	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL79	0.03-0.31	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand, Minor Coarse Hardfill	N	N	N	
FTL80	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL80	0.05-0.3	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand, Minor Coarse Hardfill	N	N	N	
FTL80	0.3-0.4	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse Hardfill With Clay (Orange/Brown)	N	N	N	-
FTL81	0-0.02	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	-
FTL81	0.02-0.2	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand, Minor Coarse Hardfill	N	N	N	
FTL82	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	-
FTL82	0.03-0.07	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand (Brown)	N	N	Y	
FTL82	0.07-0.09	P	Pavement (Road Interface)	Pavement/Road - Chipseal	N	N	N	
FTL82	0.09-0.11	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand (Grey)	N	N	N	
FTL82	0.11-0.13	P	Pavement (Road Interface)	Coal Tar Roding Layer	Y	Y	Y	
FTL82	0.13-0.26	B	Basecourse (Layer beneath Road)	Fine To Moderately Sized Basecourse (Dark Grey/Brown)	N	N	N	
FTL83	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	Y	-
FTL83	0.05-0.09	B	Basecourse (Layer beneath Road)	Fine Basecourse (Grey)	N	N	Y	
FTL83	0.09-0.13	P	Pavement (Road Interface)	Coal Tar Roding Layer	Y	Y	Y	
FTL83	0.13-0.23	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Coarse Hardfill (Grey)	N	N	Y	
FTL84	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	-
FTL84	0.03-0.06	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	
FTL84	0.06-0.30	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base	N	N	Y	
FTL85	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	
FTL85	0.05-0.18	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand (Grey)	N	N	N	-
FTL86	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	-
FTL86	0.05-0.15	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand (Grey)	N	N	N	
FTL87	0-0.04	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	-
FTL87	0.04-0.2	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand (Grey)	N	N	N	
FTL88	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	Minor construction debris (Brick)
FTL88	0.03-0.06	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	
FTL88	0.06-0.28	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand (Grey)	N	N	N	
FTL89	0-0.02	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	Y	Possible Smearing
FTL89	0.02-0.05	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	-
FTL89	0.05-0.26	B	Basecourse (Layer beneath Road)	Moderately Sized Basecourse, Sub-Base (Rounded Stones) & Sand (Light Brown/Grey)	N	N	N	-
FTL90	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	Y	Y	Y	-
FTL90	0.05-0.2	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse & Sand (Grey)	N	N	N	
FTL91	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL91	0.04-0.22	B	Basecourse (Layer beneath Road)	Coarse Hardfill	N	N	N	
FTL91	0.22-0.27	V	Vein of Coal Tar	Small Vein Of Coal Tar Within Sub-Base Layer	Y	Y	Y	
FTL91	0.27-0.4	S	Sub-Base (Layer beneath Basecourse)	Sub-Base - Mix Of Small To Moderately Sized Hardfill And Grey/Brown/Orange Clays	N	N	Y	
FTL92	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	

FTL92	0.05-0.16	B	Basecourse (Layer beneath Road)	Basecourse Layer 1 (Light Brown/Grey, Moderately Sized)	N	N	N	-
FTL92	0.13-0.14	P	Pavement (Road Interface)	Coal Tar Lens (Isolated)	Y	Y	Y	
FTL92	0.16-0.18	P	Pavement (Road Interface)	Chipseal Layer 2	N	N	N	
FTL92	0.18-0.24	B	Basecourse (Layer beneath Road)	Basecourse Layer 2 (Light Brown/Grey, Moderately Sized)	N	N	N	
FTL92	0.24-0.29	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	
FTL92	0.29-0.4	B	Basecourse (Layer beneath Road)	Basecourse Layer 3 (Brown/Grey, Moderately Sized)	N	N	Y	-
FTL93	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL93	0.03-0.08	B	Basecourse (Layer beneath Road)	Gravels And Fine Basecourse (Light Brown/Grey)	N	N	N	
FTL93	0.08-0.17	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse Hardfill (Brown)	N	N	N	
FTL93	0.17-0.2	P	Pavement (Road Interface)	Chipseal Layer 2	N	N	N	
FTL93	0.2-0.24	B	Basecourse (Layer beneath Road)	Gravels And Fine Basecourse (Light Brown/Grey)	N	N	N	-
FTL93	0.24-0.37	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse Hardfill (Brown)	N	N	Y	
FTL94	0-0.06	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL94	0.06-0.15	B	Basecourse (Layer beneath Road)	Moderate To Coarse Hardfill (Light Brown/Grey)	N	N	N	
FTL94	0.15-0.45	S	Sub-Base (Layer beneath Basecourse)	Fine To Moderate Rock Fill (Mix Of Sharp Stones & Rounded) & Clay (Orange/Light Brown)	N	N	N	
FTL95	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL95	0.04-0.25	B	Basecourse (Layer beneath Road)	Moderately Coarse Basecourse (Orange/Brown)	N	N	N	
FTL96	0-0.02	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	Brick Band identified in one side of the test-pit
FTL96	0.02-0.13	B	Basecourse (Layer beneath Road)	Hardfill And Gravels (Brown/Grey)	N	N	N	
FTL97	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL97	0.03-0.25	B	Basecourse (Layer beneath Road)	Moderate To Coarse Hardfill (Orange/Light Brown)	N	N	N	
FTL98	0-0.05	P	Pavement (Road Interface)	Pavement/Road - Asphalt	Y	Y	Y	-
FTL98	0.05-0.2	B	Basecourse (Layer beneath Road)	Moderately Sized Basecourse (Grey/Brown)	N	N	Y	Possible smearing
FTL99	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL99	0.05-0.23	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate) With Sand (Light Brown/Orange)	N	N	N	
FTL99	0.23-0.27	V	Vein of Coal Tar	Thin Coal Tar Layer	Y	Y	Y	
FTL99	0.27-0.35	B	Basecourse (Layer beneath Road)	Basecourse (Fine) With Sandy Clay (Light Brown)	N	N	Y	
FTL100	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL100	0.04-0.2	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate) With Sand (Dark Brown/Orange)	N	N	N	
FTL101	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL101	0.03-0.2	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate) With Sand (Light Brown/Orange)	N	N	N	
FTL102	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL102	0.03-0.11	B	Basecourse (Layer beneath Road)	Fine Basecourse With Gravels (Light Brown/Orange)	N	N	N	
FTL102	0.11-0.3	S	Sub-Base (Layer beneath Basecourse)	Fine Basecourse/Sub-Base Mix With Some Larger Sub-Base	N	N	N	
FTL103	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL103	0.03-0.15	B	Basecourse (Layer beneath Road)	Fine Basecourse With Gravels (Light Brown/Orange)	N	N	N	
FTL103	0.15-0.3	S	Sub-Base (Layer beneath Basecourse)	Fine Basecourse/Sub-Base Mix With Some Larger Sub-Base	N	N	N	
FTL104	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	-
FTL104	0.03-0.09	B	Basecourse (Layer beneath Road)	Predominantly Fine Basecourse (Brown/Orange)	N	N	N	
FTL104	0.09-0.14	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Brown/Grey)	N	N	N	
FTL104	0.14-0.3	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Brown/Orange)	N	N	N	-
FTL105	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL105	0.04-0.1	B	Basecourse (Layer beneath Road)	Fine To Moderate Gravels	N	N	N	
FTL105	0.1-0.4	S	Sub-Base (Layer beneath Basecourse)	Orange Sand Atop Coarse Hardfill	N	N	N	
FTL105	0.4-0.7	F	Fill	Fill	N	N	N	
FTL106	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	-
FTL106	0.03-0.1	B	Basecourse (Layer beneath Road)	Fine Basecourse With Gravels (Grey)	N	N	N	
FTL106	0.1-0.18	S	Sub-Base (Layer beneath Basecourse)	Hardfill Within Orange Clay Atop Grey/Blue Clay	N	N	N	
FTL108	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL108	0.03-0.1	B	Basecourse (Layer beneath Road)	Fine To Moderate Basecourse (Orange/Grey)	N	N	N	
FTL108	0.1-0.3	S	Sub-Base (Layer beneath Basecourse)	Orange Sand Atop Coarse Hardfill	N	N	N	
FTL109	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL109	0.03-0.15	B	Basecourse (Layer beneath Road)	Fine To Moderate Basecourse (Brown/Grey)	N	N	N	
FTL109	0.15-0.65	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse Sized Sub-Base (Intermixed Hardfill (Brown/Grey)	N	N	N	
FTL110	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	Y	Y	Y	-
FTL110	0.03-0.15	B	Basecourse (Layer beneath Road)	Fine To Moderate Basecourse (Orange/Grey)	N	N	N	
FTL110	0.15-0.45	S	Sub-Base (Layer beneath Basecourse)	Moderately Sized Basecourse With Hardfill Intermixed (Orange/Grey)	N	N	N	
FTL111	0-0.05	P	Pavement (Road Interface)		N	N	N	-
FTL111	0.05-0.2	B	Basecourse (Layer beneath Road)		N	N	N	

FTL112	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL112	0.03-0.2	B	Basecourse (Layer beneath Road)	Fine To Moderate Basecourse (Orange/Grey)	N	N	N	
FTL113	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL113	0.05-0.2	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Brown)	N	N	N	
FTL113	0.2-0.45	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Hardfill With Orange Clay)	N	N	N	
FTL114	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL114	0.03-0.06	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL114	0.06-0.3	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Hardfill With Orange Clay)	N	N	N	
FTL115	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	-
FTL115	0.05-0.11	B	Basecourse (Layer beneath Road)	Basecourse (Fine Gravels And Clay - Grey/Orange)	N	N	N	
FTL115	0.11-0.23	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Grey)	N	N	Y	
FTL116	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL116	0.03-0.11	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Grey/Light Brown)	N	N	N	
FTL116	0.11-0.23	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Brown/Grey)	N	N	N	
FTL117	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL117	0.03-0.12	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Grey/Light Brown)	N	N	N	
FTL117	0.12-0.3	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Grey)	N	N	N	
FTL118	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	Y	Y	Y	Lots of small specks showing up under UV in basecourse and sub-base - likely cross contamination from bucket
FTL118	0.02-0.08	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Grey Layer Atop Orange Layer)	N	N	Y	
FTL118	0.08-0.25	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse Hardfill Intermixed Through Mixed Clays (Yellow/Grey/Brown)	N	N	N	
FTL119	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL119	0.03-0.2	B	Basecourse (Layer beneath Road)	Basecourse (Fine & Compacted With Orange/Brown Clay)	N	N	N	
FTL120	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL120	0.05-0.18	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Brown)	N	N	N	
FTL121	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL121	0.05-0.15	B	Basecourse (Layer beneath Road)	Basecourse - Fine Grey/Orange	N	N	N	
FTL121	0.15-0.3	S	Sub-Base (Layer beneath Basecourse)	Ffine Gravels And Sandy Clay (Orange)	N	N	N	
FTL122	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL122	0.03-0.17	B	Basecourse (Layer beneath Road)	Basecourse - Grey/Brown	N	N	N	
FTL123	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL123	0.02-0.3	B	Basecourse (Layer beneath Road)	Basecourse - Grey/Brown	N	N	N	
FTL124	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL124	0.03-0.23	B	Basecourse (Layer beneath Road)	Basecourse - Grey/ Light Brown	N	N	N	
FTL125	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	Lots of small specks showing up under UV in basecourse and sub-base. Historical road precense.
FTL125	0.02-0.25	B	Basecourse (Layer beneath Road)	Basecourse - Grey/Brown	N	Y	Y	
FTL125	0.25-0.35	S	Sub-Base (Layer beneath Basecourse)	Sub-Base - Coarse Hardfill (Grey/Brown)	N	Y	Y	
FTL126	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL126	0.03-0.4	B	Basecourse (Layer beneath Road)	Basecourse - Coarse Hardfill - Grey/Brown	N	N	N	
FTL127	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL127	0.03-0.08	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Light Brown)	N	N	N	
FTL127	0.08-0.21	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate - Light Brown To Brown)	N	N	N	
FTL130	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL130	0.03-0.08	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Light Brown)	N	N	N	
FTL130	0.08-0.33	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate - Light Brown)	N	N	N	
FTL131	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	N	N	N	-
FTL131	0.03-0.08	B	Basecourse (Layer beneath Road)	Basecourse - Grey/Brown	N	N	N	
FTL131	0.08-0.27	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Hardfill With Orange Sandy Clay)	N	N	N	
FTL132	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL132	0.03-0.12	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Light Brown)	N	N	N	
FTL132	0.12-0.3	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Fine To Moderate - Orange/Light Brown)	N	N	N	
FTL133	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	-
FTL133	0.04-0.09	B	Basecourse (Layer beneath Road)	Basecourse - Grey/Brown	N	N	N	
FTL133	0.09-0.42	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Rounded Stones With Orange Sandy Clay)	N	N	N	
FTL134	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal Containing Coal Tar	Y	Y	Y	-
FTL134	0.04-0.14	B	Basecourse (Layer beneath Road)	Basecourse - Grey/Brown	N	N	Y	
FTL135	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL135	0.05-0.11	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Grey/Brown)	N	N	N	
FTL135	0.11-0.24	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate To Coarse - Grey/Brown)	N	N	N	
FTL136	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL136	0.05-0.15	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Orange/Brown)	N	N	N	

FTL137	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal			N	Fill in basecourse layer including Pipe, ACM Sheets and concrete to 0.25 - No Samples Analysed (Class A ACM)
FTL137	0.03-0.25	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Orange/Brown)			N	
FTL138	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL138	0.03-0.25	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Grey/Brown)	N	N	N	
FTL139	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	Minor coal tar indication in paint and UV (specks) and Duplicates taken at both layers.
FTL139	0.04-0.23	B	Basecourse (Layer beneath Road)	Coarse Compacted Hardfill (Grey)	Y	Y	N	
FTL140	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	2nd Road layer observed in photographs which does not appear to have been sampled or recorded (at approx 0.15-0.2)
FTL140	0.05-0.15	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Orange/Brown)	N	N	N	
FTL140	0.15-0.5	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate To Coarse Hardfill And Gravels - Grey/Light Brown)	N	N	N	
FTL141	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	Y	Y	Y	UV Specks visible in basecourse - Possibly cross contamination from bucket
FTL141	0.04-0.1	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Orange/Brown)	N	N	Y	
FTL141	0.10-0.35	S	Sub-Base (Layer beneath Basecourse)	Coarse Hardfill	N	N	Y	
FTL142	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	UV Specks visible in basecourse - Possibly cross contamination from bucket. Coat Tar layer not recorded in site notes
FTL142	0.03-0.1	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Orange/Brown)	N	N	N	
FTL142	0.1-0.15	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL142	0.15-0.3	S	Sub-Base (Layer beneath Basecourse)	Coarse Hardfill	N	N	Y	-
FTL143	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	Y	Y	Y	
FTL143	0.04-0.09	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Brown)	N	N	Y	Possibly cross contamination from bucket.
FTL143	0.09-0.34	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate To Coarse - Orange/Brown)	N	N	N	
FTL144	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	Coal Tar inclusion within basecourse, specks illuminated under UV in all Layers
FTL144	0.03-0.1	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Brown)	N	N	Y	
FTL144	0.1-0.14	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL144	0.14-0.25	S	Sub-Base (Layer beneath Basecourse)	Coarse Hardfill	N	N	Y	-
FTL145	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL145	0.04-0.09	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Brown)	N	N	N	
FTL145	0.09-0.25	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate To Coarse - Orange/Brown)	N	N	N	-
FTL146	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	
FTL146	0.04-0.1	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Brown)	N	N	N	
FTL146	0.1-0.2	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Red Scoria)	N	N	N	-
FTL147	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	
FTL147	0.03-0.11	B	Basecourse (Layer beneath Road)	Fine Basecourse (Orange/Brown)	N	N	N	
FTL147	0.11-0.33	S	Sub-Base (Layer beneath Basecourse)	Coarse Mix Of Hardfill (Grey/Purple)	N	N	N	Duplicate samples at all three layers.
FTL148	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	
FTL148	0.02-0.05	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL148	0.05-0.19	S	Sub-Base (Layer beneath Basecourse)	Sub-Base - Coarse Hardfill(Purple/Grey)	N	N	N	-
FTL149	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL149	0.03-0.13	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Light Brown)	N	N	N	
FTL149	0.13-0.33	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate To Coarse - Grey/Light Brown)	N	N	N	-
FTL150	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	
FTL150	0.03-0.09	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Brown)	N	N	N	
FTL150	0.09-0.18	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Coarse - Brown)	N	N	N	
FTL151	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	
FTL151	0.04-0.09	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL151	0.09-0.29	S	Sub-Base (Layer beneath Basecourse)	Basecourse (Fine - Orange/Light Brown)	N	N	N	
FTL152	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL152	0.05-0.25	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/Grey)	N	N	N	
FTL152	0.25-0.6	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate To Coarse - Orange/Light Brown)	N	N	N	-
FTL153	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	
FTL153	0.02-0.07	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL153	0.07-0.2	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Brown/Grey)	N	N	N	-
FTL153	0.2-0.4	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Moderate To Coarse - Orange/Light Brown)	N	N	N	No result analysed
FTL154	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL154	0.04-0.08	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL154	0.08-0.25	S	Sub-Base (Layer beneath Basecourse)	Basecourse (Fine - Orange/ Brown)	N	N	N	
FTL155	0-0.06	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL155	0.06-0.25	B	Basecourse (Layer beneath Road)	Basecourse (Fine - Orange/ Brown)	N	N	N	
FTL156	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL156	0.04-0.11	B	Basecourse (Layer beneath Road)	Basecourse - Fine (Orange/Brown)	N	N	N	
FTL156	0.11-0.3	S	Sub-Base (Layer beneath Basecourse)	Mixed Clay Fill With Gravels (Blue/Orange/Brown)	N	N	N	
FTL156	0.3-0.41	F	Fill	Fill (Buried Topsoil)	N	N	N	

FTL157	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL157	0.04-0.2	B	Basecourse (Layer beneath Road)	Fine To Moderate Basecourse (Orange/Grey) With Gravels	N	N	N	
FTL157	0.2-0.23	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	
FTL157	0.23-0.45	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse Basecourse (Orange/Grey) With Gravels	N	N	N	
FTL158	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL158	0.04-0.09	B	Basecourse (Layer beneath Road)	Basecourse	N	N	N	
FTL158	0.09-0.15	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	
FTL158	0.15-0.35	B	Basecourse (Layer beneath Road)	Basecourse	N	N	N	
FTL158	0.35-0.37	S	Sub-Base (Layer beneath Basecourse)	Sub-Base	N	N	N	
FTL158	0.37-0.7	S	Sub-Base (Layer beneath Basecourse)	Sub-Base	N	N	N	
FTL159	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL159	0.04-0.14	S	Sub-Base (Layer beneath Basecourse)	Hardfill With Orange Clay	N	N	N	
FTL160	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	Y	
FTL160	0.04-0.09	B	Basecourse (Layer beneath Road)	Basecourse (Fine)	N	N	N	
FTL160	0.09-0.14	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	
FTL160	0.14-0.19	B	Basecourse (Layer beneath Road)	Basecourse (Fine)	N	N	N	
FTL160	0.19-0.28	S	Sub-Base (Layer beneath Basecourse)	Crushed Lightweight Black Glassey Material	N	N	N	-
FTL161	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	Y	Y	Y	
FTL161	0.05-0.22	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base With Orange Clay	N	N	N	-
FTL162	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL162	0.03-0.26	B	Basecourse (Layer beneath Road)	Basecourse (Light Brown/Orange)	N	N	N	
FTL163	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL163	0.05-0.3	B	Basecourse (Layer beneath Road)	Basecourse (Brown/Grey)	N	N	N	
FTL164	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL164	0.04-0.3	B	Basecourse (Layer beneath Road)	Basecourse (Brown/Grey)	N	N	N	
FTL165	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	-
FTL165	0.04-0.12	B	Basecourse (Layer beneath Road)	Basecourse (Brown/Orange)	N	N	Y	Possibly cross contamination from bucket
FTL166	0-0.06	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL166	0.06-0.3	B	Basecourse (Layer beneath Road)	Fine Crushed Concrete-Like Basecourse (Grey/Brown) Atop Orange/Brown Clay And Hardfi	N	N	N	
FTL167	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL167	0.04-0.22	B	Basecourse (Layer beneath Road)	Basecourse (Orange/Brown/Grey)	N	N	N	
FTL168	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL168	0.03-0.15	B	Basecourse (Layer beneath Road)	Basecourse (Light Brown/Orange)	N	N	N	-
FTL168	0.15-0.2	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	N	Very minor positive (beige)
FTL168	0.2-0.35	S	Sub-Base (Layer beneath Basecourse)	Basecourse (Brown/Orange)	N	N	N	-
FTL169	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL169	0.03-0.32	B	Basecourse (Layer beneath Road)	Basecourse (Light Brown/Grey)	N	N	N	
FTL170	0-0.04	P	Pavement (Road Interface)	Chipseal	N	N	N	-
FTL170	0.04-0.14	B	Basecourse (Layer beneath Road)	Fine Basecourse (Light Brown)	N	N	N	
FTL170	0.14-0.4	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse (Grey/Brown)	N	N	N	
FTL171	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	-
FTL171	0.04-0.1	B	Basecourse (Layer beneath Road)	Fine Basecourse (Brown)	N	N	N	
FTL171	0.1-0.2	S	Sub-Base (Layer beneath Basecourse)	Fine Sandy/Clay (Orange/Light Brown)	N	N	N	
FTL172	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	Demolition Debris identified
FTL172	0.03-0.06	B	Basecourse (Layer beneath Road)	Fine Basecourse (Orange/Brown)	N	N	N	
FTL172	0.06-0.15	S	Sub-Base (Layer beneath Basecourse)	Mixed Clays	N	N	N	
FTL173	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL173	0.03-0.25	B	Basecourse (Layer beneath Road)	Fine Basecourse (Orange/Brown)	N	N	N	
FTL173	0.25-1.25	F	Fill	Mixed Clays	N	N	N	
FTL174	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	Minor Fill (ceramic/brick) in basecourse
FTL174	0.05-0.25	B	Basecourse (Layer beneath Road)	Fine Basecourse With Sand	N	N	N	
FTL175	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL175	0.03-0.17	B	Basecourse (Layer beneath Road)	Fine To Moderate Basecourse (Orange/Brown)	N	N	N	
FTL176	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal Containing Coal Tar	Y	Y	N	Exceeds only BAP
FTL176	0.05-0.3	B	Basecourse (Layer beneath Road)	Fine Basecourse - Clay And Sand (Orange/Light Brown)	N	N	N	-
FTL176	0.35-0.45	F	Fill	Fill - Pipe Surrounded By Lightweight/Black Glass Material	N	N	N	-
FTL177	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	-
FTL177	0.03-0.25	B	Basecourse (Layer beneath Road)	Fine Basecourse - Clay And Sand (Orange/Light Brown)	N	N	Y	
FTL178	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL178	0.04-0.2	B	Basecourse (Layer beneath Road)	Basecourse (Light Brown)	N	N	N	

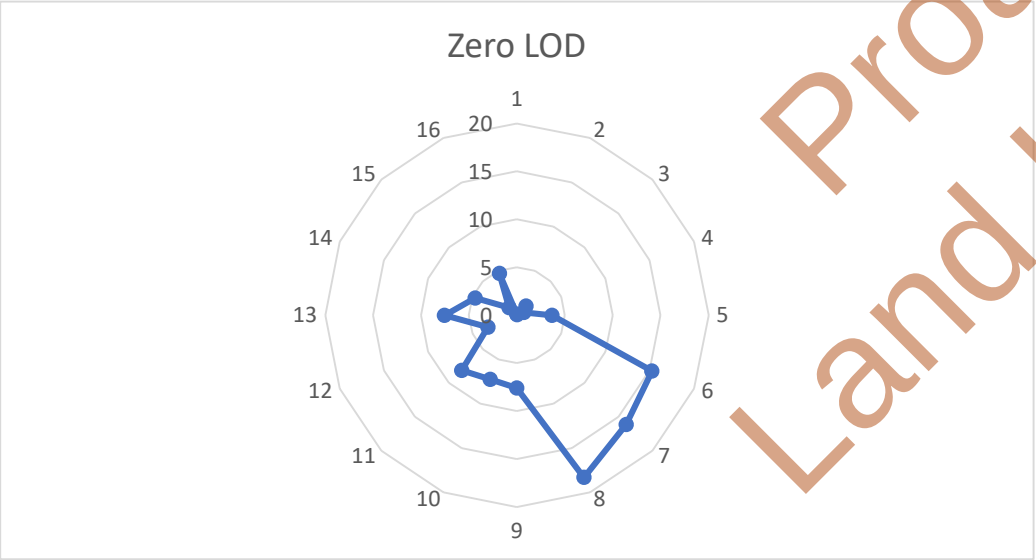
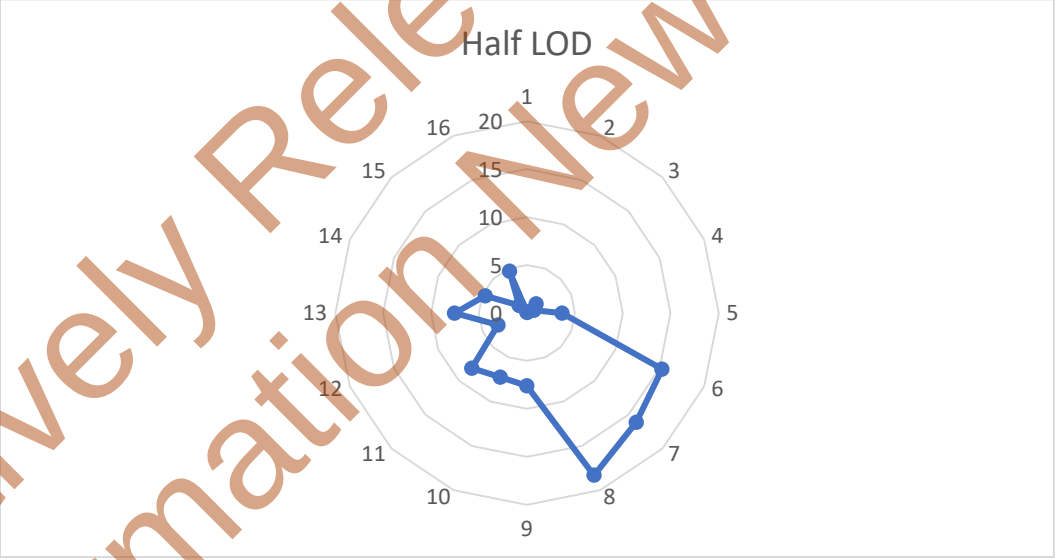
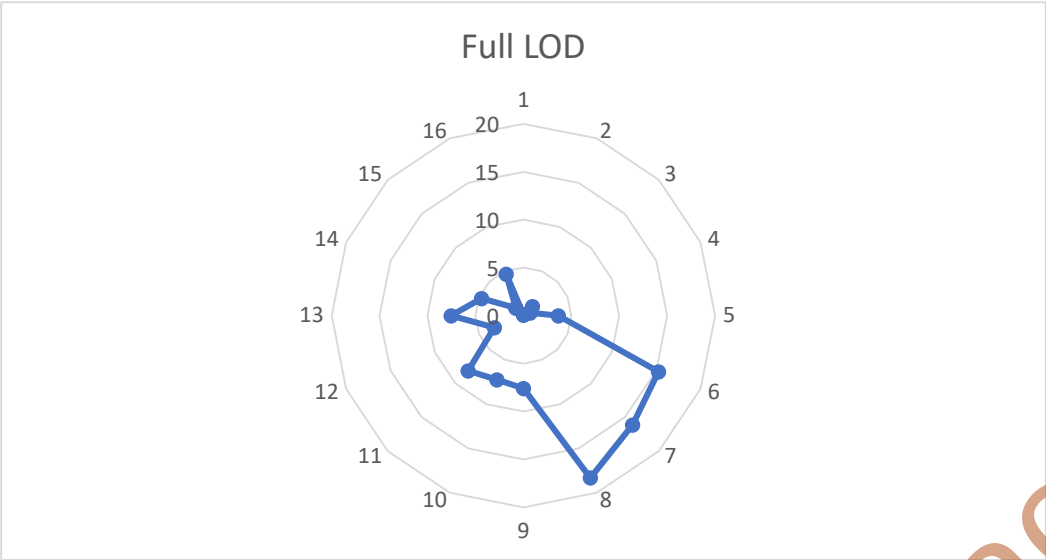
FTL179	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL179	0.03-0.15	B	Basecourse (Layer beneath Road)	Fine Basecourse (Brown)	N	N	N	
FTL179	0.15-0.3	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Dark Brown Moderately Coarse Hardfill)	N	N	N	
FTL180	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL180	0.02-0.14	B	Basecourse (Layer beneath Road)	Fine Basecourse (Light Brown)	N	N	N	
FTL180	0.14-0.25	S	Sub-Base (Layer beneath Basecourse)	Moderately Coarse Sub-Base (Dark Brown Layer Atop Light Brown Layer)	N	N	N	
FTL181	0-0.03	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	-
FTL181	0.03-0.1	B	Basecourse (Layer beneath Road)	Fine Basecourse (Orange/ Brown)	N	N	N	
FTL182	0-0.04	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	Exceeds only BAP
FTL182	0.04-0.2	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Red/Brown)	N	N	N	-
FTL183	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL183	0.05-0.15	B	Basecourse (Layer beneath Road)	Fine Basecourse With Clay (Brown/Grey)	N	N	N	
FTL183	0.15-0.26	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Dark Brown Moderately Coarse Hardfill)	N	N	N	
FTL184	0-0.04	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL184	0.04-0.1	B	Basecourse (Layer beneath Road)	Fine Basecourse (Brown)	N	N	N	
FTL184	0.1-0.19	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Dark Brown Moderately Coarse Hardfill)	N	N	N	
FTL185	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL185	0.02-0.47	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Orange/Brown)	N	N	N	
FTL186	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL186	0.03-0.27	B	Basecourse (Layer beneath Road)	Basecourse (Orange/Grey) With Gravels	N	N	N	-
FTL186	0.27-0.5	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Dark Blue-Green/Grey)	N	N	N	
FTL187	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL187	0.02-0.4	B	Basecourse (Layer beneath Road)	Basecourse (Orange/Grey) With Gravels	N	N	N	-
FTL188	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	
FTL188	0.02-0.22	B	Basecourse (Layer beneath Road)	Basecourse (Light Brown/Grey) With Gravels	N	N	N	
FTL188	0.22-0.4	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Orange Clay With Hardfill)	N	N	N	
FTL188	0.4-0.5	S	Sub-Base (Layer beneath Basecourse)	Coarse Sub-Base (Grey Clay With Hardfill)	N	N	N	
FTL189	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	N	elevated
FTL189	0.05-0.12	B	Basecourse (Layer beneath Road)	Basecourse (Orange/Grey) With Gravels	N	N	Y	-
FTL189	0.12-0.17	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	elevated
FTL189	0.17-0.36	B	Basecourse (Layer beneath Road)	Fine Clayey Basecourse (Orange/Grey) With Gravels	N	N	N	-
FTL190	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	N	elevated
FTL190	0.05-0.12	B	Basecourse (Layer beneath Road)	Basecourse (Orange/Grey) With Gravels	N	N	N	elevated
FTL190	0.12-0.16	P	Pavement (Road Interface)	Pavement/Road - Asphalt	N	N	N	elevated
FTL190	0.16-0.37	B	Basecourse (Layer beneath Road)	Fine Clayey Basecourse (Orange/Grey) With Gravels	N	N	N	-
FTL191	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL191	0.02-0.2	B	Basecourse (Layer beneath Road)	Fine To Moderate Basecourse (Orange/Grey) With Gravels	N	N	Y	-
FTL191	0.2-0.24	P	Pavement (Road Interface)	Pavement/Road - Coal Tar	Y	Y	Y	-
FTL191	0.24-0.45	S	Sub-Base (Layer beneath Basecourse)	Moderate To Coarse Basecourse (Orange/Grey) With Gravels	N	N	N	Exceeds only BAP
FTL192	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL192	0.03-0.27	B	Basecourse (Layer beneath Road)	Basecourse (Orange/Brown) With Fine Gravels	N	N	N	
FTL193	0-0.02	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	Y	-
FTL193	0.02-0.05	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	Y	-
FTL193	0.05-0.17	B	Basecourse (Layer beneath Road)	Basecourse (Orange/Brown) With Fine Gravels	N	N	N	Exceeds only BAP
FTL194	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	Triplicates Collected
FTL194	0.03-0.17	B	Basecourse (Layer beneath Road)	Basecourse (Fine To Moderate - Grey)	N	N	N	Exceeds only BAP - triplicated collected
FTL194	0.17-0.27	S	Sub-Base (Layer beneath Basecourse)	Orange Clay	N	N	N	-
FTL194	0.27-0.34	S	Sub-Base (Layer beneath Basecourse)	Lightweight Crushed Black Glassy Material	N	N	N	Sample not analysed
FTL194	0.34-0.45	B	Basecourse (Layer beneath Road)	Moderately Sized Rounded Rock Fill	N	N	N	Sample not analysed
FTL195	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	Triplicates Collected
FTL195	0.05-0.12	B	Basecourse (Layer beneath Road)	Basecourse (Grey/Brown)	N	N	N	Sample not analysed
FTL195	0.12-0.32	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Grey Brown)	N	N	N	Sample not analysed
FTL195	0.32	C	Concrete Slab (May be service duct)	Concrete Slab	N	N	N	Sample not analysed
FTL196	0-0.05	P	Pavement (Road Interface)	Pavement/ Road - Asphalt	N	N	N	elevated
FTL196	0.05-0.08	B	Basecourse (Layer beneath Road)	Fine Basecourse (Brown/Grey)	N	N	Y	elevated
FTL196	0.08-0.11	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	N	
FTL196	0.11-0.35	S	Sub-Base (Layer beneath Basecourse)	Sub-Base (Brown)	N	N	N	
FTL197	0-0.03	P	Pavement (Road Interface)	Pavement/ Road - Chipseal	N	N	N	-
FTL197	0.03-0.06	P	Pavement (Road Interface)	Pavement/ Road - Coal Tar	Y	Y	N	Triplicates Collected
FTL197	0.06-0.35	S	Sub-Base (Layer beneath Basecourse)	Basecourse (Moderately Sized (Brown & Grey)	N	N	N	-

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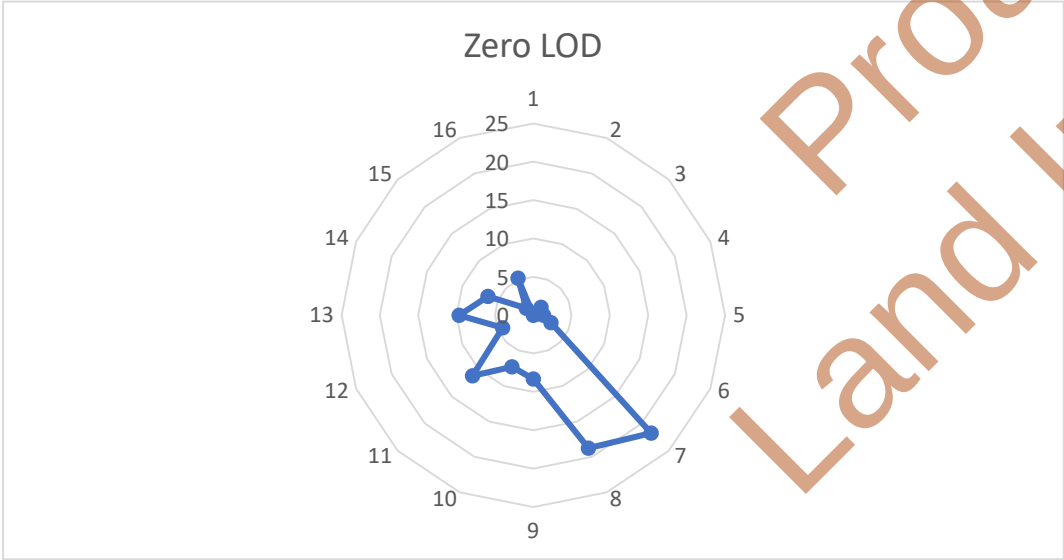
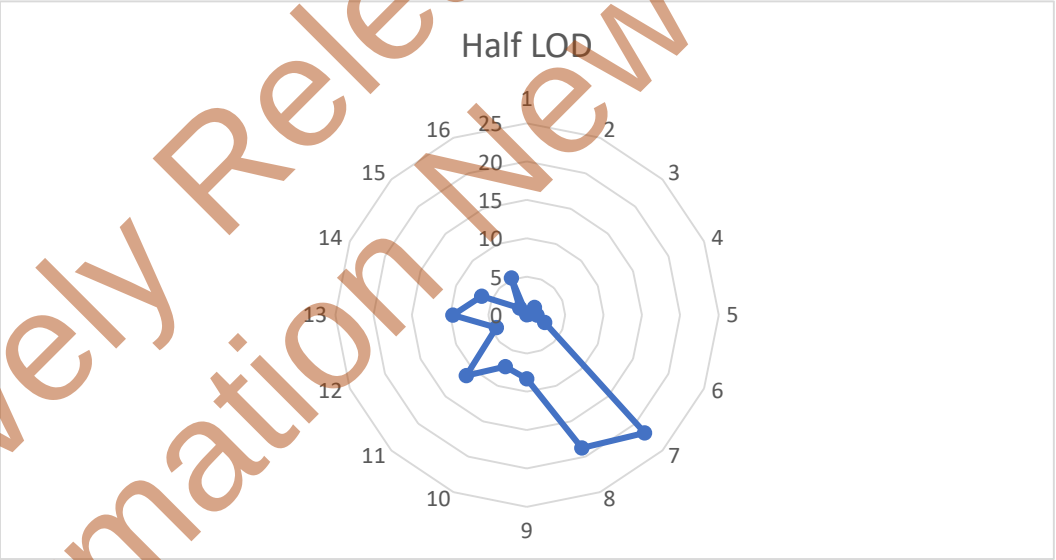
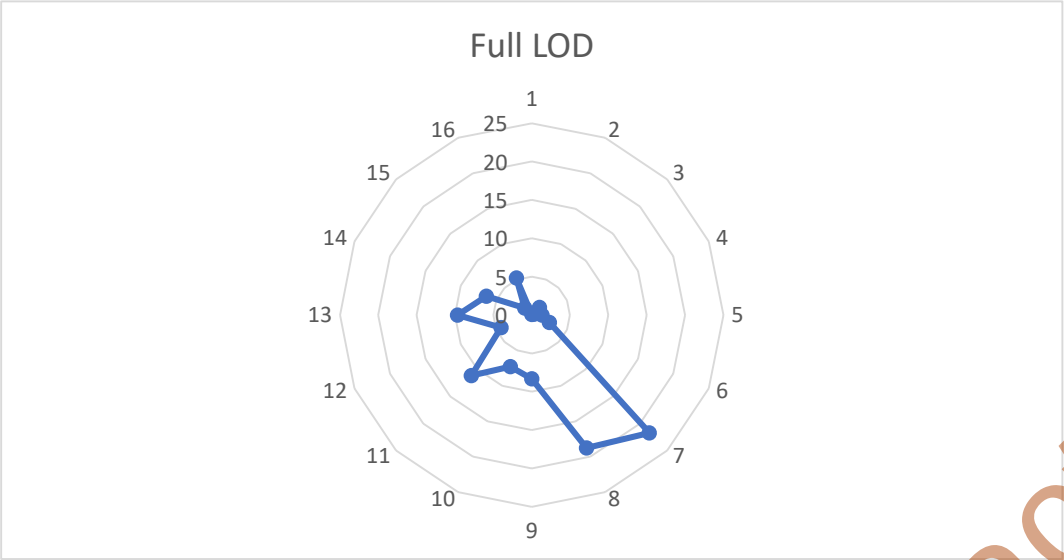
Appendix D

Radar Plots

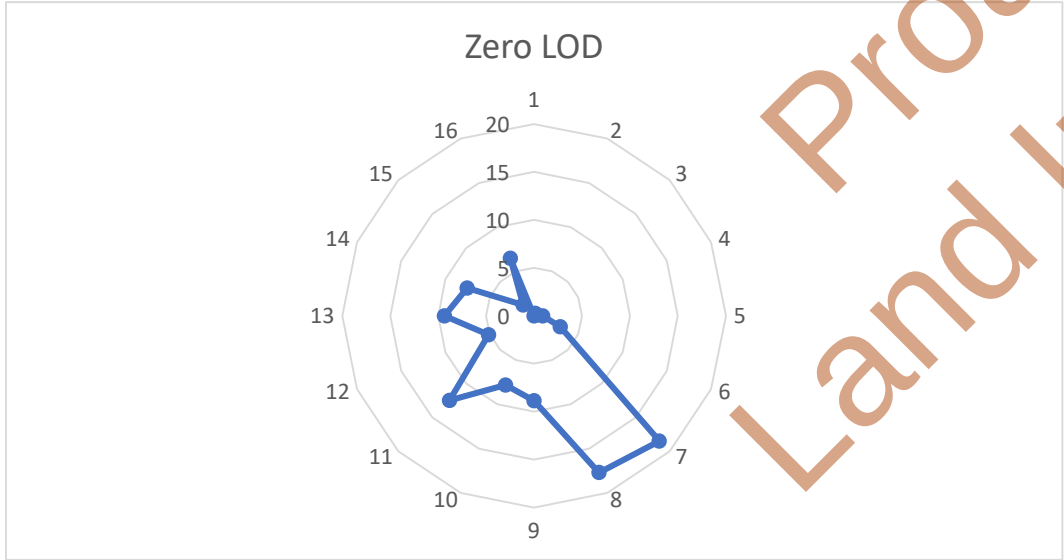
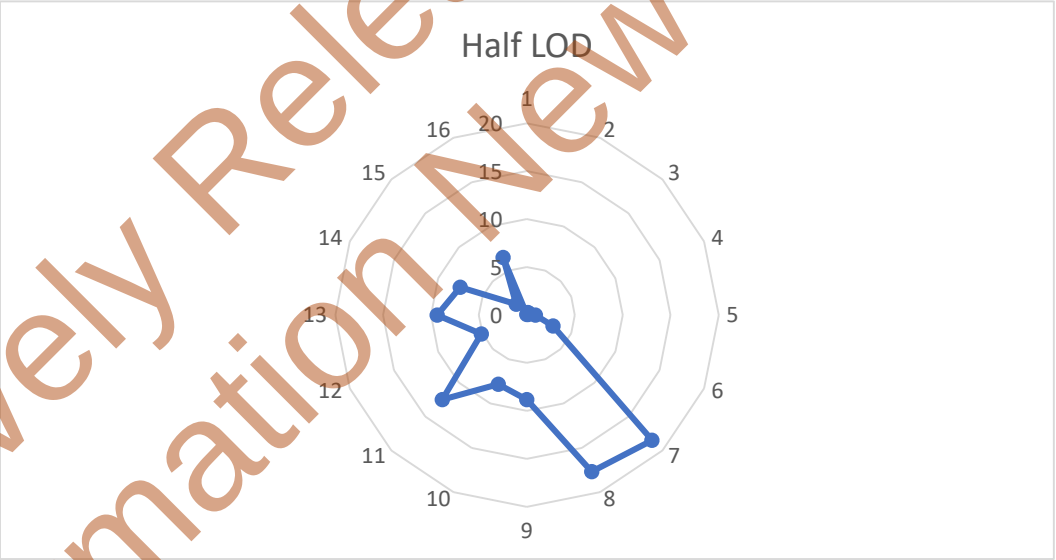
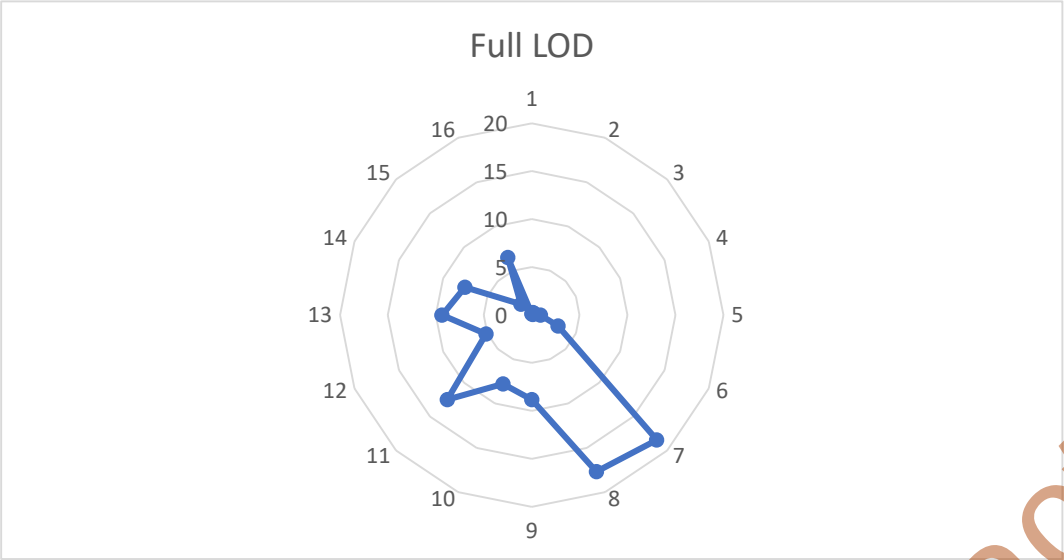
PAH Compound	FTL165 0-0.04m 17-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	3.1	FALSE	3.1	3.1	3.1	0.1351051	0.1351051	0.135105
Acenaphthylene	1.61	FALSE	1.61	1.61	1.61	0.0701675	0.0701675	0.070167
Acenaphthene	31	FALSE	31	31	31	1.351051	1.351051	1.351051
Fluorene	17.8	FALSE	17.8	17.8	17.8	0.7757648	0.7757648	0.775765
Anthracene	84	FALSE	84	84	84	3.6609124	3.6609124	3.660912
Phenanthrene	350	FALSE	350	350	350	15.253801	15.253801	15.2538
Fluoranthene	370	FALSE	370	370	370	16.125447	16.125447	16.12545
Pyrene	420	FALSE	420	420	420	18.304562	18.304562	18.30456
Benzo[a]anthracene	174	FALSE	174	174	174	7.5833184	7.5833184	7.583318
Chrysene	166	FALSE	166	166	166	7.2346601	7.2346601	7.23466
Benzo[b]fluoranthene + Benzo[j]fluoranthene	187	FALSE	187	187	187	8.1498882	8.1498882	8.149888
Benzo[k]fluoranthene	75	FALSE	75	75	75	3.2686717	3.2686717	3.268672
Benzo[a]pyrene (BAP)	173	FALSE	173	173	173	7.5397362	7.5397362	7.539736
Indeno(1,2,3-c,d)pyrene	108	FALSE	108	108	108	4.7068873	4.7068873	4.706887
Dibenzo[a,h]anthracene	26	FALSE	26	26	26	1.1331395	1.1331395	1.13314
Benzo[g,h,i]perylene	108	FALSE	108	108	108	4.7068873	4.7068873	4.706887
Total of 16 Priority PAHs	2,500		2294.51	2294.51	2295	100	100	100



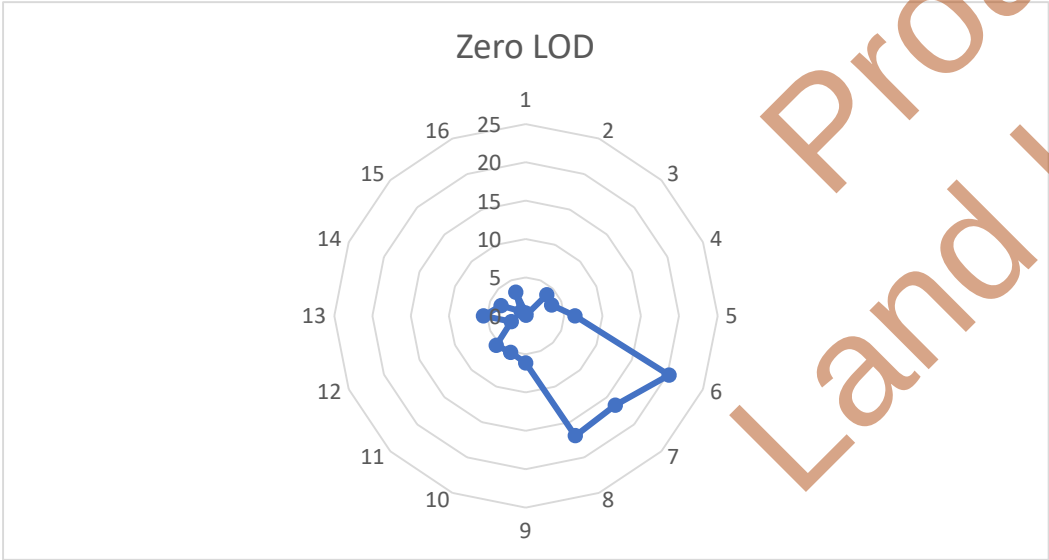
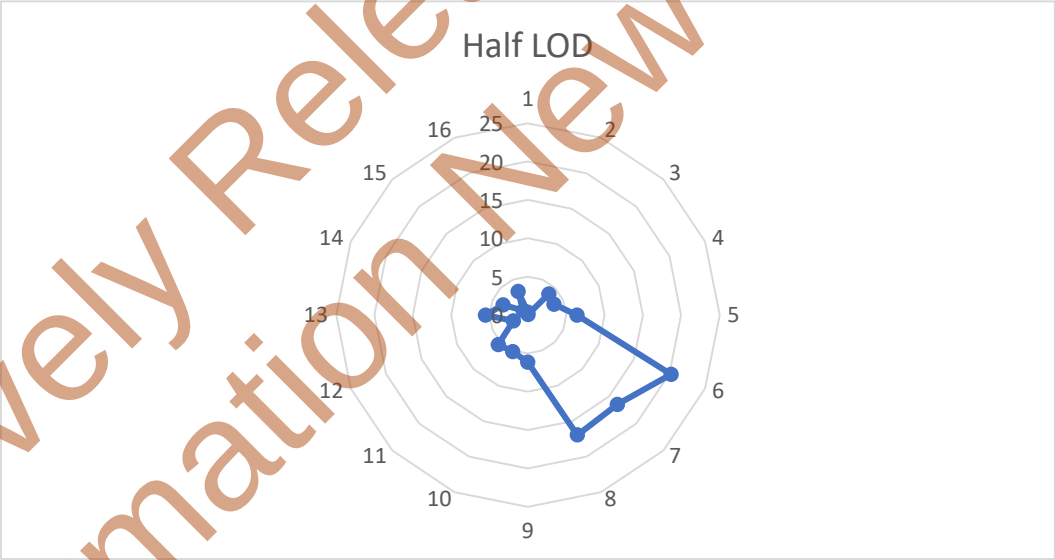
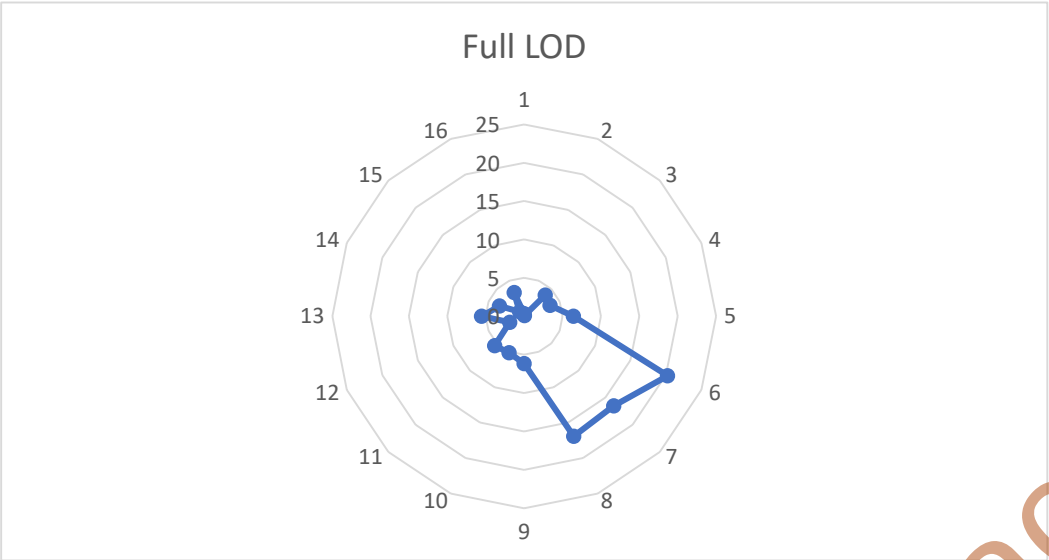
PAH Compound	FTL153 0.02-0.07m 17-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.5	TRUE	0.5	0.25	0	0.074355	0.0371913	0
Acenaphthylene	1.55	FALSE	1.55	1.55	1.55	0.2305004	0.2305861	0.230672
Acenaphthene	9.6	FALSE	9.6	9.6	9.6	1.4276154	1.4281464	1.428678
Fluorene	2.2	FALSE	2.2	2.2	2.2	0.3271619	0.3272835	0.327405
Anthracene	9	FALSE	9	9	9	1.3383895	1.3388872	1.339385
Phenanthrene	16.9	FALSE	16.9	16.9	16.9	2.513198	2.5141327	2.515068
Fluoranthene	146	FALSE	146	146	146	21.711651	21.719726	21.72781
Pyrene	126	FALSE	126	126	126	18.737453	18.744421	18.7514
Benzo[a]anthracene	56	FALSE	56	56	56	8.3277567	8.3308539	8.333953
Chrysene	49	FALSE	49	49	49	7.2867871	7.2894972	7.292209
Benzo[b]fluoranthene + Benzo[j]fluoranthene	75	FALSE	75	75	75	11.153246	11.157394	11.16154
Benzo[k]fluoranthene	29	FALSE	29	29	29	4.3125883	4.3141922	4.315797
Benzo[a]pyrene (BAP)	65	FALSE	65	65	65	9.6661462	9.6697411	9.673339
Indeno(1,2,3-c,d)pyrene	43	FALSE	43	43	43	6.3945275	6.3969057	6.399286
Dibenzo[a,h]anthracene	8.7	FALSE	8.7	8.7	8.7	1.2937765	1.2942577	1.294739
Benzo[g,h,i]perylene	35	FALSE	35	35	35	5.2048479	5.2067837	5.208721
Total of 16 Priority PAHs	720		672.45	672.2	672	100	100	100



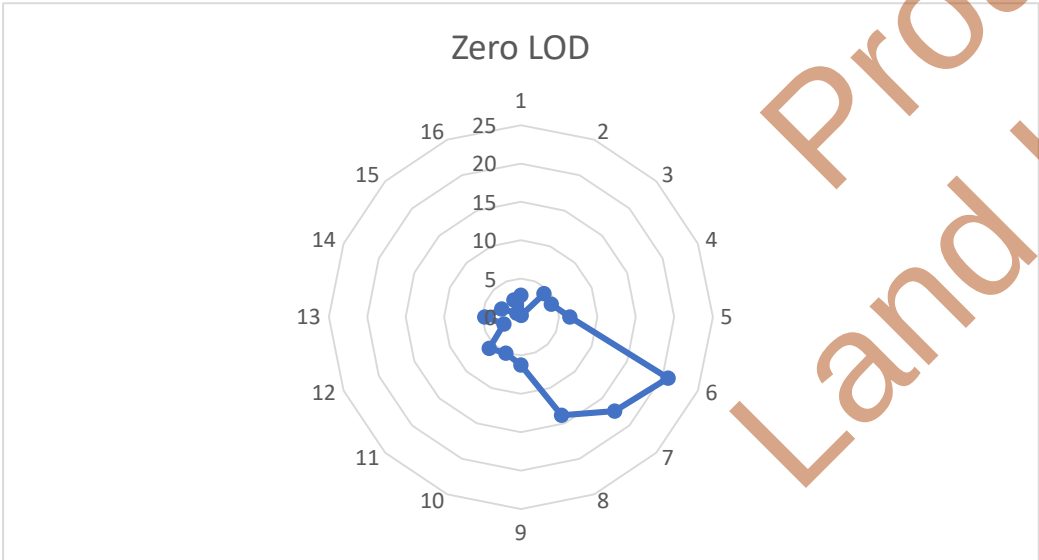
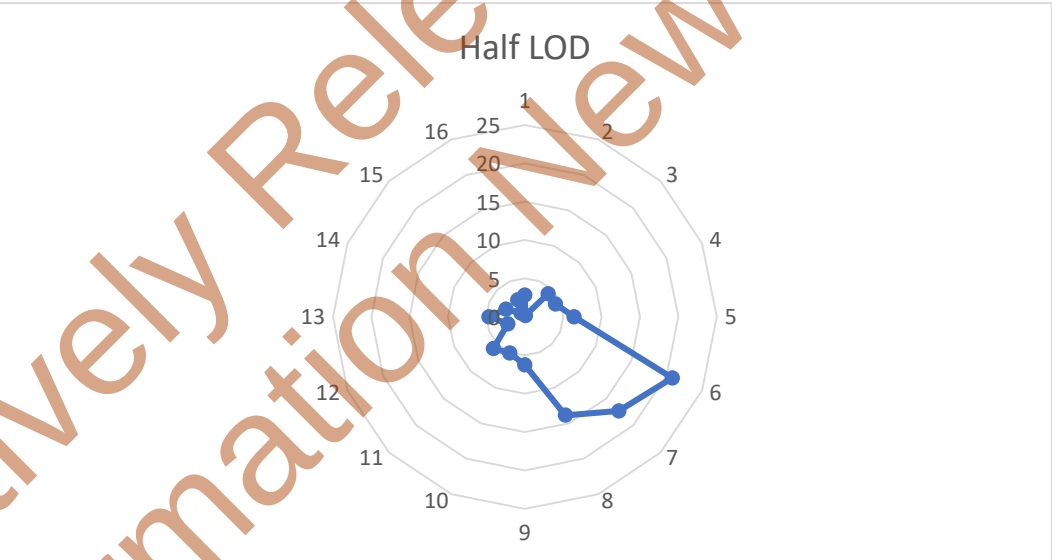
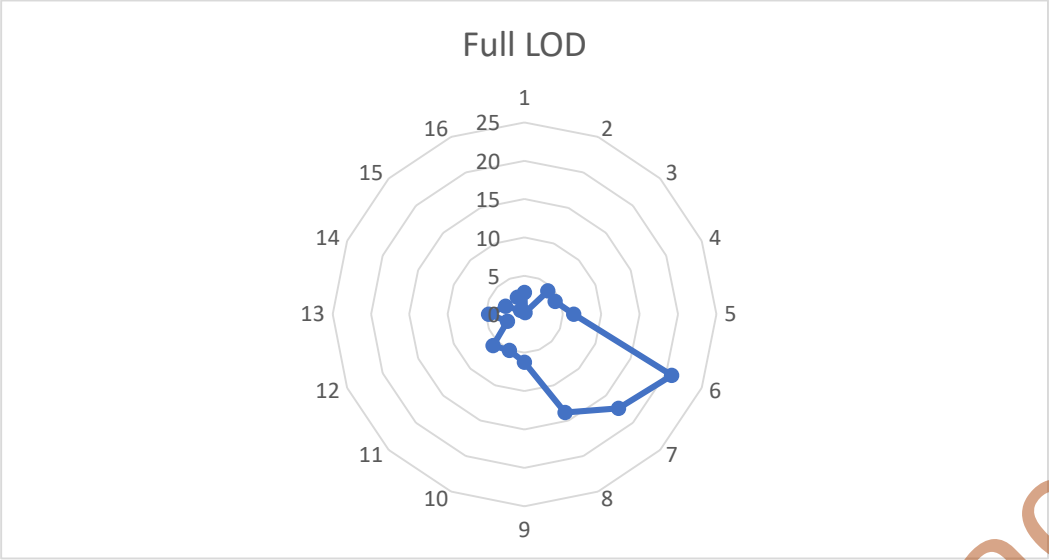
PAH Compound	FTL151 0.04-0.09m 17-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.5	TRUE	0.5	0.25	0	0.1298904	0.0649874	0
Acenaphthylene	1.06	FALSE	1.06	1.06	1.06	0.2753676	0.2755465	0.275726
Acenaphthene	1.12	FALSE	1.12	1.12	1.12	0.2909544	0.2911435	0.291333
Fluorene	0.46	FALSE	0.46	0.46	0.46	0.1194991	0.1195768	0.119655
Anthracene	3.5	FALSE	3.5	3.5	3.5	0.9092326	0.9098235	0.910415
Phenanthrene	11.4	FALSE	11.4	11.4	11.4	2.9615005	2.9634251	2.965352
Fluoranthene	71	FALSE	71	71	71	18.444433	18.456419	18.46842
Pyrene	68	FALSE	68	68	68	17.665091	17.676571	17.68807
Benzo[a]anthracene	34	FALSE	34	34	34	8.8325453	8.8382854	8.844033
Chrysene	30	FALSE	30	30	30	7.7934224	7.7984871	7.803558
Benzo[b]fluoranthene + Benzo[j]fluoranthene	48	FALSE	48	48	48	12.469476	12.477579	12.48569
Benzo[k]fluoranthene	19.8	FALSE	19.8	19.8	19.8	5.1436588	5.1470015	5.150349
Benzo[a]pyrene (BAP)	36	FALSE	36	36	36	9.3521068	9.3581845	9.36427
Indeno(1,2,3-c,d)pyrene	29	FALSE	29	29	29	7.5336416	7.5385375	7.54344
Dibenzo[a,h]anthracene	6.1	FALSE	6.1	6.1	6.1	1.5846625	1.5856924	1.586724
Benzo[g,h,i]perylene	25	FALSE	25	25	25	6.4945186	6.4987392	6.502965
Total of 16 Priority PAHs	420		384.94	384.69	384.4	100	100	100



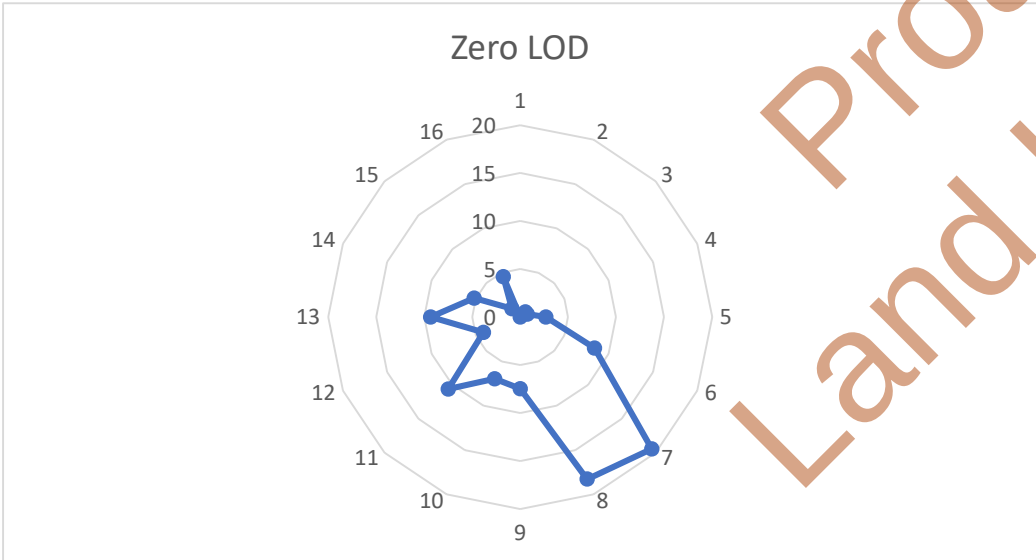
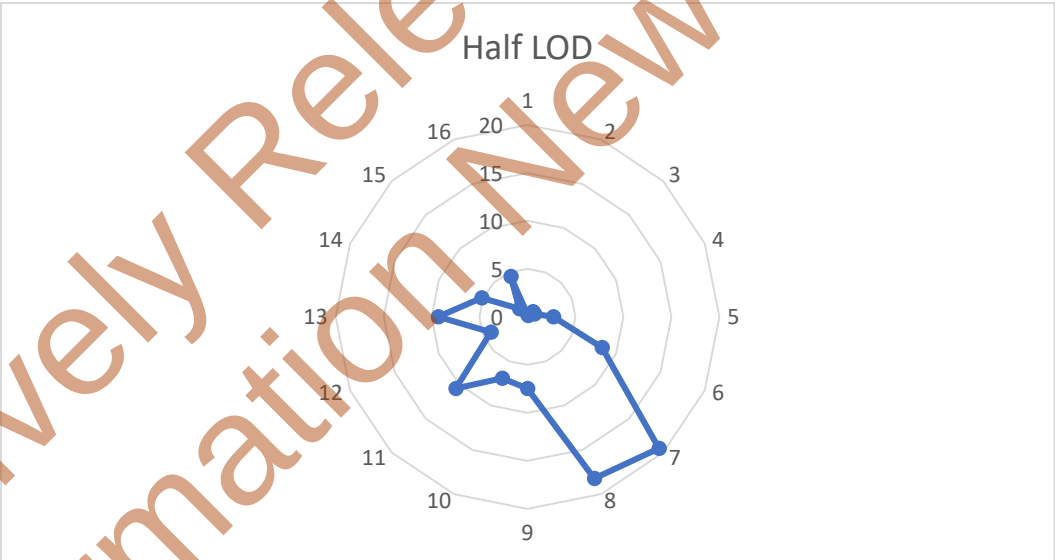
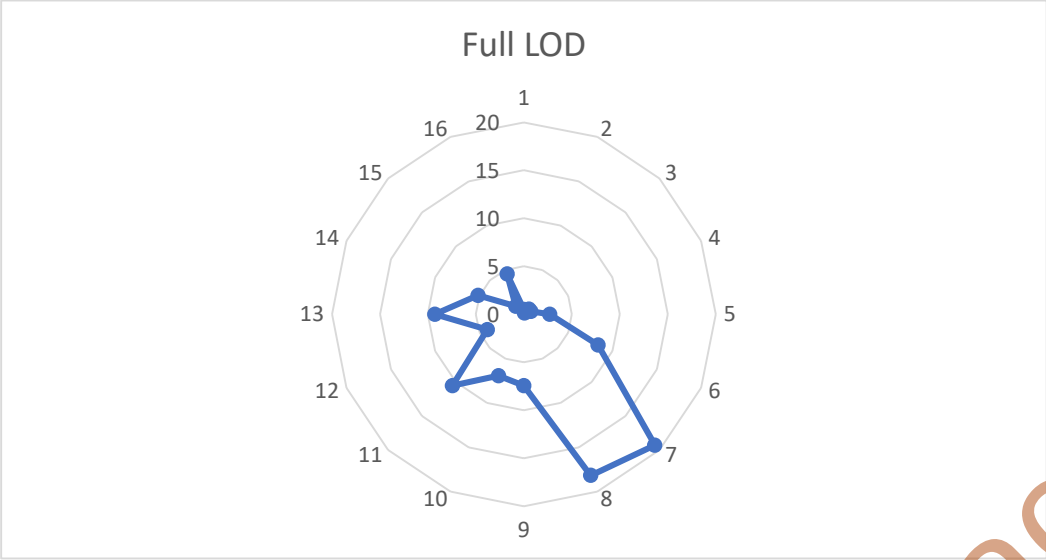
PAH Compound	FTL142 0.1-0.15m 17-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	8.4	FALSE	8.4	8.4	8.4	0.3466519	0.3466519	0.346652
Acenaphthylene	1.78	FALSE	1.78	1.78	1.78	0.0734572	0.0734572	0.073457
Acenaphthene	94	FALSE	94	94	94	3.8792001	3.8792001	3.8792
Fluorene	89	FALSE	89	89	89	3.6728596	3.6728596	3.67286
Anthracene	156	FALSE	156	156	156	6.4378214	6.4378214	6.437821
Phenanthrene	490	FALSE	490	490	490	20.221362	20.221362	20.22136
Fluoranthene	400	FALSE	400	400	400	16.507234	16.507234	16.50723
Pyrene	410	FALSE	410	410	410	16.919915	16.919915	16.91992
Benzo[a]anthracene	149	FALSE	149	149	149	6.1489448	6.1489448	6.148945
Chrysene	125	FALSE	125	125	125	5.1585107	5.1585107	5.158511
Benzo[b]fluoranthene + Benzo[j]fluoranthene	132	FALSE	132	132	132	5.4473873	5.4473873	5.447387
Benzo[k]fluoranthene	49	FALSE	49	49	49	2.0221362	2.0221362	2.022136
Benzo[a]pyrene (BAP)	134	FALSE	134	134	134	5.5299235	5.5299235	5.529923
Indeno(1,2,3-c,d)pyrene	84	FALSE	84	84	84	3.4665192	3.4665192	3.466519
Dibenzo[a,h]anthracene	20	FALSE	20	20	20	0.8253617	0.8253617	0.825362
Benzo[g,h,i]perylene	81	FALSE	81	81	81	3.3427149	3.3427149	3.342715
Total of 16 Priority PAHs	2,600		2423.18	2423.18	2423	100	100	100



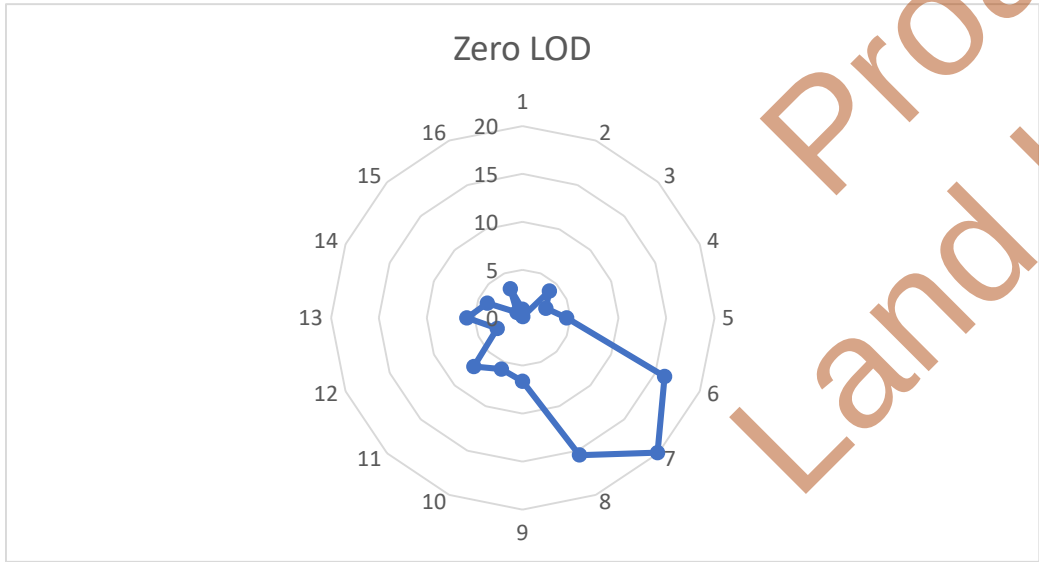
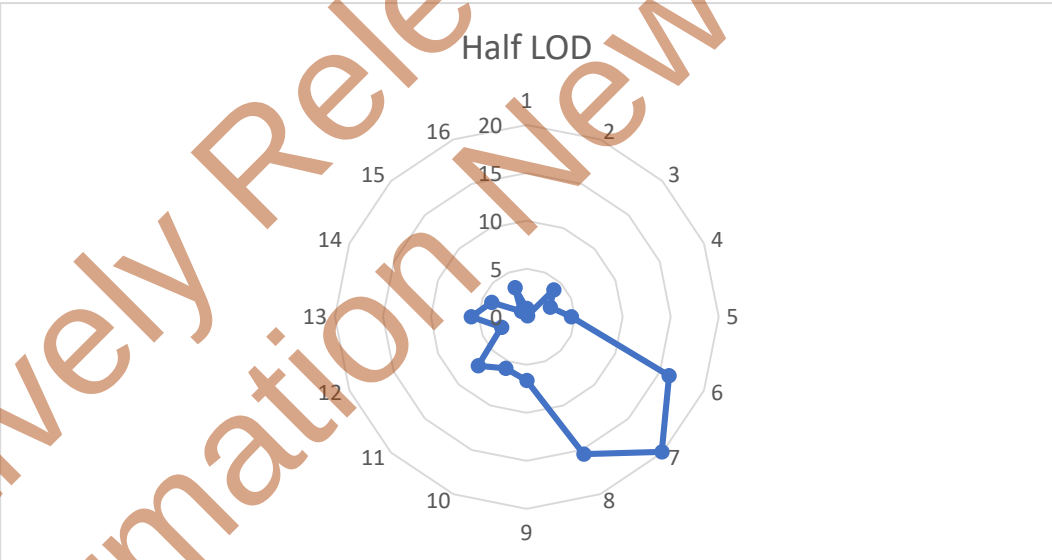
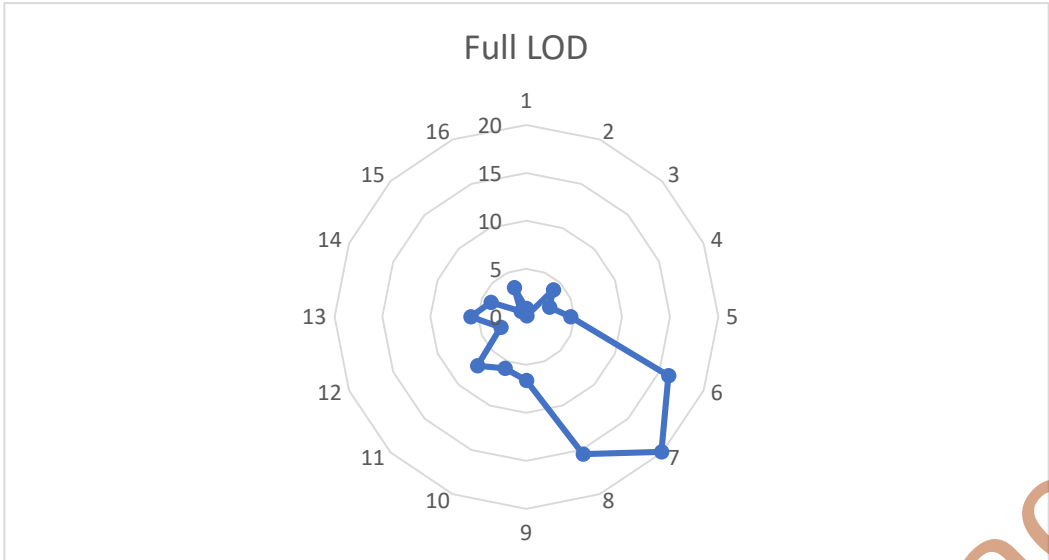
PAH Compound	FTL98 0-0.05m 16-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	66	FALSE	66	66	66	2.8567718	2.8567718	2.856772
Acenaphthylene	4.9	FALSE	4.9	4.9	4.9	0.2120937	0.2120937	0.212094
Acenaphthene	99	FALSE	99	99	99	4.2851578	4.2851578	4.285158
Fluorene	100	FALSE	100	100	100	4.3284422	4.3284422	4.328442
Anthracene	148	FALSE	148	148	148	6.4060944	6.4060944	6.406094
Phenanthrene	480	FALSE	480	480	480	20.776523	20.776523	20.77652
Fluoranthene	400	FALSE	400	400	400	17.313769	17.313769	17.31377
Pyrene	320	FALSE	320	320	320	13.851015	13.851015	13.85102
Benzo[a]anthracene	144	FALSE	144	144	144	6.2329568	6.2329568	6.232957
Chrysene	118	FALSE	118	118	118	5.1075618	5.1075618	5.107562
Benzo[b]fluoranthene + Benzo[j]fluoranthene	134	FALSE	134	134	134	5.8001125	5.8001125	5.800113
Benzo[k]fluoranthene	55	FALSE	55	55	55	2.3806432	2.3806432	2.380643
Benzo[a]pyrene (BAP)	108	FALSE	108	108	108	4.6747176	4.6747176	4.674718
Indeno(1,2,3-c,d)pyrene	62	FALSE	62	62	62	2.6836342	2.6836342	2.683634
Dibenzo[a,h]anthracene	16.4	FALSE	16.4	16.4	16.4	0.7098645	0.7098645	0.709865
Benzo[g,h,i]perylene	55	FALSE	55	55	55	2.3806432	2.3806432	2.380643
Total of 16 Priority PAHs	2,500		2310.3	2310.3	2310	100	100	100



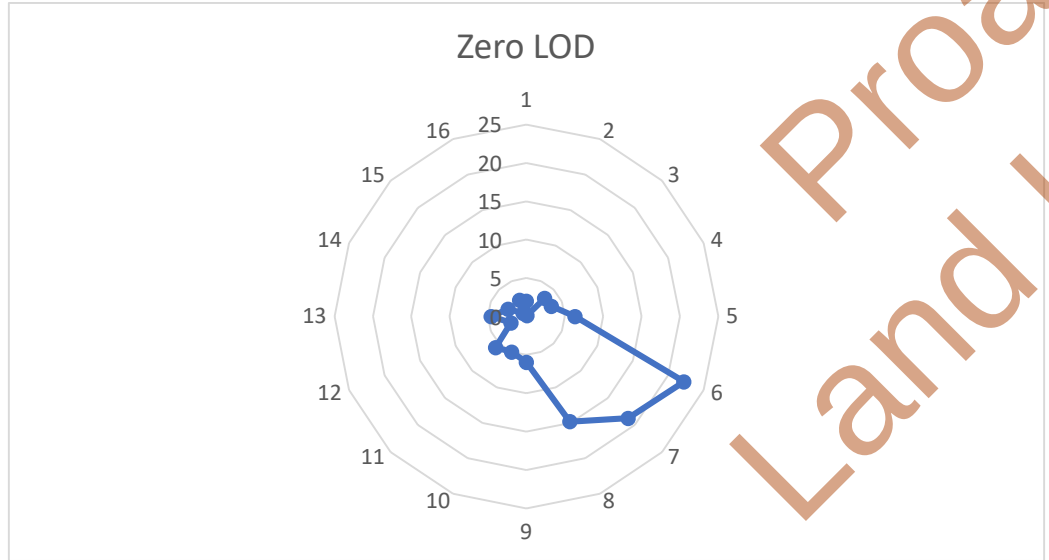
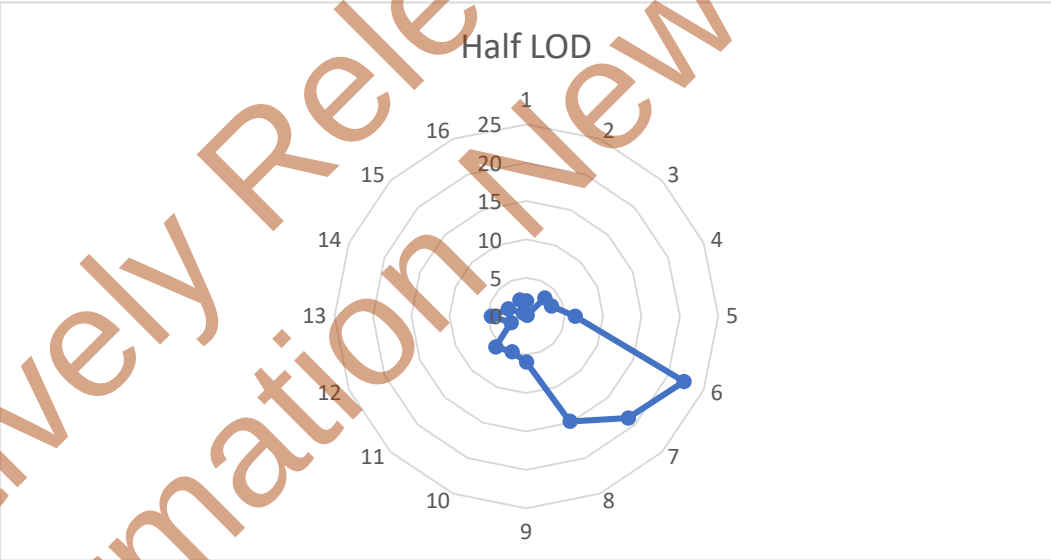
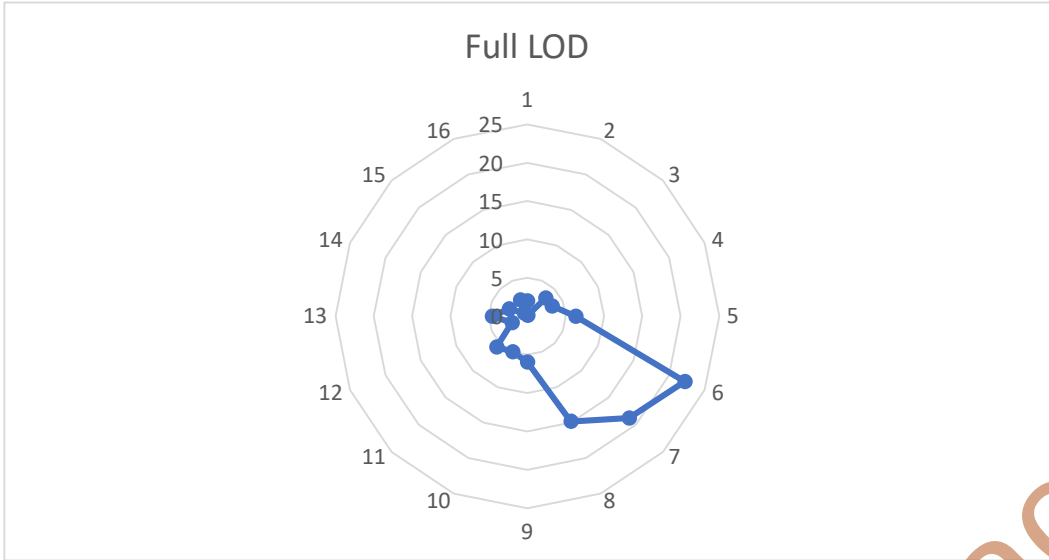
PAH Compound	FTL83 0-0.05m 15-Jul-2024	Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.5 TRUE	0.5	0.25	0	0.5163156	0.258826	0
Acenaphthylene	0.16 FALSE	0.16	0.16	0.16	0.165221	0.1656486	0.166078
Acenaphthene	0.74 FALSE	0.74	0.74	0.74	0.764147	0.7661249	0.768113
Fluorene	0.77 FALSE	0.77	0.77	0.77	0.795126	0.797184	0.799253
Anthracene	2.6 FALSE	2.6	2.6	2.6	2.684841	2.69179	2.698775
Phenanthrene	8.1 FALSE	8.1	8.1	8.1	8.3643123	8.3859613	8.407723
Fluoranthene	18.7 FALSE	18.7	18.7	18.7	19.310202	19.360182	19.41042
Pyrene	17.6 FALSE	17.6	17.6	17.6	18.174308	18.221348	18.26863
Benzo[a]anthracene	7.2 FALSE	7.2	7.2	7.2	7.4349442	7.4541878	7.473531
Chrysene	6.7 FALSE	6.7	6.7	6.7	6.9186287	6.9365359	6.954536
Benzo[b]fluoranthene + Benzo[j]fluoranthene	10.2 FALSE	10.2	10.2	10.2	10.532838	10.560099	10.5875
Benzo[k]fluoranthene	4 FALSE	4	4	4	4.1305246	4.1412154	4.151962
Benzo[a]pyrene (BAP)	9 FALSE	9	9	9	9.2936803	9.3177348	9.341914
Indeno(1,2,3-c,d)pyrene	5 FALSE	5	5	5	5.1631557	5.1765193	5.189952
Dibenzo[a,h]anthracene	1.17 FALSE	1.17	1.17	1.17	1.2081784	1.2113055	1.214449
Benzo[g,h,i]perylene	4.4 FALSE	4.4	4.4	4.4	4.543577	4.555337	4.567158
Total of 16 Priority PAHs	103	96.84	96.59	96.34	100	100	100



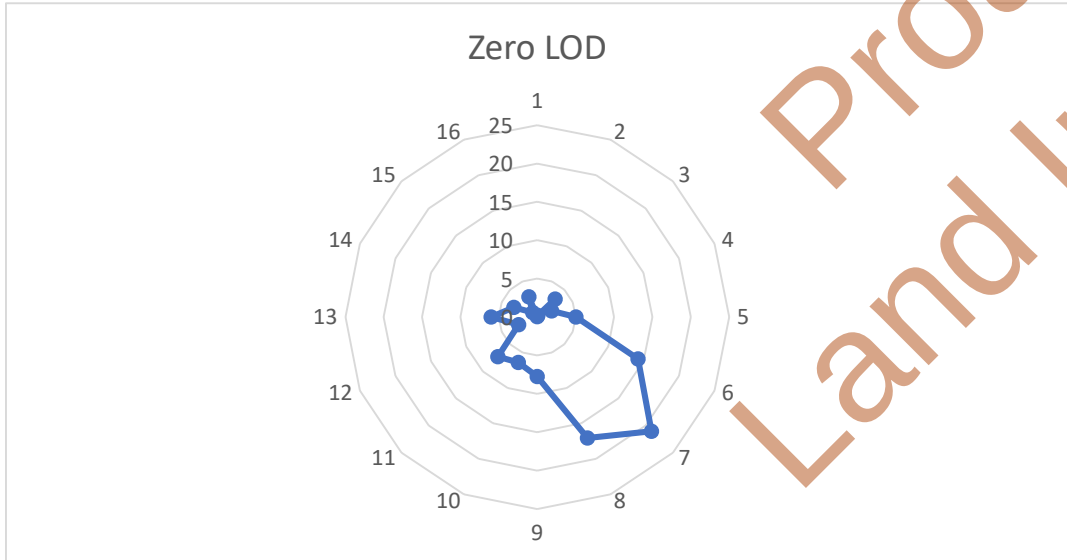
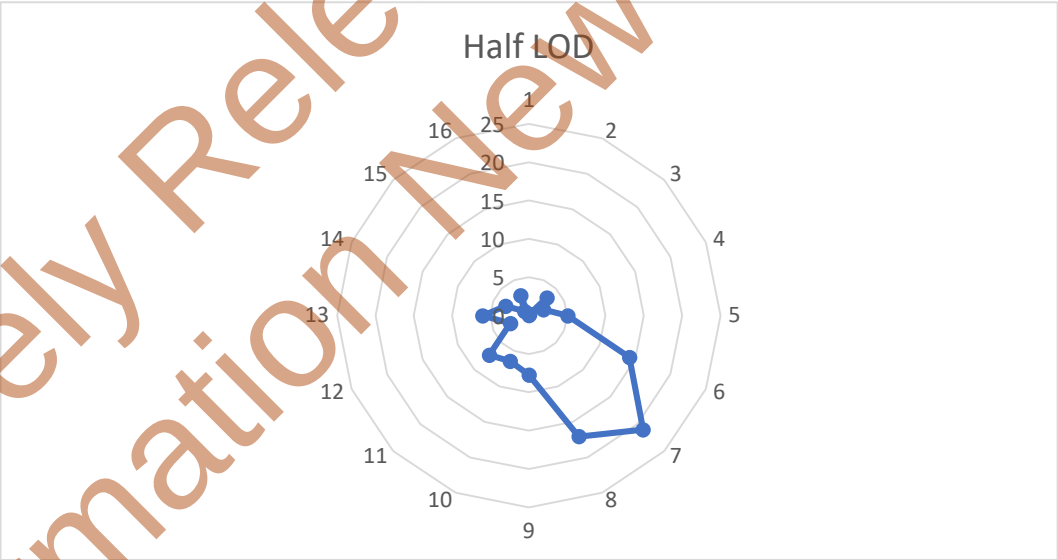
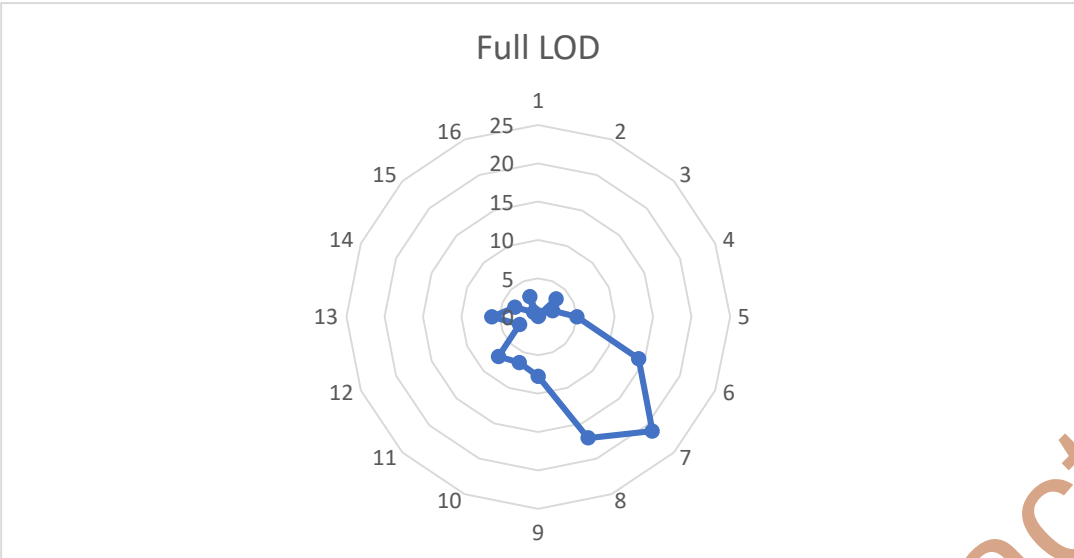
PAH Compound	FTL110 0-0.03m 16-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	3.2	FALSE	3.2	3.2	3.2	0.8846133	0.8846133	0.884613
Acenaphthylene	0.44	FALSE	0.44	0.44	0.44	0.1216343	0.1216343	0.121634
Acenaphthene	14.3	FALSE	14.3	14.3	14.3	3.9531155	3.9531155	3.953115
Fluorene	9.5	FALSE	9.5	9.5	9.5	2.6261956	2.6261956	2.626196
Anthracene	16.7	FALSE	16.7	16.7	16.7	4.6165754	4.6165754	4.616575
Phenanthrene	58	FALSE	58	58	58	16.033615	16.033615	16.03362
Fluoranthene	72	FALSE	72	72	72	19.903798	19.903798	19.9038
Pyrene	56	FALSE	56	56	56	15.480732	15.480732	15.48073
Benzo[a]anthracene	24	FALSE	24	24	24	6.6345994	6.6345994	6.634599
Chrysene	21	FALSE	21	21	21	5.8052745	5.8052745	5.805275
Benzo[b]fluoranthene + Benzo[j]fluoranthene	26	FALSE	26	26	26	7.1874827	7.1874827	7.187483
Benzo[k]fluoranthene	10.4	FALSE	10.4	10.4	10.4	2.8749931	2.8749931	2.874993
Benzo[a]pyrene (BAP)	21	FALSE	21	21	21	5.8052745	5.8052745	5.805275
Indeno(1,2,3-c,d)pyrene	14.4	FALSE	14.4	14.4	14.4	3.9807597	3.9807597	3.98076
Dibenzo[a,h]anthracene	2.9	FALSE	2.9	2.9	2.9	0.8016808	0.8016808	0.801681
Benzo[g,h,i]perylene	11.9	FALSE	11.9	11.9	11.9	3.2896556	3.2896556	3.289656
Total of 16 Priority PAHs	380		361.74	361.74	361.7	100	100	100



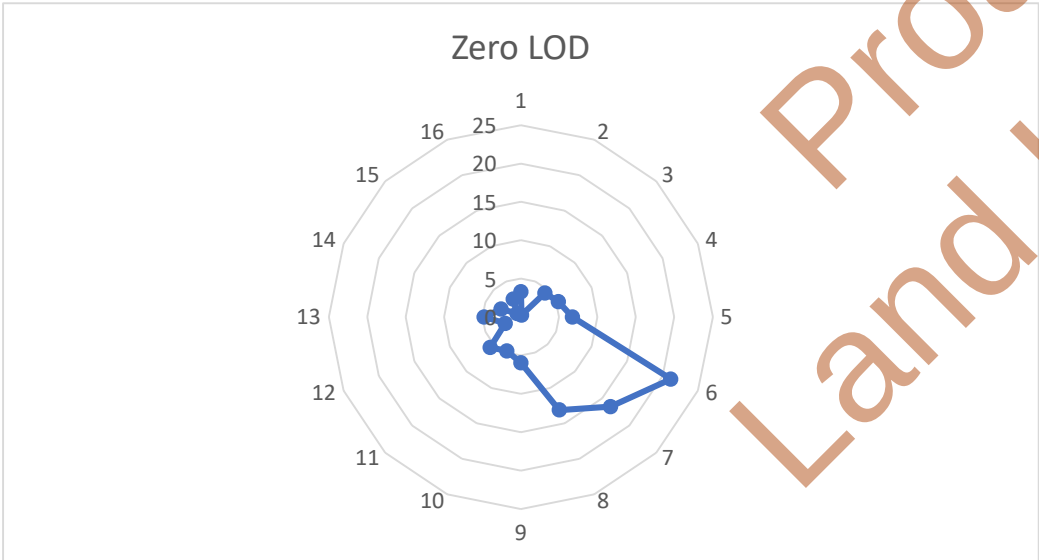
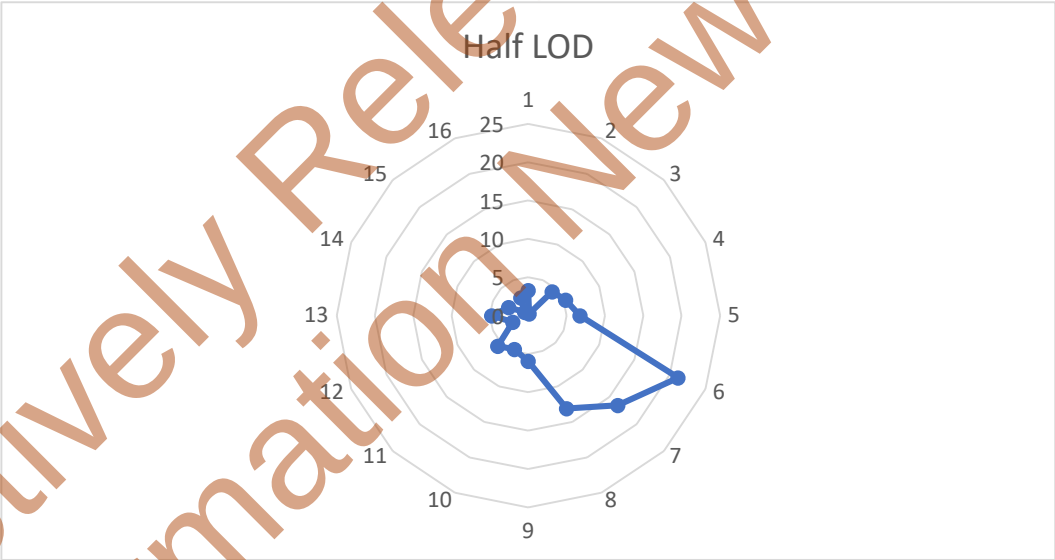
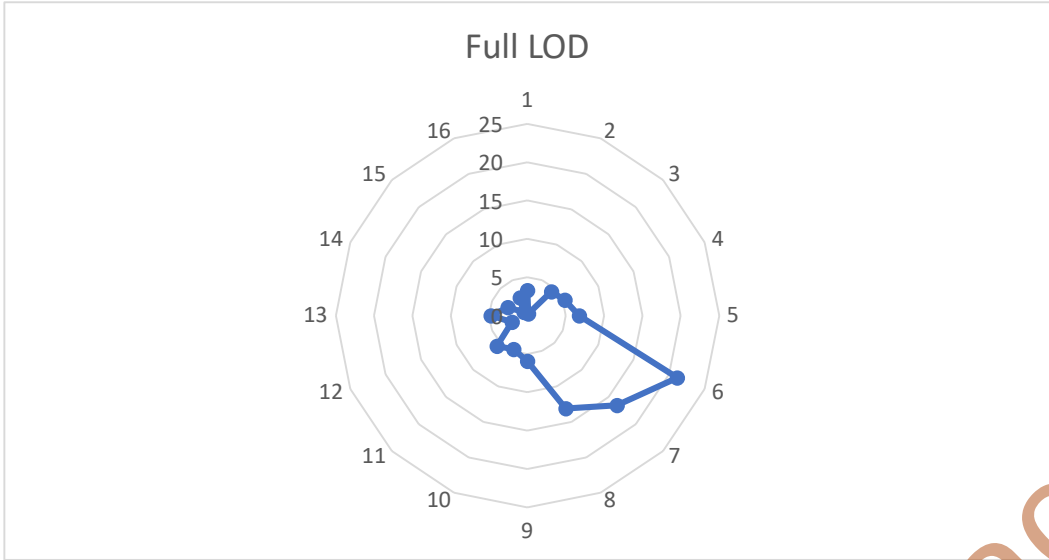
PAH Compound	FTL86 0-0.5m 15-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	41	FALSE	41	41	41	2.0231927	2.0231927	2.023193
Acenaphthylene	3.3	FALSE	3.3	3.3	3.3	0.1628423	0.1628423	0.162842
Acenaphthene	68	FALSE	68	68	68	3.3555391	3.3555391	3.355539
Fluorene	71	FALSE	71	71	71	3.5035776	3.5035776	3.503578
Anthracene	128	FALSE	128	128	128	6.3163089	6.3163089	6.316309
Phenanthrene	450	FALSE	450	450	450	22.205774	22.205774	22.20577
Fluoranthene	380	FALSE	380	380	380	18.751542	18.751542	18.75154
Pyrene	300	FALSE	300	300	300	14.803849	14.803849	14.80385
Benzo[a]anthracene	121	FALSE	121	121	121	5.9708858	5.9708858	5.970886
Chrysene	101	FALSE	101	101	101	4.9839625	4.9839625	4.983962
Benzo[b]fluoranthene + Benzo[j]fluoranthene	115	FALSE	115	115	115	5.6748088	5.6748088	5.674809
Benzo[k]fluoranthene	44	FALSE	44	44	44	2.1712312	2.1712312	2.171231
Benzo[a]pyrene (BAP)	93	FALSE	93	93	93	4.5891932	4.5891932	4.589193
Indeno(1,2,3-c,d)pyrene	52	FALSE	52	52	52	2.5660005	2.5660005	2.566
Dibenzo[a,h]anthracene	12.2	FALSE	12.2	12.2	12.2	0.6020232	0.6020232	0.602023
Benzo[g,h,i]perylene	47	FALSE	47	47	47	2.3192697	2.3192697	2.31927
Total of 16 Priority PAHs	2,100		2026.5	2026.5	2027	100	100	100



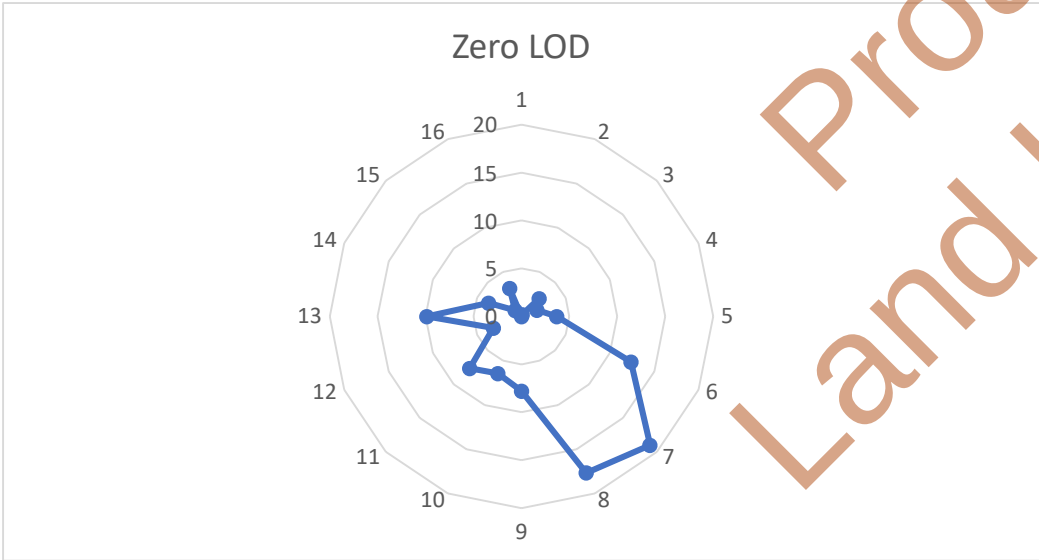
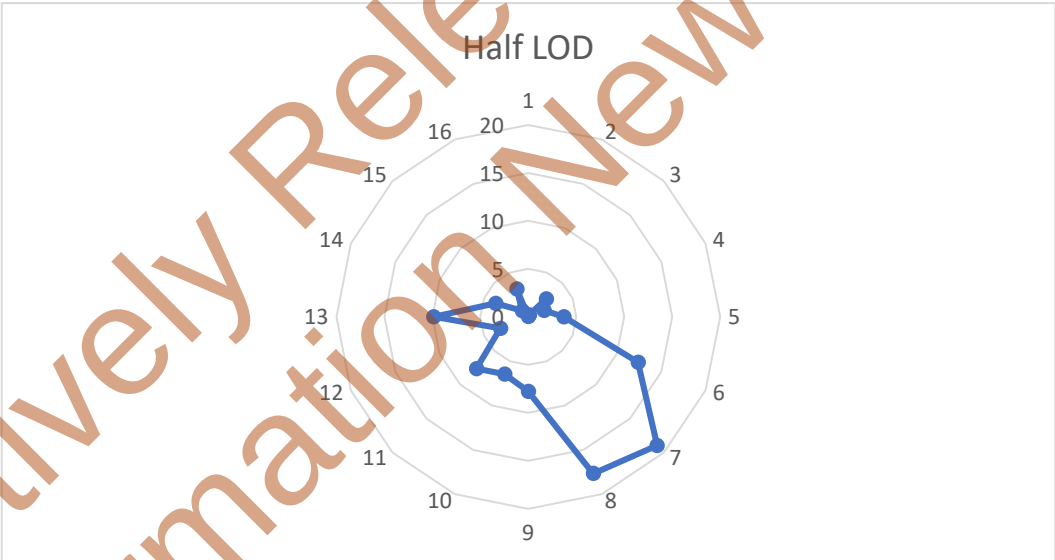
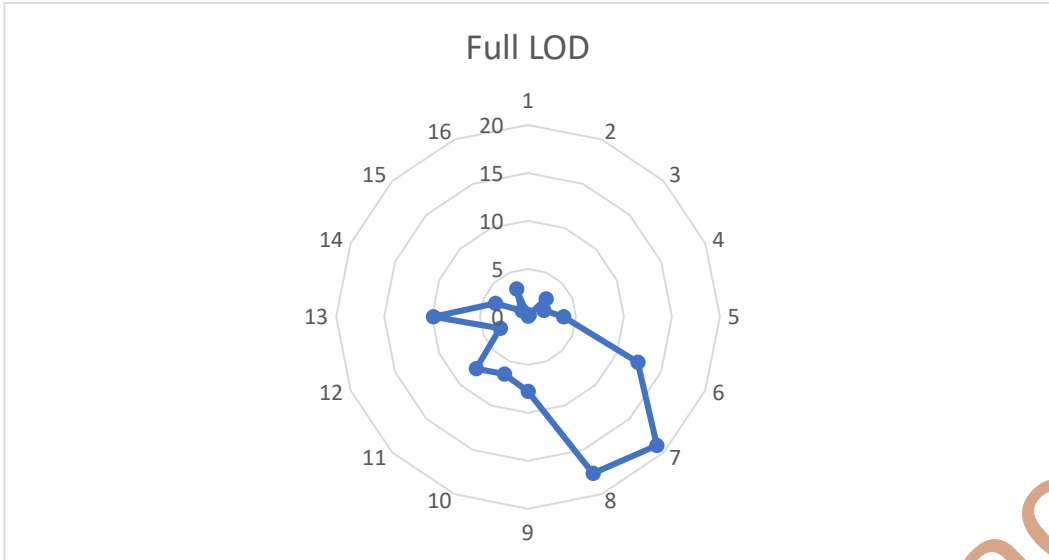
PAH Compound	FTL51A 0-0.1m 27-May-2024-29-May-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	0.8	FALSE	0.8	0.8	0.8	0.0454752	0.0454752	0.045475
Acenaphthylene	3.8	FALSE	3.8	3.8	3.8	0.2160073	0.2160073	0.216007
Acenaphthene	58	FALSE	58	58	58	3.2969532	3.2969532	3.296953
Fluorene	36	FALSE	36	36	36	2.0463847	2.0463847	2.046385
Anthracene	89	FALSE	89	89	89	5.0591178	5.0591178	5.059118
Phenanthrene	250	FALSE	250	250	250	14.211005	14.211005	14.21101
Fluoranthene	370	FALSE	370	370	370	21.032287	21.032287	21.03229
Pyrene	300	FALSE	300	300	300	17.053206	17.053206	17.05321
Benzo[a]anthracene	136	FALSE	136	136	136	7.7307867	7.7307867	7.730787
Chrysene	113	FALSE	113	113	113	6.4233743	6.4233743	6.423374
Benzo[b]fluoranthene + Benzo[j]fluoranthene	128	FALSE	128	128	128	7.2760346	7.2760346	7.276035
Benzo[k]fluoranthene	46	FALSE	46	46	46	2.6148249	2.6148249	2.614825
Benzo[a]pyrene (BAP)	106	FALSE	106	106	106	6.0254661	6.0254661	6.025466
Indeno(1,2,3-c,d)pyrene	58	FALSE	58	58	58	3.2969532	3.2969532	3.296953
Dibenzo[a,h]anthracene	14.6	FALSE	14.6	14.6	14.6	0.8299227	0.8299227	0.829923
Benzo[g,h,i]perylene	50	FALSE	50	50	50	2.842201	2.842201	2.842201
Total of 16 Priority PAHs	1759.2		1759.2	1759.2	1759	100	100	100



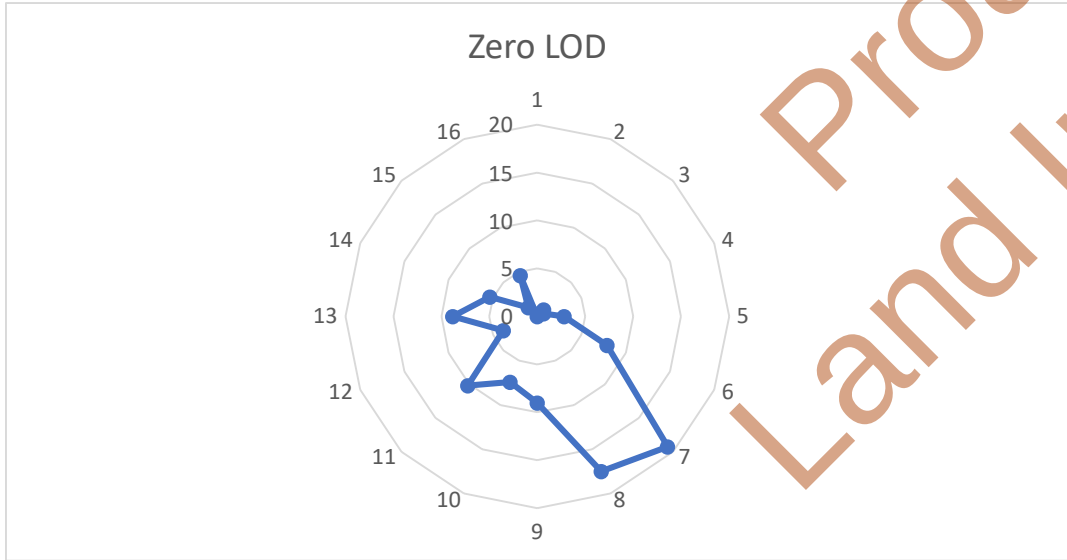
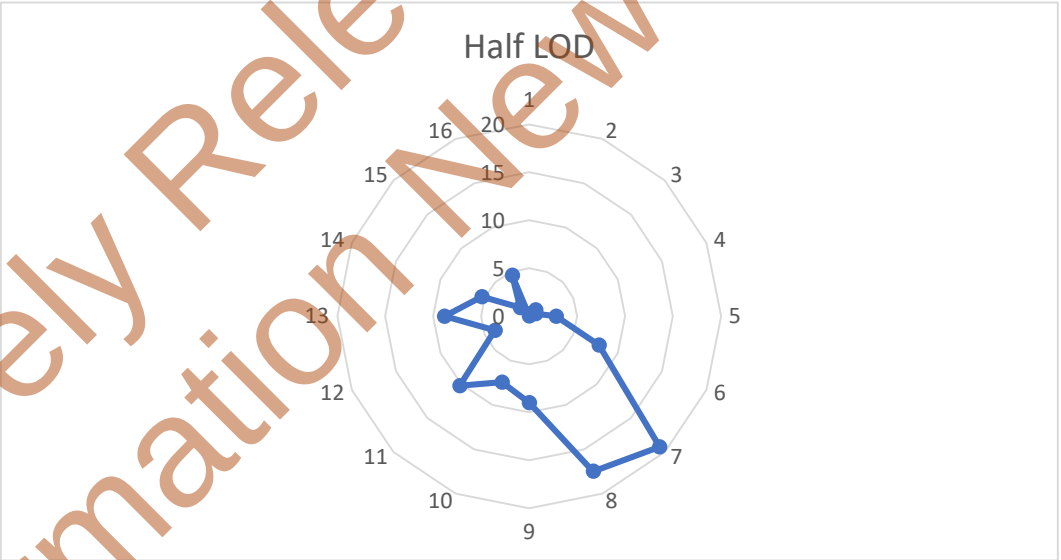
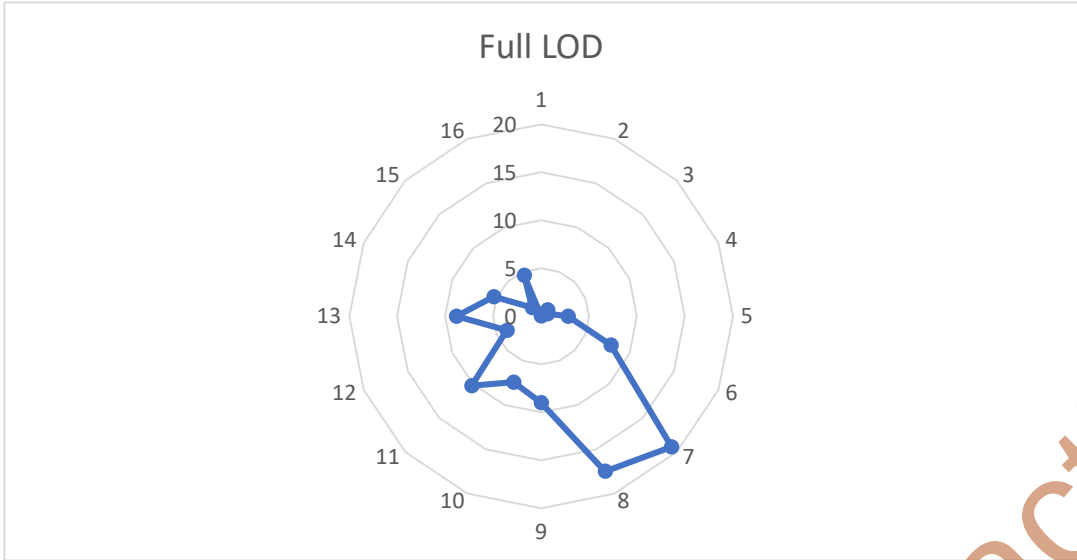
PAH Compound	FTL14 0.1m 01-May-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	50	FALSE	50	50	50	3.3049111	3.3049111	3.304911
Acenaphthylene	3.9	FALSE	3.9	3.9	3.9	0.2577831	0.2577831	0.257783
Acenaphthene	67	FALSE	67	67	67	4.4285809	4.4285809	4.428581
Fluorene	80	FALSE	80	80	80	5.2878578	5.2878578	5.287858
Anthracene	102	FALSE	102	102	102	6.7420186	6.7420186	6.742019
Phenanthrene	320	FALSE	320	320	320	21.151431	21.151431	21.15143
Fluoranthene	250	FALSE	250	250	250	16.524555	16.524555	16.52456
Pyrene	198	FALSE	198	198	198	13.087448	13.087448	13.08745
Benzo[a]anthracene	90	FALSE	90	90	90	5.94884	5.94884	5.94884
Chrysene	72	FALSE	72	72	72	4.759072	4.759072	4.759072
Benzo[b]fluoranthene + Benzo[j]fluoranthene	85	FALSE	85	85	85	5.6183489	5.6183489	5.618349
Benzo[k]fluoranthene	33	FALSE	33	33	33	2.1812413	2.1812413	2.181241
Benzo[a]pyrene (BAP)	72	FALSE	72	72	72	4.759072	4.759072	4.759072
Indeno(1,2,3-c,d)pyrene	42	FALSE	42	42	42	2.7761253	2.7761253	2.776125
Dibenzo[a,h]anthracene	10	FALSE	10	10	10	0.6609822	0.6609822	0.660982
Benzo[g,h,i]perylene	38	FALSE	38	38	38	2.5117324	2.5117324	2.511732
Total of 16 Priority PAHs	1512.9		1512.9	1512.9	1513	100	100	100



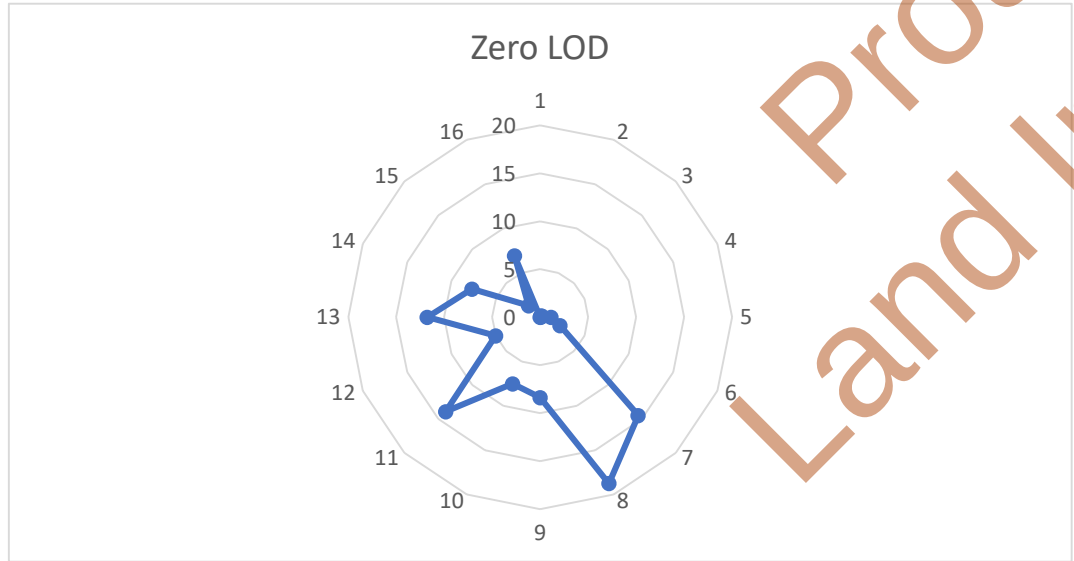
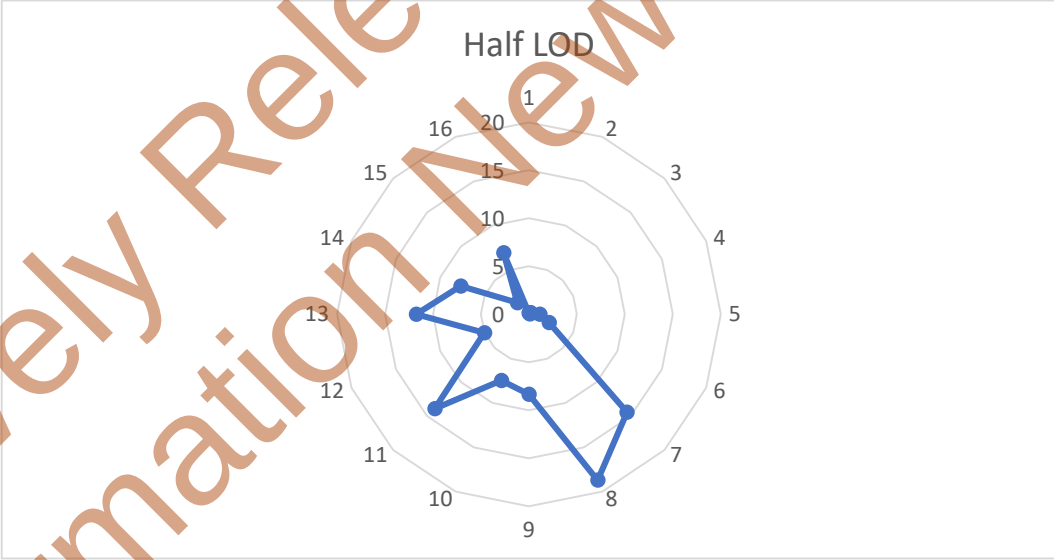
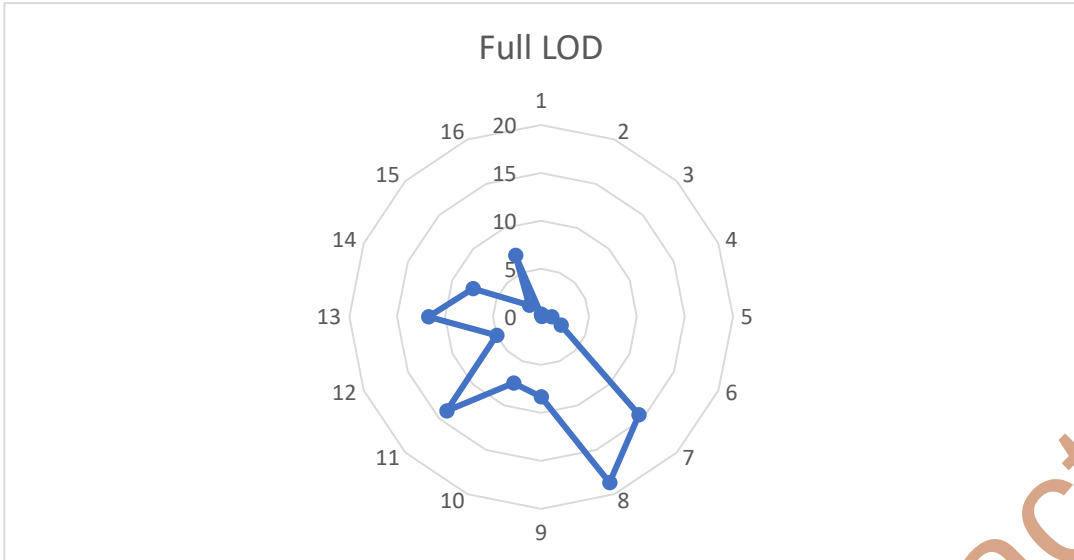
PAH Compound	FTL06 0.1m 01-May-2024	Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.5 TRUE	0.5	0.25	0	0.0658432	0.0329324	0
Acenaphthylene	1.58 FALSE	1.58	1.58	1.58	0.2080645	0.208133	0.208202
Acenaphthene	20 FALSE	20	20	20	2.6337275	2.6345949	2.635463
Fluorene	13.4 FALSE	13.4	13.4	13.4	1.7645974	1.7651786	1.76576
Anthracene	28 FALSE	28	28	28	3.6872185	3.6884328	3.689648
Phenanthrene	94 FALSE	94	94	94	12.378519	12.382596	12.38668
Fluoranthene	144 FALSE	144	144	144	18.962838	18.969083	18.97533
Pyrene	134 FALSE	134	134	134	17.645974	17.651786	17.6576
Benzo[a]anthracene	59 FALSE	59	59	59	7.7694962	7.7720549	7.774615
Chrysene	49 FALSE	49	49	49	6.4526324	6.4547574	6.456884
Benzo[b]fluoranthene + Benzo[j]fluoranthene	58 FALSE	58	58	58	7.6378098	7.6403251	7.642842
Benzo[k]fluoranthene	24 FALSE	24	24	24	3.160473	3.1615138	3.162555
Benzo[a]pyrene (BAP)	75 FALSE	75	75	75	9.8764782	9.8797307	9.882985
Indeno(1,2,3-c,d)pyrene	28 FALSE	28	28	28	3.6872185	3.6884328	3.689648
Dibenzo[a,h]anthracene	6.9 FALSE	6.9	6.9	6.9	0.908636	0.9089352	0.909235
Benzo[g,h,i]perylene	24 FALSE	24	24	24	3.160473	3.1615138	3.162555
Total of 16 Priority PAHs	758.88	759.38	759.13	758.9	100	100	100



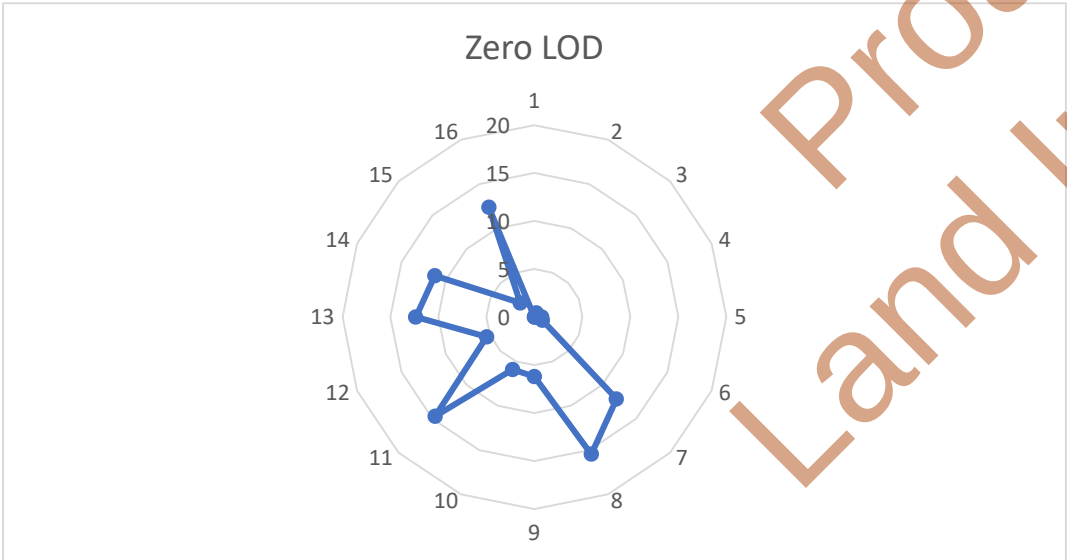
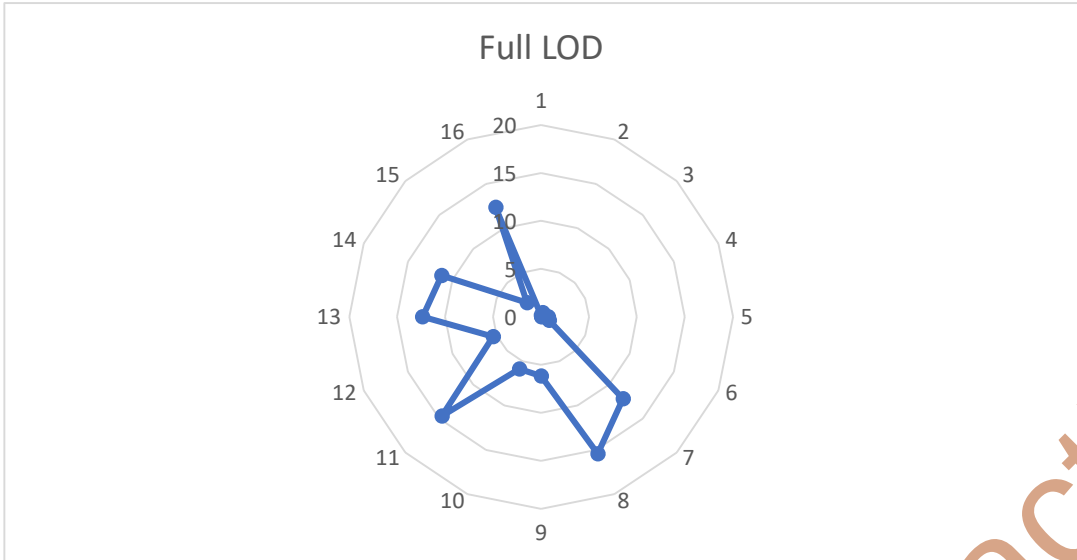
PAH Compound	FTL06B 0.2m 27-May-2024-29-May-2024			Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.5	TRUE		0.5	0.25	0	0.0436948	0.0218522	0
Acenaphthylene	3.5	FALSE		3.5	3.5	3.5	0.3058638	0.3059307	0.305998
Acenaphthene	11	FALSE		11	11	11	0.9612864	0.9614964	0.961707
Fluorene	8.4	FALSE		8.4	8.4	8.4	0.7340732	0.7342336	0.734394
Anthracene	32	FALSE		32	32	32	2.7964695	2.7970805	2.797692
Phenanthrene	90	FALSE		90	90	90	7.8650703	7.866789	7.868508
Fluoranthene	220	FALSE		220	220	220	19.225728	19.229929	19.23413
Pyrene	200	FALSE		200	200	200	17.477934	17.481753	17.48557
Benzo[a]anthracene	103	FALSE		103	103	103	9.0011361	9.003103	9.005071
Chrysene	85	FALSE		85	85	85	7.428122	7.4297452	7.431369
Benzo[b]fluoranthene + Benzo[j]fluoranthene	117	FALSE		117	117	117	10.224591	10.226826	10.22906
Benzo[k]fluoranthene	44	FALSE		44	44	44	3.8451455	3.8459858	3.846826
Benzo[a]pyrene (BAP)	101	FALSE		101	101	101	8.8263567	8.8282855	8.830215
Indeno(1,2,3-c,d)pyrene	61	FALSE		61	61	61	5.3307699	5.3319348	5.3331
Dibenzo[a,h]anthracene	14.9	FALSE		14.9	14.9	14.9	1.3021061	1.3023906	1.302675
Benzo[g,h,i]perylene	53	FALSE		53	53	53	4.6316525	4.6326647	4.633677
Total of 16 Priority PAHs	1143.8			1144.3	1144.05	1144	100	100	100



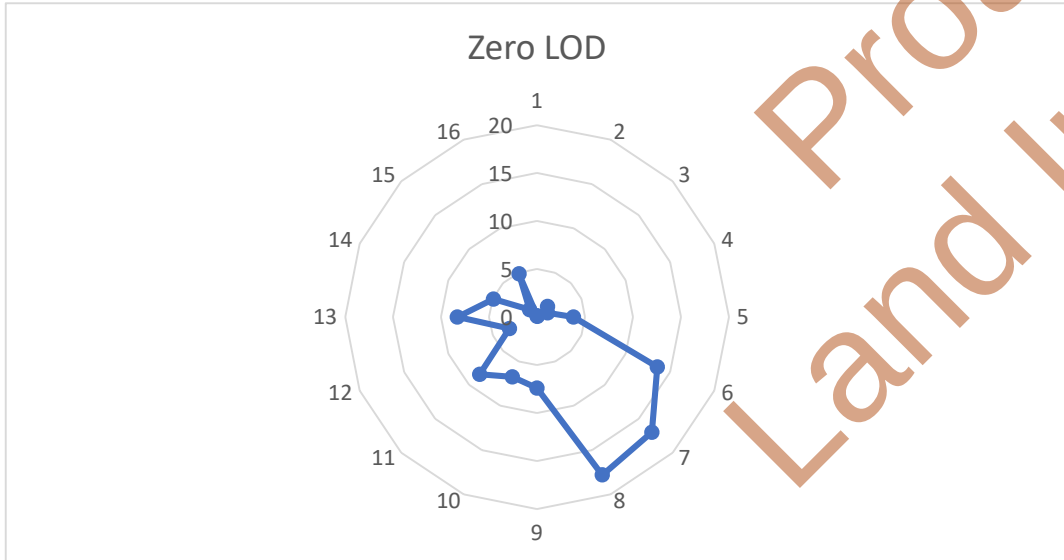
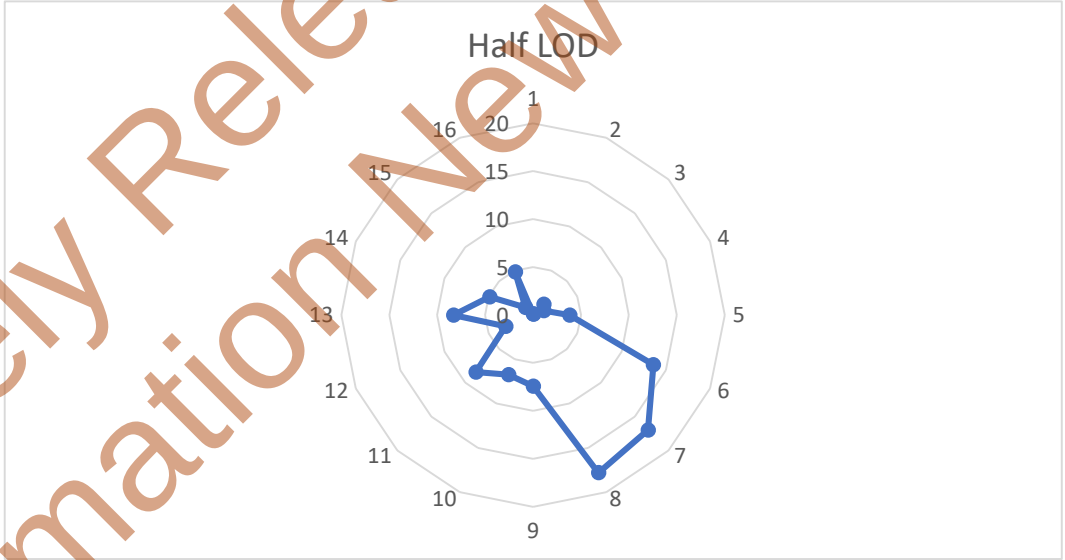
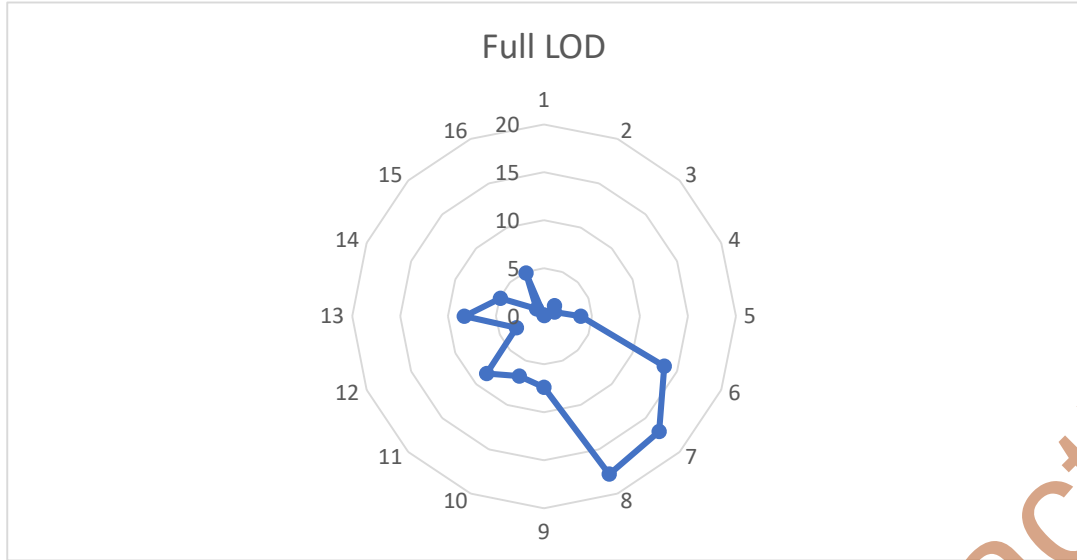
PAH Compound	FTL22B 0.2m 27-May-2024-29-May- 2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.5	TRUE	0.5	0.25	0	0.2669372	0.133647	0
Acenaphthylene	0.32	FALSE	0.32	0.32	0.32	0.1708398	0.1710681	0.171297
Acenaphthene	0.42	FALSE	0.42	0.42	0.42	0.2242272	0.2245269	0.224827
Fluorene	0.17	FALSE	0.17	0.17	0.17	0.0907586	0.0908799	0.091002
Anthracene	2.1	FALSE	2.1	2.1	2.1	1.1211361	1.1226344	1.124137
Phenanthrene	4.2	FALSE	4.2	4.2	4.2	2.2422722	2.2452689	2.248274
Fluoranthene	27	FALSE	27	27	27	14.414607	14.433871	14.45319
Pyrene	35	FALSE	35	35	35	18.685601	18.710574	18.73561
Benzo[a]anthracene	15.6	FALSE	15.6	15.6	15.6	8.3284395	8.3395702	8.350731
Chrysene	14	FALSE	14	14	14	7.4742406	7.4842297	7.494245
Benzo[b]fluoranthene + Benzo[j]fluoranthene	26	FALSE	26	26	26	13.880732	13.899284	13.91788
Benzo[k]fluoranthene	9.4	FALSE	9.4	9.4	9.4	5.0184187	5.0251256	5.031851
Benzo[a]pyrene (BAP)	22	FALSE	22	22	22	11.745235	11.760932	11.77667
Indeno(1,2,3-c,d)pyrene	14.4	FALSE	14.4	14.4	14.4	7.6877903	7.6980648	7.708367
Dibenzo[a,h]anthracene	3.2	FALSE	3.2	3.2	3.2	1.7083978	1.7106811	1.71297
Benzo[g,h,i]perylene	13	FALSE	13	13	13	6.9403662	6.9496418	6.958942
Total of 16 Priority PAHs	186.81		187.31	187.06	186.8	100	100	100



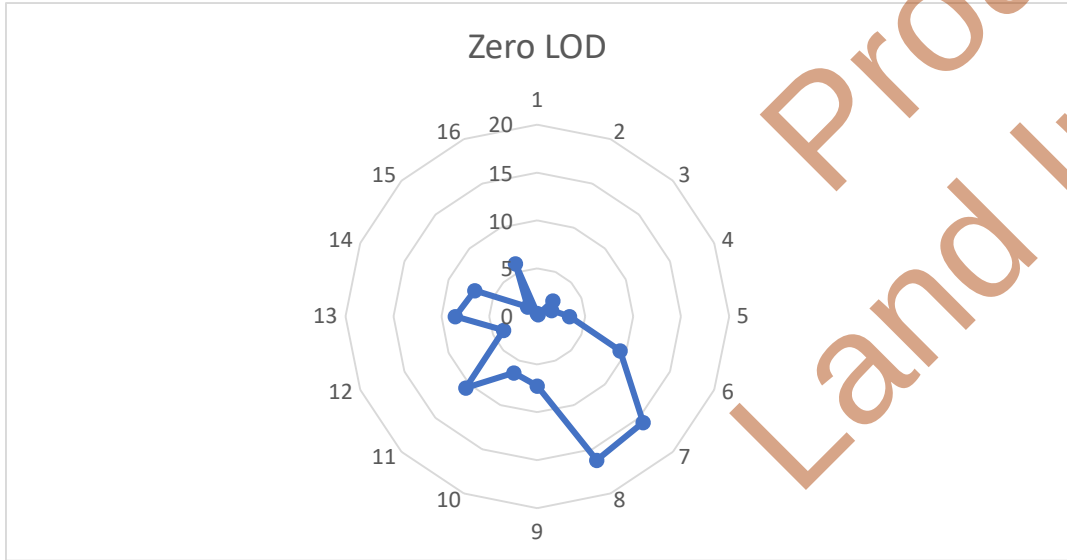
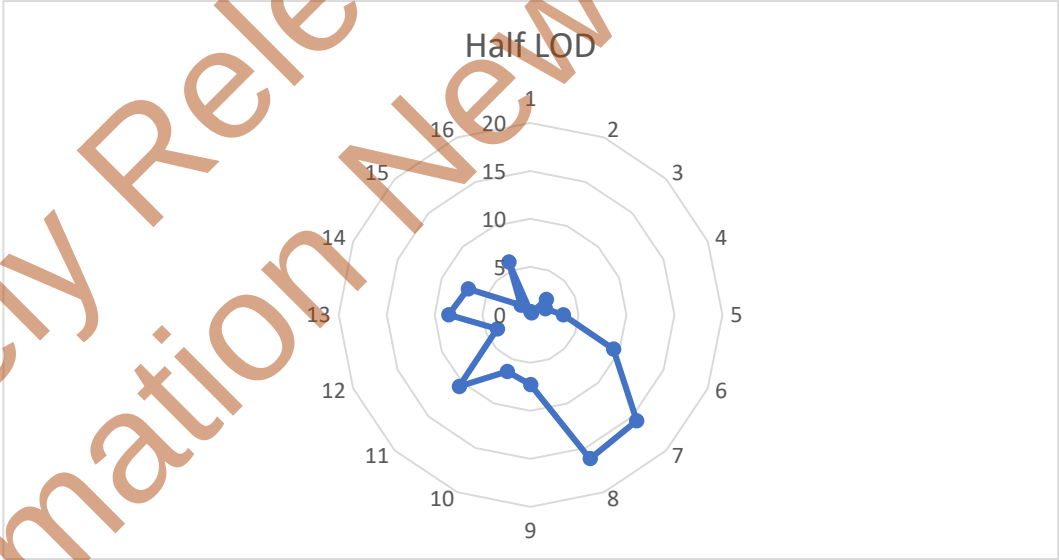
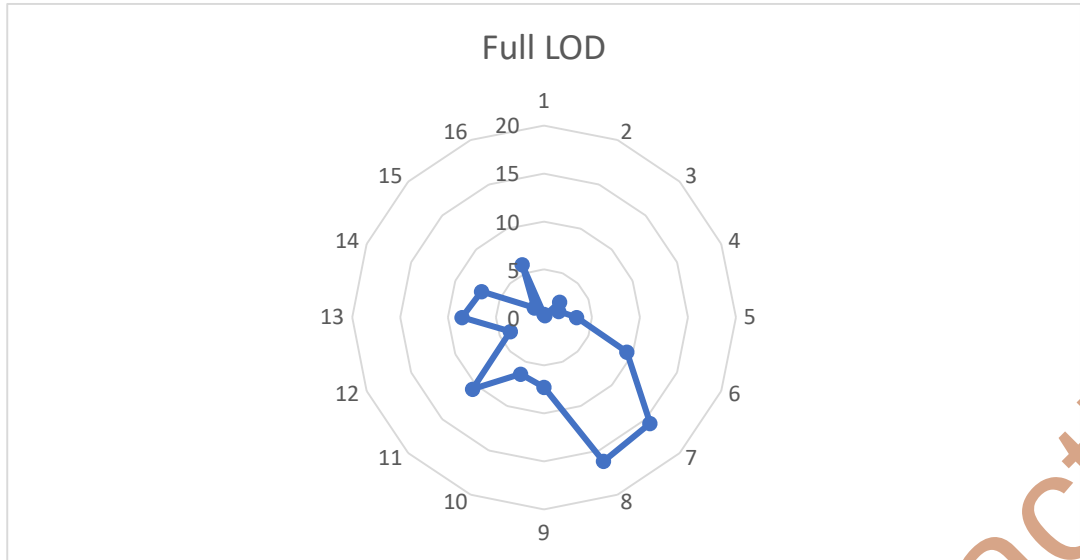
PAH Compound	FTL36B 0.05-0.15m 27-May-2024-29-May-2024			Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.06	TRUE		0.06	0.03	0	0.1684494	0.0842957	0
Acenaphthylene	0.174	FALSE		0.174	0.174	0.174	0.4885033	0.4889151	0.489328
Acenaphthene	0.019	FALSE		0.019	0.019	0.019	0.0533423	0.0533873	0.053432
Fluorene	0.016	FALSE		0.016	0.016	0.016	0.0449198	0.0449577	0.044996
Anthracene	0.27	FALSE		0.27	0.27	0.27	0.7580224	0.7586614	0.759301
Phenanthrene	0.32	FALSE		0.32	0.32	0.32	0.8983969	0.8991542	0.899913
Fluoranthene	4.3	FALSE		4.3	4.3	4.3	12.072209	12.082385	12.09258
Pyrene	5.5	FALSE		5.5	5.5	5.5	15.441197	15.454213	15.46725
Benzo[a]anthracene	2.2	FALSE		2.2	2.2	2.2	6.1764788	6.1816854	6.186901
Chrysene	2.1	FALSE		2.1	2.1	2.1	5.8957298	5.9006997	5.905678
Benzo[b]fluoranthene + Benzo[j]fluoranthene	5.2	FALSE		5.2	5.2	5.2	14.59895	14.611256	14.62358
Benzo[k]fluoranthene	1.92	FALSE		1.92	1.92	1.92	5.3903815	5.3949254	5.399477
Benzo[a]pyrene (BAP)	4.4	FALSE		4.4	4.4	4.4	12.352958	12.363371	12.3738
Indeno(1,2,3-c,d)pyrene	4	FALSE		4	4	4	11.229962	11.239428	11.24891
Dibenzo[a,h]anthracene	0.74	FALSE		0.74	0.74	0.74	2.0775429	2.0792942	2.081048
Benzo[g,h,i]perylene	4.4	FALSE		4.4	4.4	4.4	12.352958	12.363371	12.3738
Total of 16 Priority PAHs	35.559			35.619	35.589	35.56	100	100	100



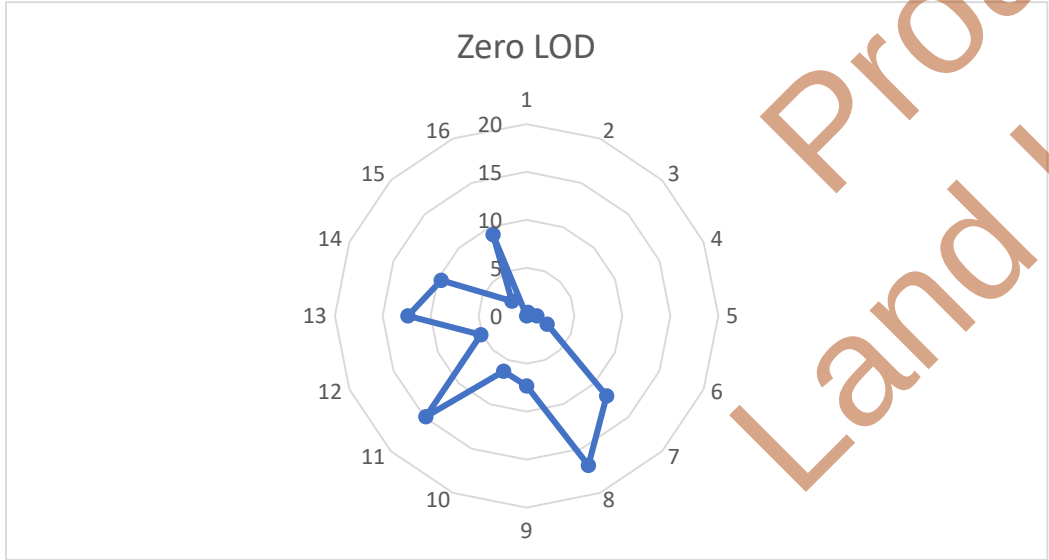
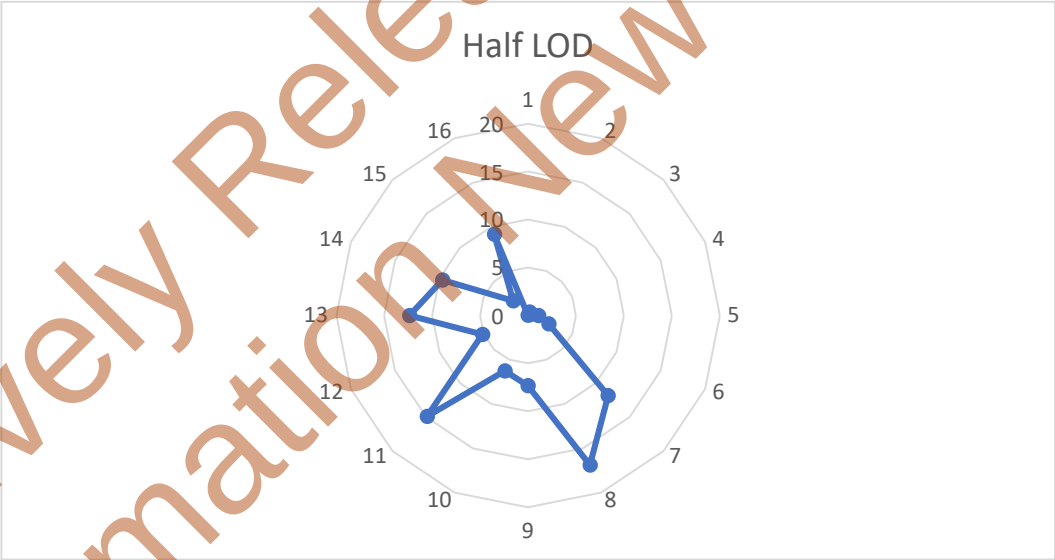
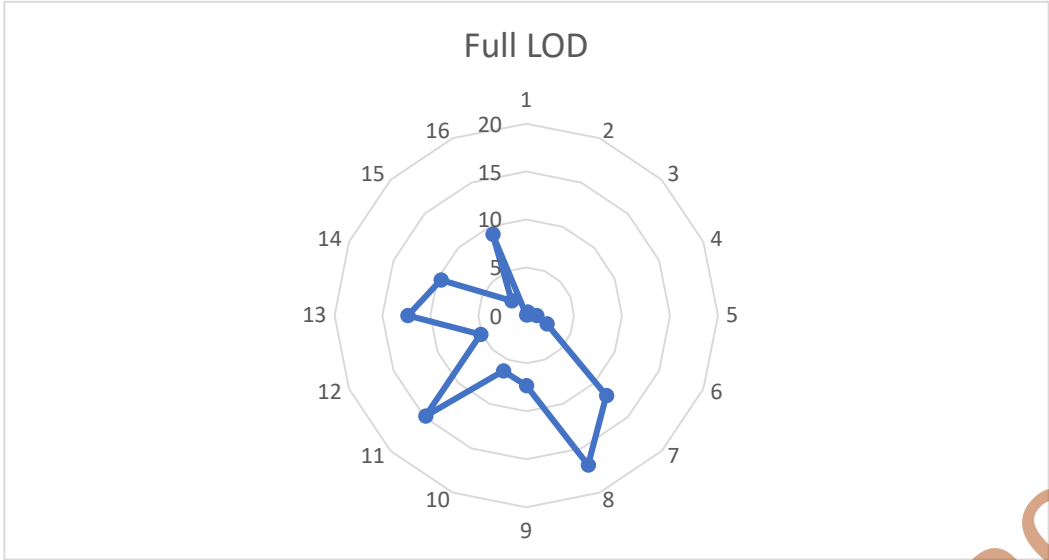
PAH Compound	FTL37B 0.05-0.2m 27-May-2024-29-May-2024			Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	3	FALSE		3	3	3	0.1271617	0.1271617	0.127162
Acenaphthylene	2.2	FALSE		2.2	2.2	2.2	0.0932519	0.0932519	0.093252
Acenaphthene	37	FALSE		37	37	37	1.5683282	1.5683282	1.568328
Fluorene	28	FALSE		28	28	28	1.186843	1.186843	1.186843
Anthracene	90	FALSE		90	90	90	3.8148525	3.8148525	3.814852
Phenanthrene	320	FALSE		320	320	320	13.56392	13.56392	13.56392
Fluoranthene	400	FALSE		400	400	400	16.9549	16.9549	16.9549
Pyrene	420	FALSE		420	420	420	17.802645	17.802645	17.80264
Benzo[a]anthracene	175	FALSE		175	175	175	7.4177687	7.4177687	7.417769
Chrysene	159	FALSE		159	159	159	6.7395727	6.7395727	6.739573
Benzo[b]fluoranthene + Benzo[j]fluoranthene	199	FALSE		199	199	199	8.4350627	8.4350627	8.435063
Benzo[k]fluoranthene	73	FALSE		73	73	73	3.0942692	3.0942692	3.094269
Benzo[a]pyrene (BAP)	196	FALSE		196	196	196	8.307901	8.307901	8.307901
Indeno(1,2,3-c,d)pyrene	116	FALSE		116	116	116	4.916921	4.916921	4.916921
Dibenzo[a,h]anthracene	26	FALSE		26	26	26	1.1020685	1.1020685	1.102068
Benzo[g,h,i]perylene	115	FALSE		115	115	115	4.8745337	4.8745337	4.874534
Total of 16 Priority PAHs	2359.2			2359.2	2359.2	2359	100	100	100



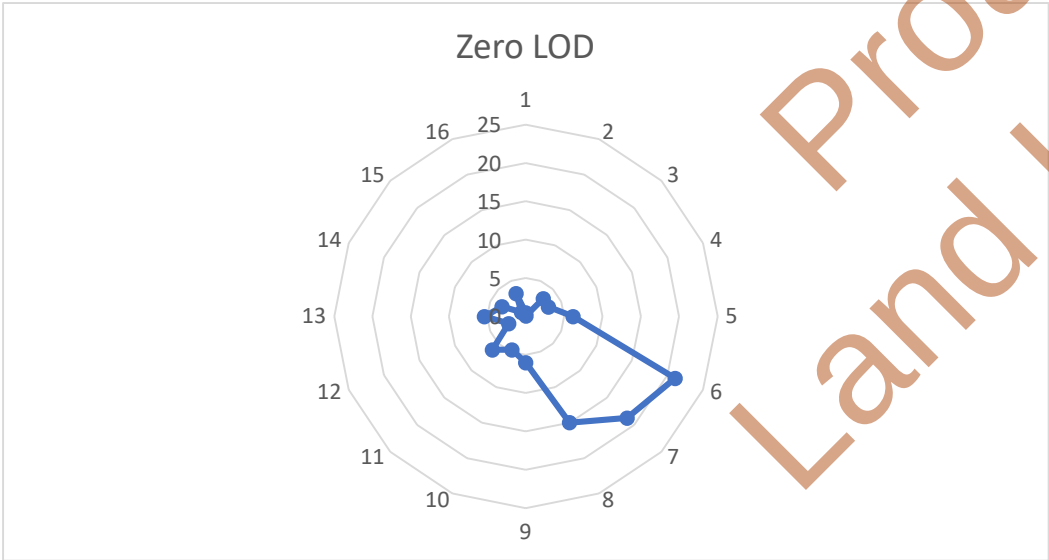
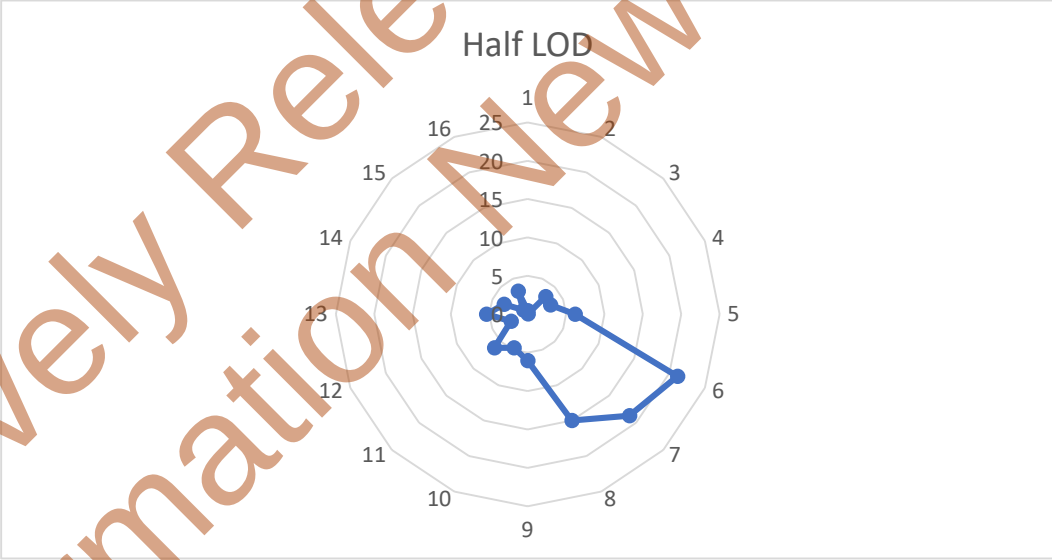
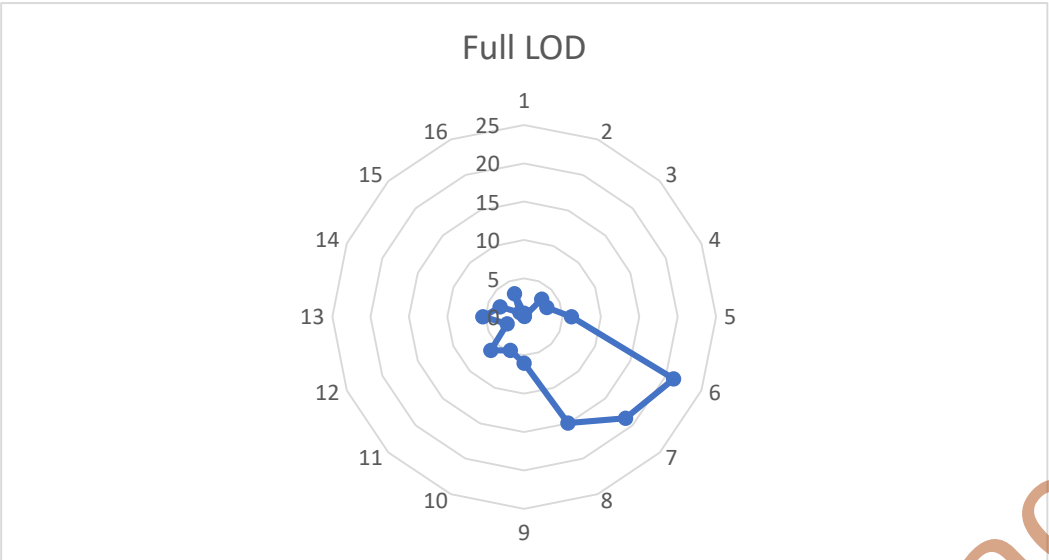
PAH Compound	FTL41B 0.05-0.1m 27-May-2024-29-May-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	0.33	FALSE	0.33	0.33	0.33	0.3282929	0.3282929	0.328293
Acenaphthylene	0.22	FALSE	0.22	0.22	0.22	0.2188619	0.2188619	0.218862
Acenaphthene	2.3	FALSE	2.3	2.3	2.3	2.2881019	2.2881019	2.288102
Fluorene	1.65	FALSE	1.65	1.65	1.65	1.6414644	1.6414644	1.641464
Anthracene	3.4	FALSE	3.4	3.4	3.4	3.3824115	3.3824115	3.382411
Phenanthrene	9.4	FALSE	9.4	9.4	9.4	9.3513729	9.3513729	9.351373
Fluoranthene	15.7	FALSE	15.7	15.7	15.7	15.618782	15.618782	15.61878
Pyrene	16.3	FALSE	16.3	16.3	16.3	16.215678	16.215678	16.21568
Benzo[a]anthracene	7.3	FALSE	7.3	7.3	7.3	7.2622364	7.2622364	7.262236
Chrysene	6.4	FALSE	6.4	6.4	6.4	6.3668922	6.3668922	6.366892
Benzo[b]fluoranthene + Benzo[j]fluoranthene	10.6	FALSE	10.6	10.6	10.6	10.545165	10.545165	10.54517
Benzo[k]fluoranthene	3.8	FALSE	3.8	3.8	3.8	3.7803422	3.7803422	3.780342
Benzo[a]pyrene (BAP)	8.6	FALSE	8.6	8.6	8.6	8.5555113	8.5555113	8.555511
Indeno(1,2,3-c,d)pyrene	7.1	FALSE	7.1	7.1	7.1	7.063271	7.063271	7.063271
Dibenzo[a,h]anthracene	1.42	FALSE	1.42	1.42	1.42	1.4126542	1.4126542	1.412654
Benzo[g,h,i]perylene	6	FALSE	6	6	6	5.9689614	5.9689614	5.968961
Total of 16 Priority PAHs	100.52		100.52	100.52	100.5	100	100	100



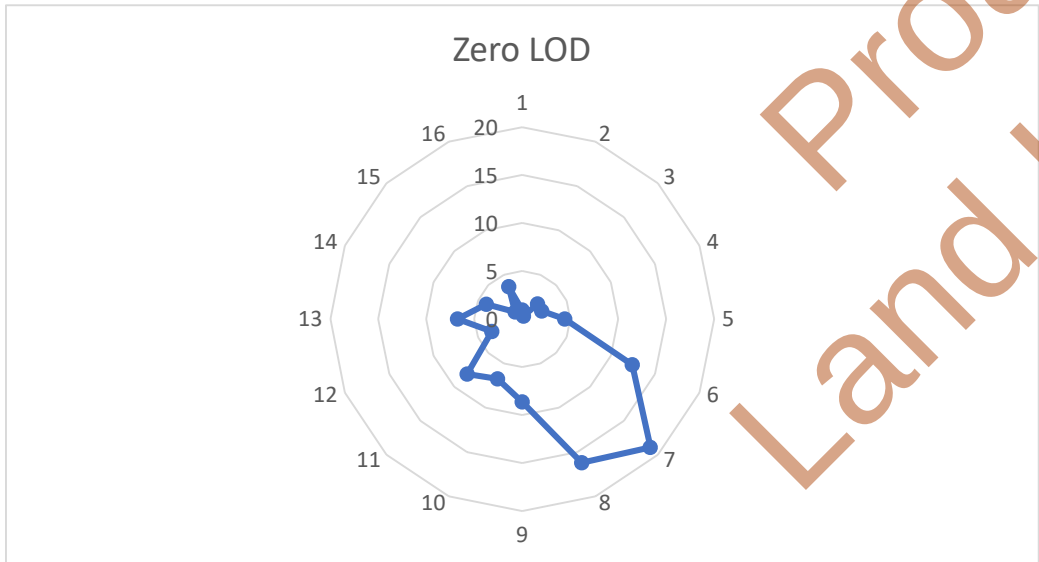
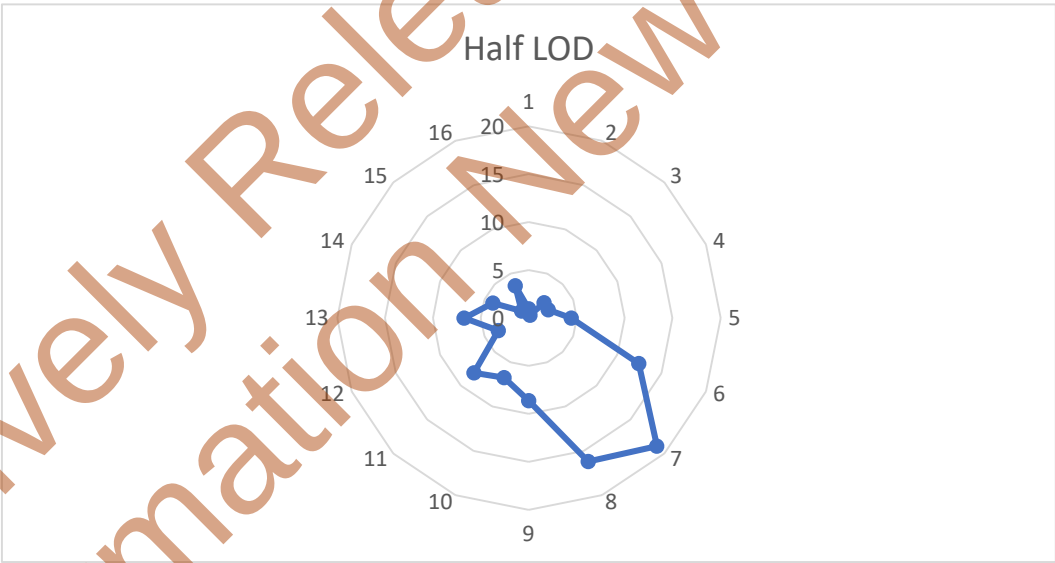
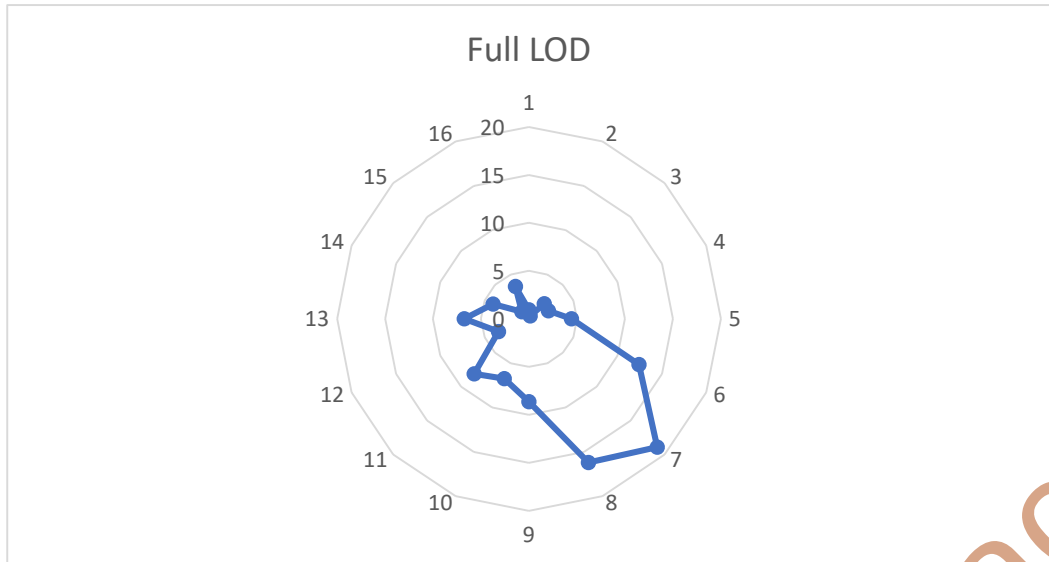
PAH Compound	FTL83 0.05-0.09m 15-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.06	TRUE	0.06	0.03	0	0.0482083	0.0241099	0
Acenaphthylene	0.47	FALSE	0.47	0.47	0.47	0.3776314	0.3777224	0.377814
Acenaphthene	0.37	FALSE	0.37	0.37	0.37	0.2972843	0.2973559	0.297428
Fluorene	0.3	FALSE	0.3	0.3	0.3	0.2410413	0.2410994	0.241158
Anthracene	1.36	FALSE	1.36	1.36	1.36	1.0927206	1.092984	1.093248
Phenanthrene	2.9	FALSE	2.9	2.9	2.9	2.3300659	2.3306277	2.33119
Fluoranthene	14.7	FALSE	14.7	14.7	14.7	11.811024	11.813871	11.81672
Pyrene	21	FALSE	21	21	21	16.872891	16.876959	16.88103
Benzo[a]anthracene	9.1	FALSE	9.1	9.1	9.1	7.3115861	7.3133489	7.315113
Chrysene	7.8	FALSE	7.8	7.8	7.8	6.2670738	6.2685847	6.270096
Benzo[b]fluoranthene + Benzo[j]fluoranthene	18.5	FALSE	18.5	18.5	18.5	14.864213	14.867797	14.87138
Benzo[k]fluoranthene	6.4	FALSE	6.4	6.4	6.4	5.1422144	5.1434542	5.144695
Benzo[a]pyrene (BAP)	15.4	FALSE	15.4	15.4	15.4	12.373453	12.376437	12.37942
Indeno(1,2,3-c,d)pyrene	12	FALSE	12	12	12	9.6416519	9.6439765	9.646302
Dibenzo[a,h]anthracene	2.7	FALSE	2.7	2.7	2.7	2.1693717	2.1698947	2.170418
Benzo[g,h,i]perylene	11.4	FALSE	11.4	11.4	11.4	9.1595693	9.1617777	9.163987
Total of 16 Priority PAHs	137		124.46	124.43	124.4	100	100	100



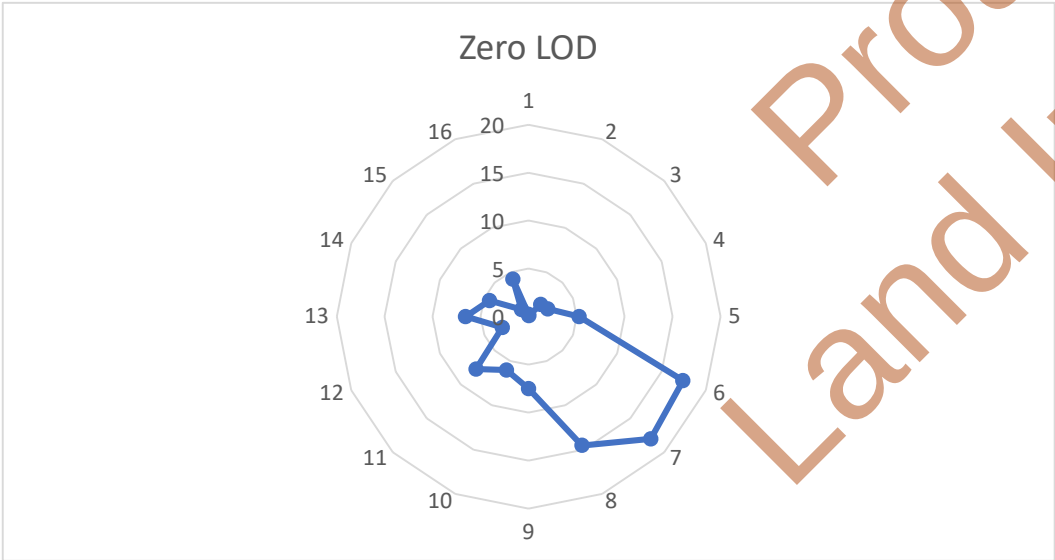
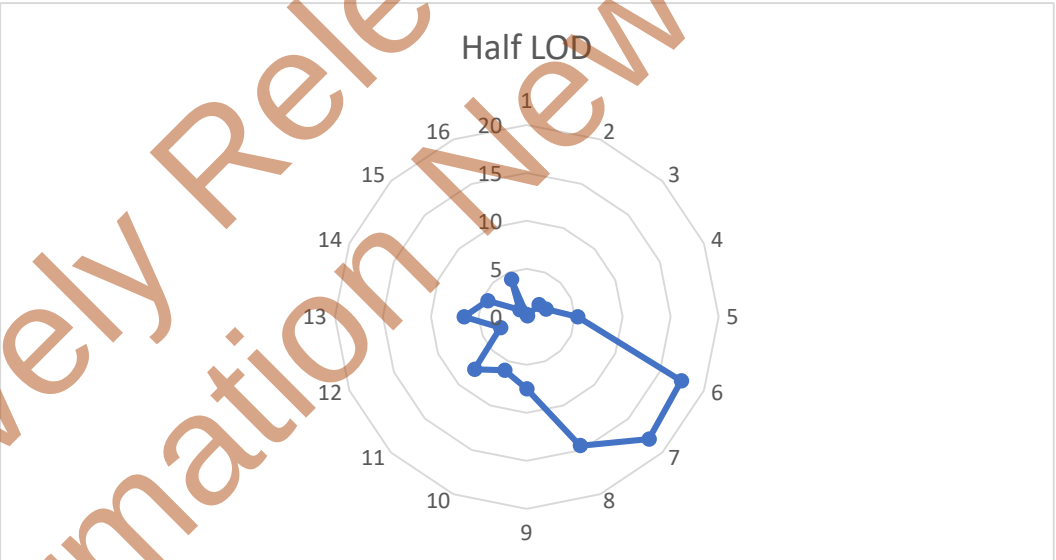
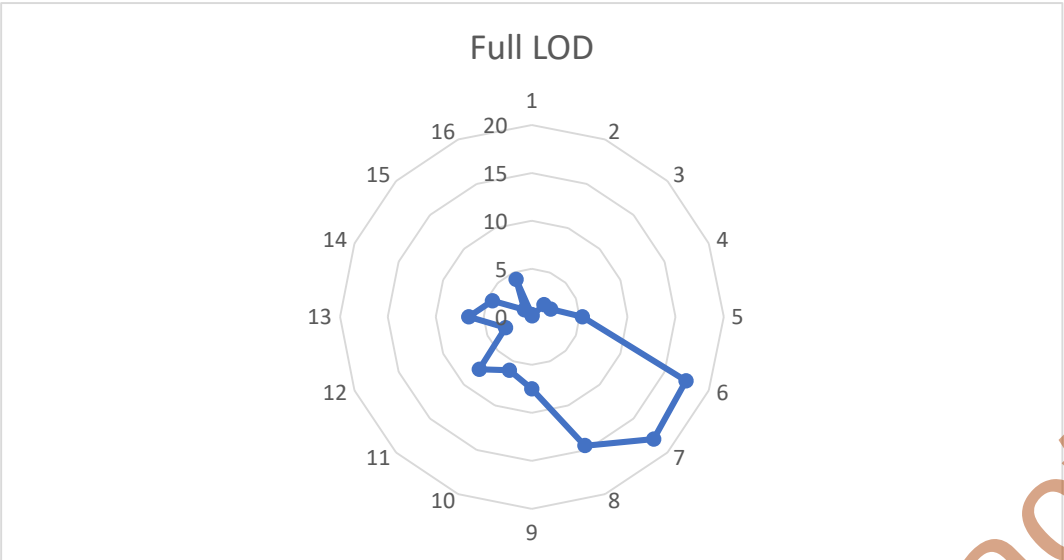
PAH Compound	FTL88 0.03-0.06m 15-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	14.1	FALSE	14.1	14.1	14.1	0.4796065	0.4796065	0.479607
Acenaphthylene	1.81	FALSE	1.81	1.81	1.81	0.0615665	0.0615665	0.061567
Acenaphthene	96	FALSE	96	96	96	3.2654061	3.2654061	3.265406
Fluorene	94	FALSE	94	94	94	3.1973768	3.1973768	3.197377
Anthracene	181	FALSE	181	181	181	6.1566511	6.1566511	6.156651
Phenanthrene	620	FALSE	620	620	620	21.089081	21.089081	21.08908
Fluoranthene	550	FALSE	550	550	550	18.708056	18.708056	18.70806
Pyrene	440	FALSE	440	440	440	14.966445	14.966445	14.96644
Benzo[a]anthracene	177	FALSE	177	177	177	6.0205925	6.0205925	6.020592
Chrysene	139	FALSE	139	139	139	4.7280359	4.7280359	4.728036
Benzo[b]fluoranthene + Benzo[j]fluoranthene	181	FALSE	181	181	181	6.1566511	6.1566511	6.156651
Benzo[k]fluoranthene	70	FALSE	70	70	70	2.3810253	2.3810253	2.381025
Benzo[a]pyrene (BAP)	158	FALSE	158	158	158	5.3743142	5.3743142	5.374314
Indeno(1,2,3-c,d)pyrene	99	FALSE	99	99	99	3.36745	3.36745	3.36745
Dibenzo[a,h]anthracene	23	FALSE	23	23	23	0.7823369	0.7823369	0.782337
Benzo[g,h,i]perylene	96	FALSE	96	96	96	3.2654061	3.2654061	3.265406
Total of 16 Priority PAHs	3,100		2939.91	2939.91	2940	100	100	100



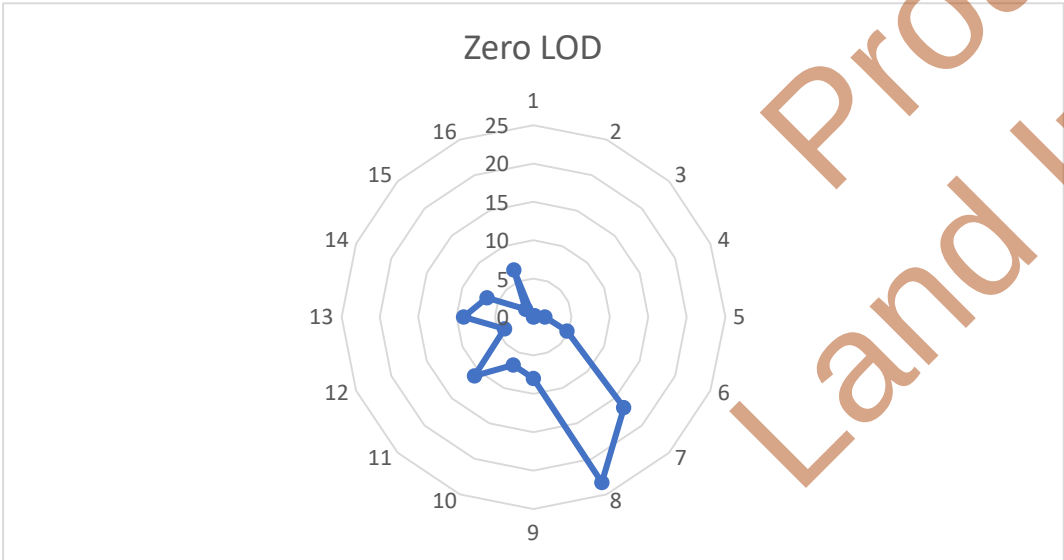
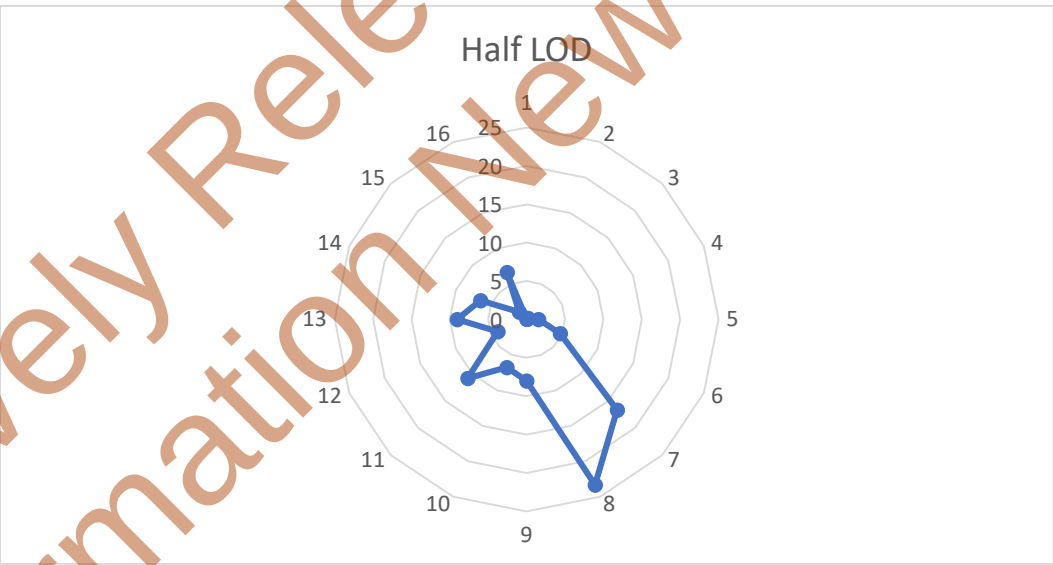
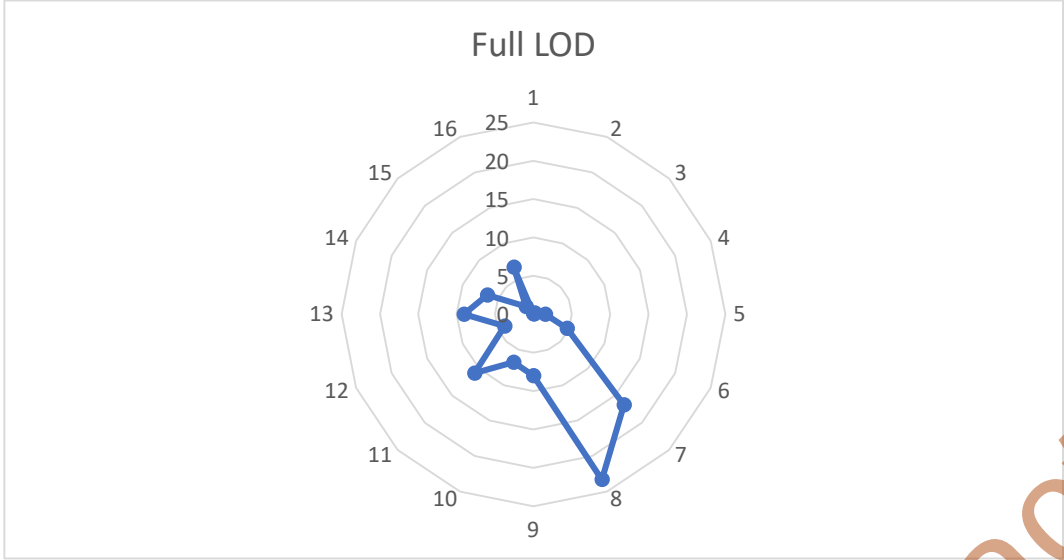
PAH Compound	FTL98 0.05-0.2m 16-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	3.5	FALSE	3.5	3.5	3.5	0.9444654	0.9444654	0.944465
Acenaphthylene	1.18	FALSE	1.18	1.18	1.18	0.3184198	0.3184198	0.31842
Acenaphthene	8.3	FALSE	8.3	8.3	8.3	2.2397323	2.2397323	2.239732
Fluorene	8.2	FALSE	8.2	8.2	8.2	2.2127476	2.2127476	2.212748
Anthracene	16.4	FALSE	16.4	16.4	16.4	4.4254952	4.4254952	4.425495
Phenanthrene	46	FALSE	46	46	46	12.412974	12.412974	12.41297
Fluoranthene	70	FALSE	70	70	70	18.889309	18.889309	18.88931
Pyrene	60	FALSE	60	60	60	16.190836	16.190836	16.19084
Benzo[a]anthracene	32	FALSE	32	32	32	8.6351125	8.6351125	8.635113
Chrysene	25	FALSE	25	25	25	6.7461817	6.7461817	6.746182
Benzo[b]fluoranthene + Benzo[j]fluoranthene	30	FALSE	30	30	30	8.095418	8.095418	8.095418
Benzo[k]fluoranthene	12.7	FALSE	12.7	12.7	12.7	3.4270603	3.4270603	3.42706
Benzo[a]pyrene (BAP)	25	FALSE	25	25	25	6.7461817	6.7461817	6.746182
Indeno(1,2,3-c,d)pyrene	15	FALSE	15	15	15	4.047709	4.047709	4.047709
Dibenzo[a,h]anthracene	3.8	FALSE	3.8	3.8	3.8	1.0254196	1.0254196	1.02542
Benzo[g,h,i]perylene	13.5	FALSE	13.5	13.5	13.5	3.6429381	3.6429381	3.642938
Total of 16 Priority PAHs	390		370.58	370.58	370.6	100	100	100



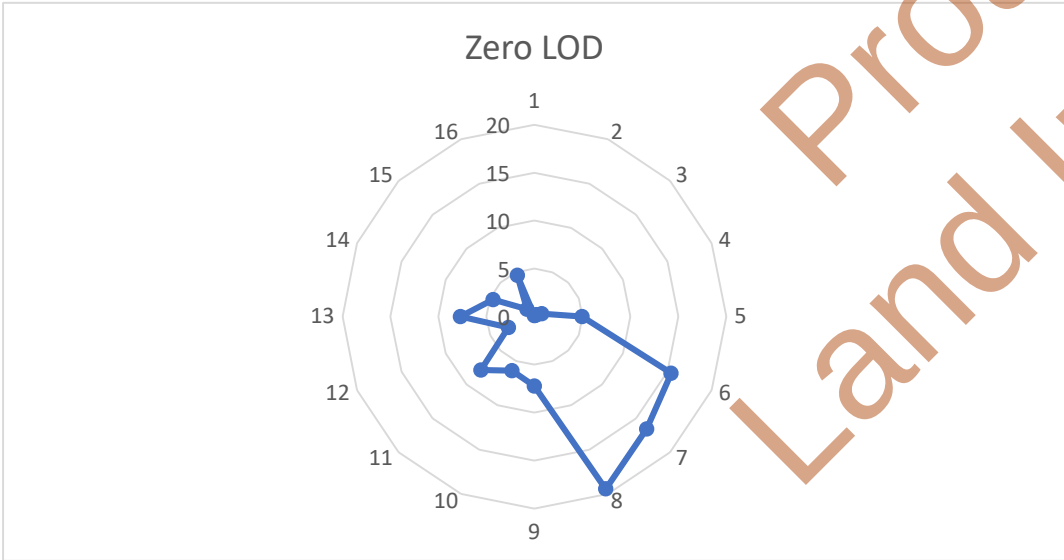
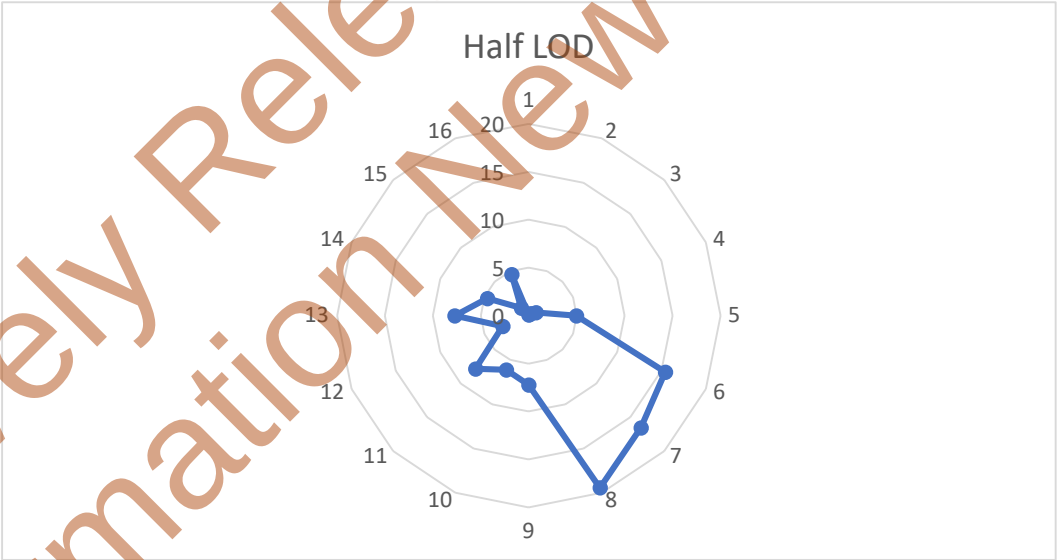
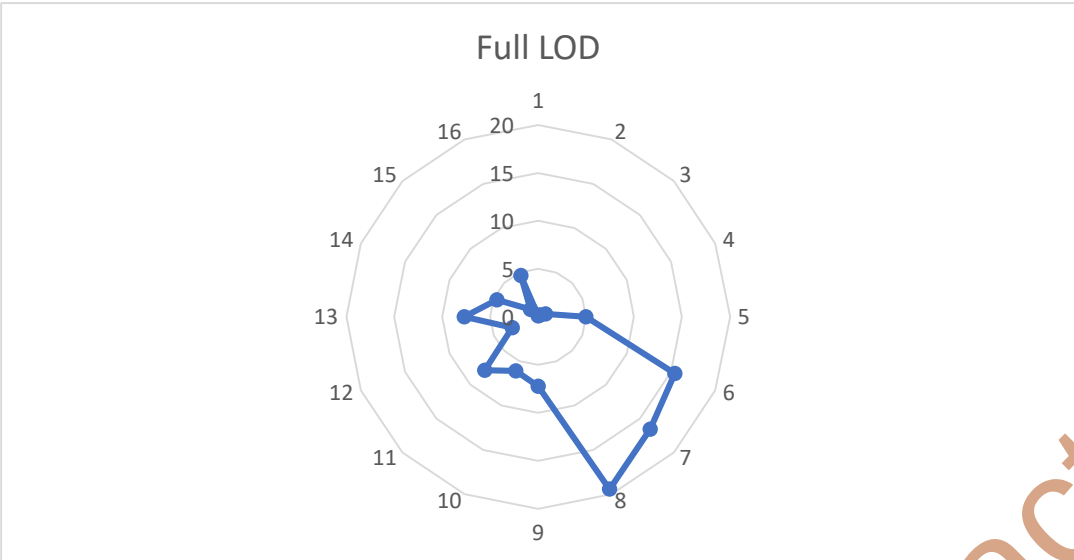
PAH Compound	FTL143 0.04-0.09m 17-Jul-2024	Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	0.42 FALSE	0.42	0.42	0.42	0.24386	0.24386	0.24386
Acenaphthylene	0.2 FALSE	0.2	0.2	0.2	0.1161238	0.1161238	0.116124
Acenaphthene	3.1 FALSE	3.1	3.1	3.1	1.7999187	1.7999187	1.799919
Fluorene	3.7 FALSE	3.7	3.7	3.7	2.1482901	2.1482901	2.14829
Anthracene	9.1 FALSE	9.1	9.1	9.1	5.2836324	5.2836324	5.283632
Phenanthrene	30 FALSE	30	30	30	17.418568	17.418568	17.41857
Fluoranthene	31 FALSE	31	31	31	17.999187	17.999187	17.99919
Pyrene	25 FALSE	25	25	25	14.515473	14.515473	14.51547
Benzo[a]anthracene	12.9 FALSE	12.9	12.9	12.9	7.4899843	7.4899843	7.489984
Chrysene	10.4 FALSE	10.4	10.4	10.4	6.038437	6.038437	6.038437
Benzo[b]fluoranthene + Benzo[j]fluoranthene	13.3 FALSE	13.3	13.3	13.3	7.7222319	7.7222319	7.722232
Benzo[k]fluoranthene	5.1 FALSE	5.1	5.1	5.1	2.9611566	2.9611566	2.961157
Benzo[a]pyrene (BAP)	11.3 FALSE	11.3	11.3	11.3	6.560994	6.560994	6.560994
Indeno(1,2,3-c,d)pyrene	7.6 FALSE	7.6	7.6	7.6	4.4127039	4.4127039	4.412704
Dibenzo[a,h]anthracene	1.81 FALSE	1.81	1.81	1.81	1.0509203	1.0509203	1.05092
Benzo[g,h,i]perylene	7.3 FALSE	7.3	7.3	7.3	4.2385183	4.2385183	4.238518
Total of 16 Priority PAHs	183	172.23	172.23	172.2	100	100	100



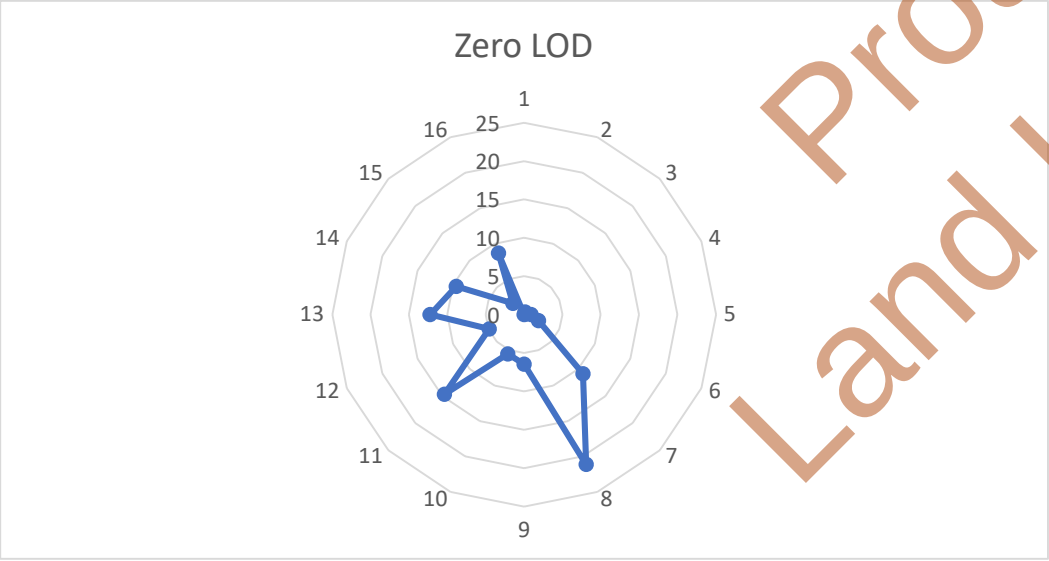
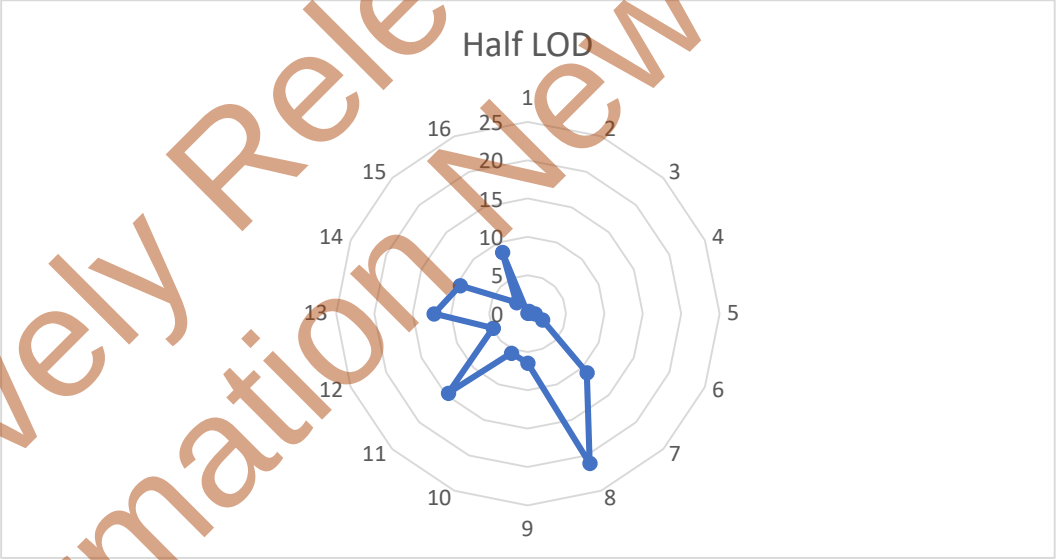
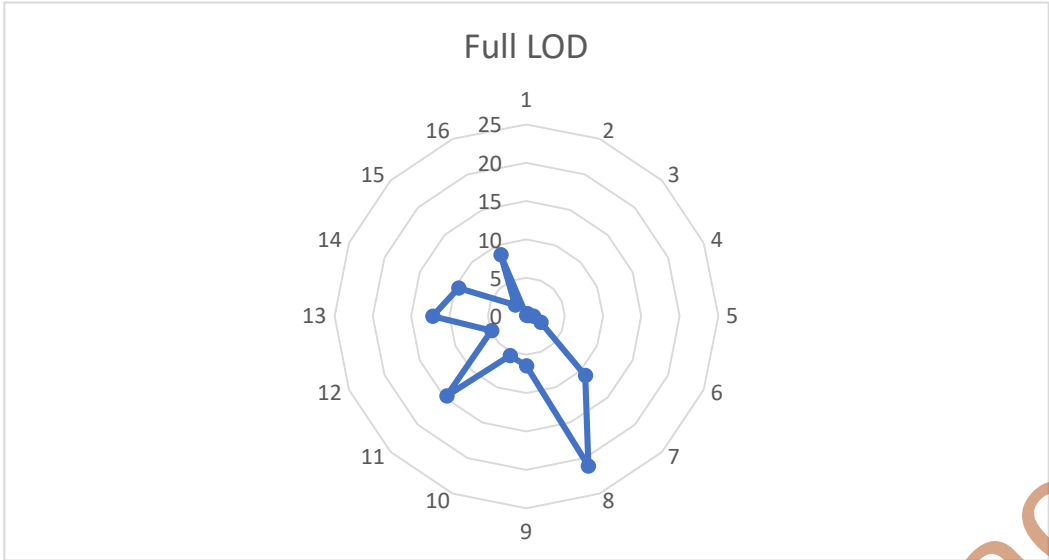
PAH Compound	FTL165 0.04-0.12m 17-Jul-2024	Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.06 TRUE	0.06	0.03	0	0.0812579	0.0406454	0
Acenaphthylene	0.087 FALSE	0.087	0.087	0.087	0.1178239	0.1178718	0.11792
Acenaphthene	0.173 FALSE	0.173	0.173	0.173	0.2342935	0.2343888	0.234484
Fluorene	0.069 FALSE	0.069	0.069	0.069	0.0934466	0.0934845	0.093523
Anthracene	1.12 FALSE	1.12	1.12	1.12	1.5168136	1.5174301	1.518047
Phenanthrene	3.5 FALSE	3.5	3.5	3.5	4.7400425	4.7419691	4.743897
Fluoranthene	12.3 FALSE	12.3	12.3	12.3	16.657864	16.664634	16.67141
Pyrene	17.2 FALSE	17.2	17.2	17.2	23.293923	23.303391	23.31287
Benzo[a]anthracene	5.9 FALSE	5.9	5.9	5.9	7.9903574	7.9936051	7.996855
Chrysene	5 FALSE	5	5	5	6.7714893	6.7742416	6.776996
Benzo[b]fluoranthene + Benzo[j]fluoranthene	8 FALSE	8	8	8	10.834383	10.838787	10.84319
Benzo[k]fluoranthene	3 FALSE	3	3	3	4.0628936	4.064545	4.066198
Benzo[a]pyrene (BAP)	6.7 FALSE	6.7	6.7	6.7	9.0737957	9.0774838	9.081175
Indeno(1,2,3-c,d)pyrene	4.8 FALSE	4.8	4.8	4.8	6.5006297	6.503272	6.505916
Dibenzo[a,h]anthracene	1.03 FALSE	1.03	1.03	1.03	1.3949268	1.3954938	1.396061
Benzo[g,h,i]perylene	4.9 FALSE	4.9	4.9	4.9	6.6360595	6.6387568	6.641456
Total of 16 Priority PAHs	80	73.839	73.809	73.78	100	100	100



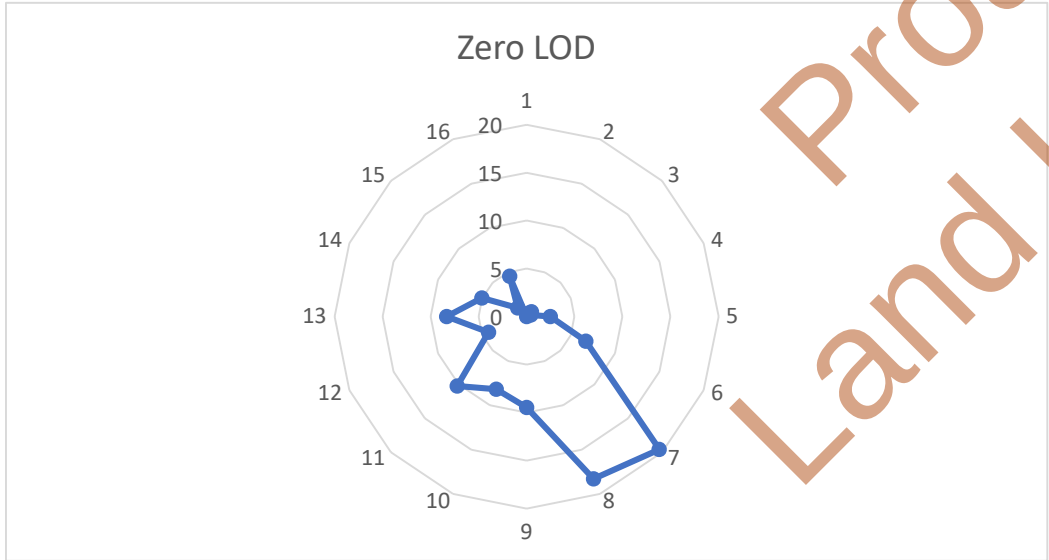
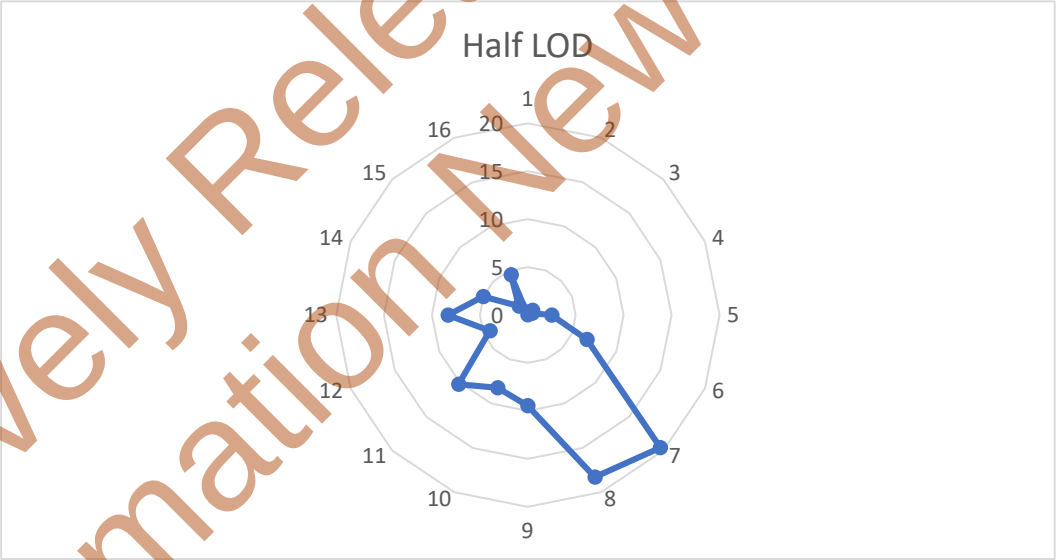
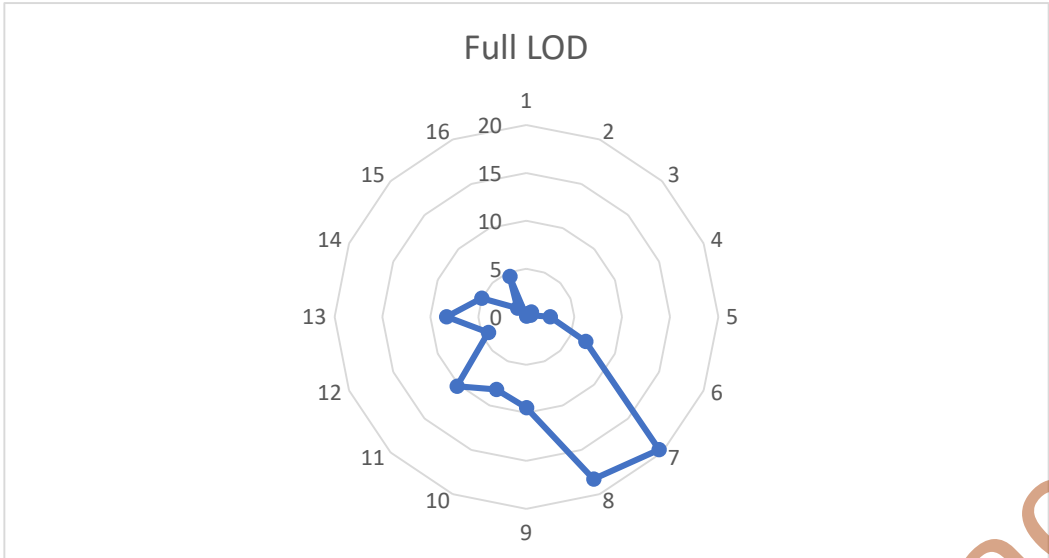
PAH Compound	2.FTL194 0.03-0.17m 19-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	0.06	FALSE	0.06	0.06	0.06	0.096353	0.096353	0.096353
Acenaphthylene	0.084	FALSE	0.084	0.084	0.084	0.1348943	0.1348943	0.134894
Acenaphthene	0.197	FALSE	0.197	0.197	0.197	0.3163591	0.3163591	0.316359
Fluorene	0.52	FALSE	0.52	0.52	0.52	0.8350597	0.8350597	0.83506
Anthracene	3.1	FALSE	3.1	3.1	3.1	4.9782403	4.9782403	4.97824
Phenanthrene	9.6	FALSE	9.6	9.6	9.6	15.416486	15.416486	15.41649
Fluoranthene	10.3	FALSE	10.3	10.3	10.3	16.540605	16.540605	16.5406
Pyrene	12.1	FALSE	12.1	12.1	12.1	19.431196	19.431196	19.4312
Benzo[a]anthracene	4.5	FALSE	4.5	4.5	4.5	7.2264778	7.2264778	7.226478
Chrysene	3.8	FALSE	3.8	3.8	3.8	6.102359	6.102359	6.102359
Benzo[b]fluoranthene + Benzo[j]fluoranthene	4.9	FALSE	4.9	4.9	4.9	7.8688314	7.8688314	7.868831
Benzo[k]fluoranthene	1.82	FALSE	1.82	1.82	1.82	2.9227088	2.9227088	2.922709
Benzo[a]pyrene (BAP)	4.8	FALSE	4.8	4.8	4.8	7.708243	7.708243	7.708243
Indeno(1,2,3-c,d)pyrene	2.9	FALSE	2.9	2.9	2.9	4.6570635	4.6570635	4.657063
Dibenzo[a,h]anthracene	0.69	FALSE	0.69	0.69	0.69	1.1080599	1.1080599	1.10806
Benzo[g,h,i]perylene	2.9	FALSE	2.9	2.9	2.9	4.6570635	4.6570635	4.657063
Total of 16 Priority PAHs	66		62.271	62.271	62.27	100	100	100



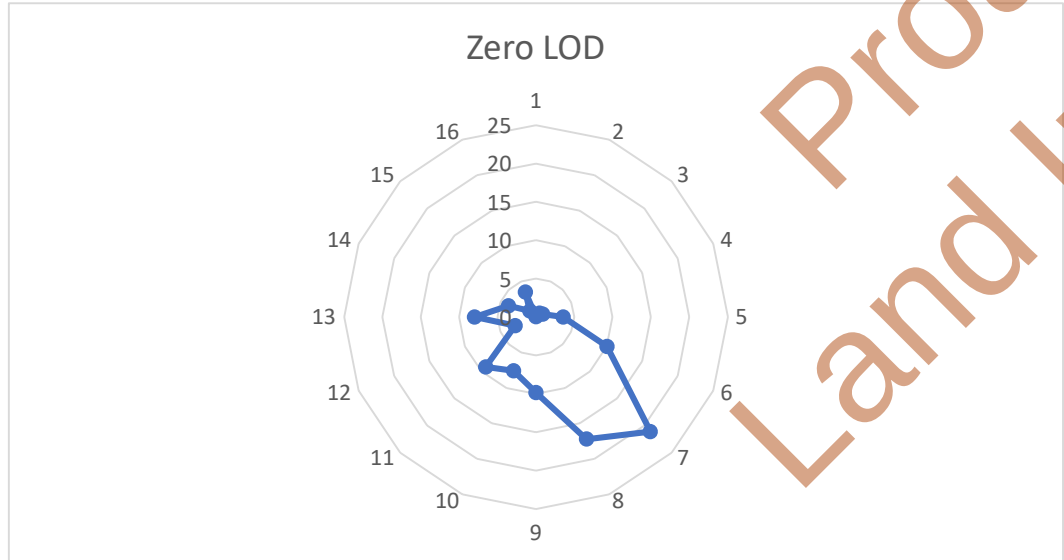
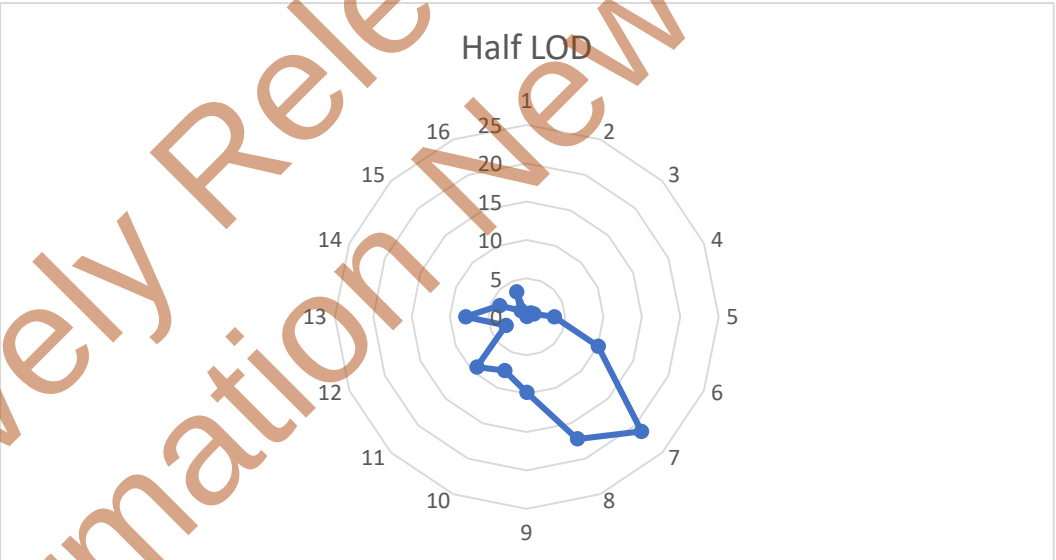
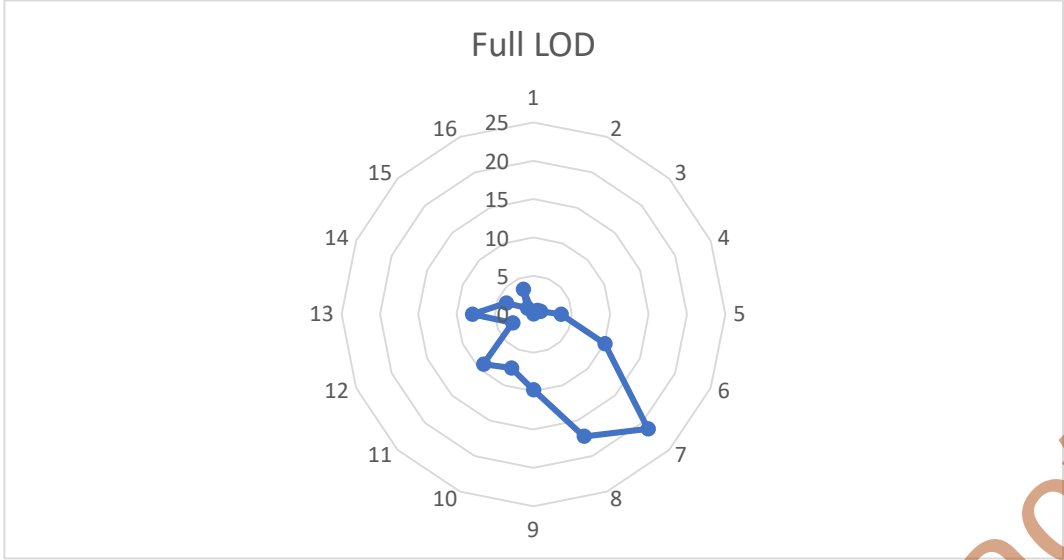
PAH Compound	FTL83 0.13-0.23m 15-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.06	TRUE	0.06	0.03	0	0.1332534	0.0666711	0
Acenaphthylene	0.162	FALSE	0.162	0.162	0.162	0.3597841	0.360024	0.360264
Acenaphthene	0.125	FALSE	0.125	0.125	0.125	0.2776112	0.2777963	0.277982
Fluorene	0.1	FALSE	0.1	0.1	0.1	0.222089	0.222237	0.222385
Anthracene	0.42	FALSE	0.42	0.42	0.42	0.9327737	0.9333956	0.934018
Phenanthrene	0.93	FALSE	0.93	0.93	0.93	2.0654274	2.0668045	2.068183
Fluoranthene	4.9	FALSE	4.9	4.9	4.9	10.882359	10.889615	10.89688
Pyrene	9.5	FALSE	9.5	9.5	9.5	21.098452	21.112519	21.1266
Benzo[a]anthracene	2.9	FALSE	2.9	2.9	2.9	6.4405801	6.4448741	6.449174
Chrysene	2.5	FALSE	2.5	2.5	2.5	5.5522242	5.555926	5.559633
Benzo[b]fluoranthene + Benzo[j]fluoranthene	6.6	FALSE	6.6	6.6	6.6	14.657872	14.667645	14.67743
Benzo[k]fluoranthene	2.2	FALSE	2.2	2.2	2.2	4.8859573	4.8892148	4.892477
Benzo[a]pyrene (BAP)	5.5	FALSE	5.5	5.5	5.5	12.214893	12.223037	12.23119
Indeno(1,2,3-c,d)pyrene	4.3	FALSE	4.3	4.3	4.3	9.5498257	9.5561926	9.562568
Dibenzo[a,h]anthracene	0.93	FALSE	0.93	0.93	0.93	2.0654274	2.0668045	2.068183
Benzo[g,h,i]perylene	3.9	FALSE	3.9	3.9	3.9	8.6614698	8.6672445	8.673027
Total of 16 Priority PAHs	50		45.027	44.997	44.97	100	100	100



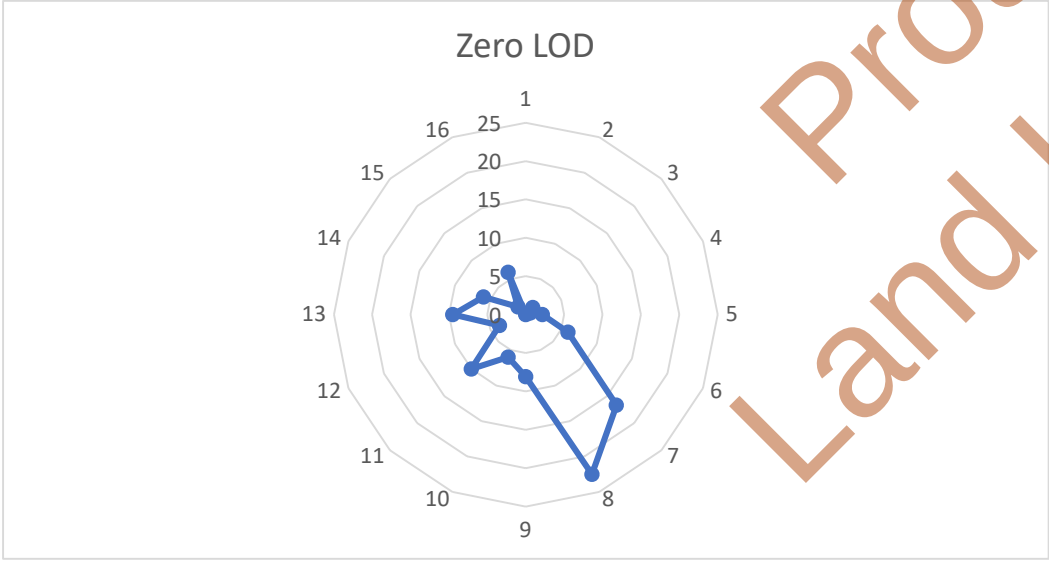
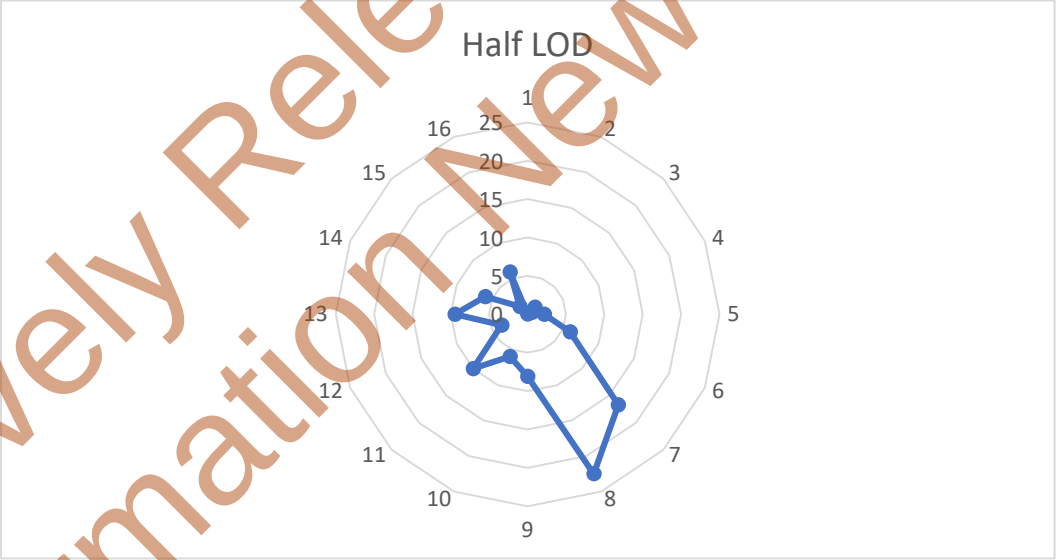
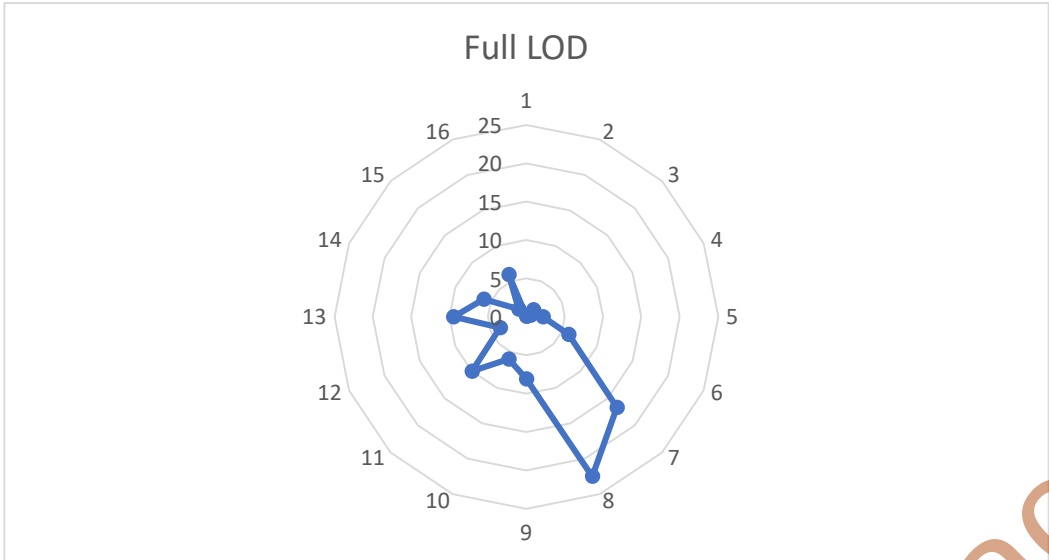
PAH Compound	FTL91 0.22-0.27m 16-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.5	TRUE	0.5	0.25	0	0.0630597	0.0315398	0
Acenaphthylene	2.9	FALSE	2.9	2.9	2.9	0.365746	0.3658614	0.365977
Acenaphthene	5.6	FALSE	5.6	5.6	5.6	0.7062681	0.7064909	0.706714
Fluorene	3.9	FALSE	3.9	3.9	3.9	0.4918653	0.4920204	0.492176
Anthracene	19.7	FALSE	19.7	19.7	19.7	2.4845504	2.485334	2.486118
Phenanthrene	53	FALSE	53	53	53	6.6843234	6.6864316	6.688541
Fluoranthene	155	FALSE	155	155	155	19.548493	19.554658	19.56083
Pyrene	145	FALSE	145	145	145	18.2873	18.293068	18.29884
Benzo[a]anthracene	75	FALSE	75	75	75	9.4589482	9.4619315	9.464917
Chrysene	65	FALSE	65	65	65	8.1977551	8.2003406	8.202928
Benzo[b]fluoranthene + Benzo[j]fluoranthene	81	FALSE	81	81	81	10.215664	10.218886	10.22211
Benzo[k]fluoranthene	34	FALSE	34	34	34	4.2880565	4.2894089	4.290762
Benzo[a]pyrene (BAP)	66	FALSE	66	66	66	8.3238744	8.3264997	8.329127
Indeno(1,2,3-c,d)pyrene	40	FALSE	40	40	40	5.0447724	5.0463635	5.047956
Dibenzo[a,h]anthracene	10.3	FALSE	10.3	10.3	10.3	1.2990289	1.2994386	1.299849
Benzo[g,h,i]perylene	36	FALSE	36	36	36	4.5402951	4.5417271	4.54316
Total of 16 Priority PAHs	850		792.9	792.65	792.4	100	100	100



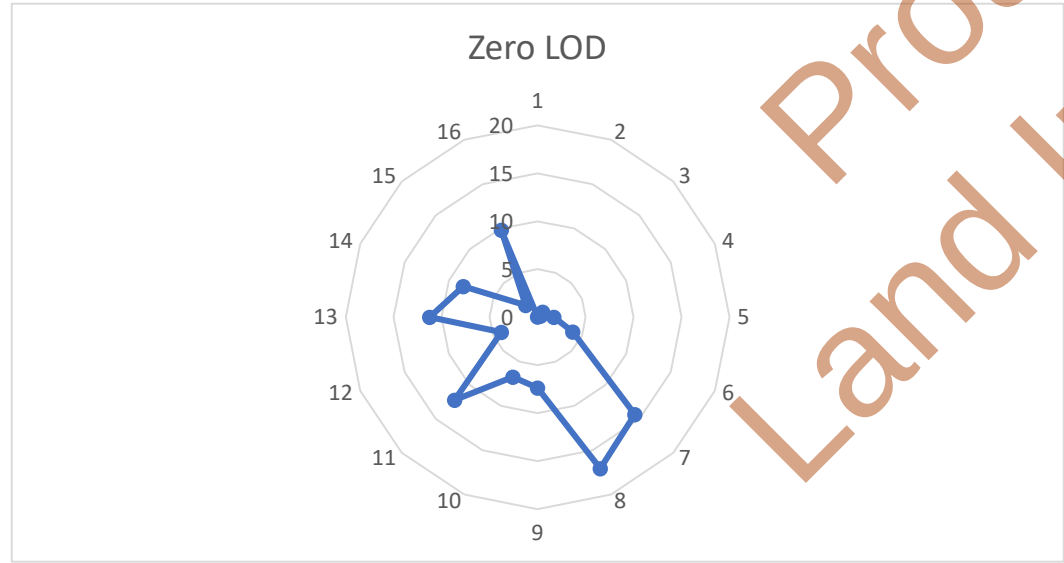
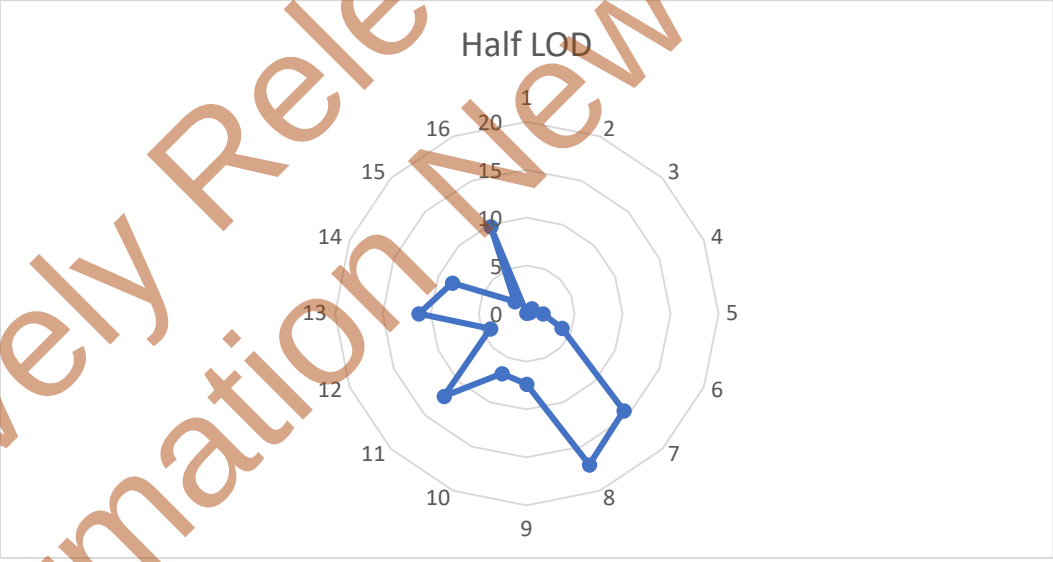
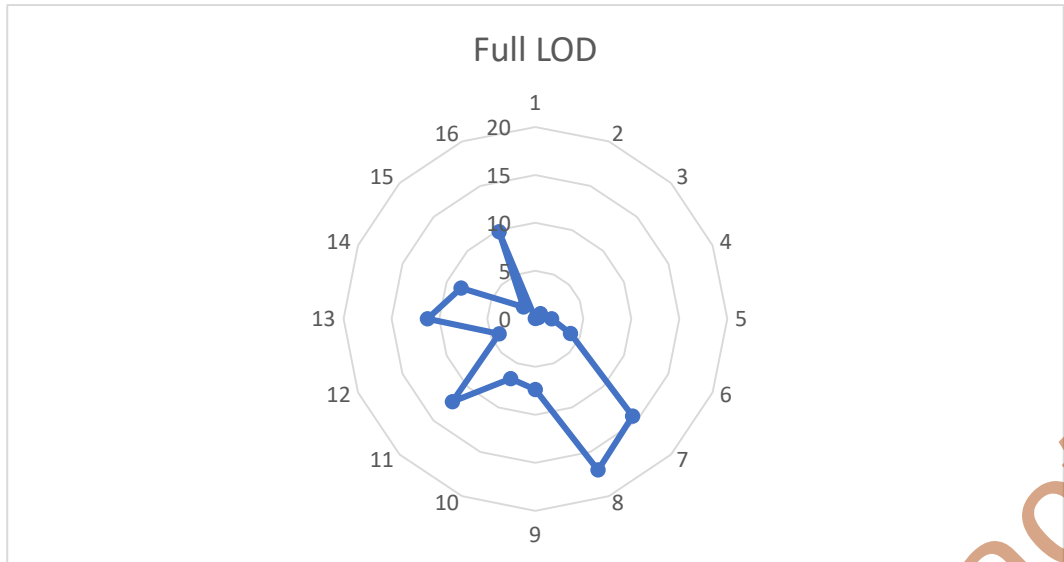
PAH Compound	FTL125 0.25-0.35m 16-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	0.23	FALSE	0.23	0.23	0.23	0.0471138	0.0471138	0.047114
Acenaphthylene	1.55	FALSE	1.55	1.55	1.55	0.3175058	0.3175058	0.317506
Acenaphthene	3.4	FALSE	3.4	3.4	3.4	0.6964644	0.6964644	0.696464
Fluorene	4.8	FALSE	4.8	4.8	4.8	0.9832439	0.9832439	0.983244
Anthracene	17.4	FALSE	17.4	17.4	17.4	3.5642591	3.5642591	3.564259
Phenanthrene	49	FALSE	49	49	49	10.037281	10.037281	10.03728
Fluoranthene	103	FALSE	103	103	103	21.098775	21.098775	21.09878
Pyrene	84	FALSE	84	84	84	17.206768	17.206768	17.20677
Benzo[a]anthracene	48	FALSE	48	48	48	9.8324389	9.8324389	9.832439
Chrysene	37	FALSE	37	37	37	7.5791716	7.5791716	7.579172
Benzo[b]fluoranthene + Benzo[j]fluoranthene	45	FALSE	45	45	45	9.2179114	9.2179114	9.217911
Benzo[k]fluoranthene	14.3	FALSE	14.3	14.3	14.3	2.9292474	2.9292474	2.929247
Benzo[a]pyrene (BAP)	39	FALSE	39	39	39	7.9888566	7.9888566	7.988857
Indeno(1,2,3-c,d)pyrene	18.8	FALSE	18.8	18.8	18.8	3.8510386	3.8510386	3.851039
Dibenzo[a,h]anthracene	5.4	FALSE	5.4	5.4	5.4	1.1061494	1.1061494	1.106149
Benzo[g,h,i]perylene	17.3	FALSE	17.3	17.3	17.3	3.5437748	3.5437748	3.543775
Total of 16 Priority PAHs	510		488.18	488.18	488.2	100	100	100



PAH Compound	FTL142 0.15-0.3m 17-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	< 0.06	TRUE	0.06	0.03	0	0.10535	0.0527028	0
Acenaphthylene	0.053	FALSE	0.053	0.053	0.053	0.0930592	0.0931082	0.093157
Acenaphthene	0.75	FALSE	0.75	0.75	0.75	1.3168753	1.3175693	1.318264
Fluorene	0.35	FALSE	0.35	0.35	0.35	0.6145418	0.6148657	0.61519
Anthracene	1.23	FALSE	1.23	1.23	1.23	2.1596755	2.1608137	2.161953
Phenanthrene	3.4	FALSE	3.4	3.4	3.4	5.9698348	5.972981	5.976131
Fluoranthene	9.5	FALSE	9.5	9.5	9.5	16.680421	16.689212	16.69801
Pyrene	12.8	FALSE	12.8	12.8	12.8	22.474672	22.486517	22.49837
Benzo[a]anthracene	4.6	FALSE	4.6	4.6	4.6	8.0768353	8.081092	8.085353
Chrysene	3.4	FALSE	3.4	3.4	3.4	5.9698348	5.972981	5.976131
Benzo[b]fluoranthene + Benzo[j]fluoranthene	5.7	FALSE	5.7	5.7	5.7	10.008252	10.013527	10.01881
Benzo[k]fluoranthene	2.1	FALSE	2.1	2.1	2.1	3.6872509	3.6891942	3.69114
Benzo[a]pyrene (BAP)	5.4	FALSE	5.4	5.4	5.4	9.4815023	9.4864993	9.491502
Indeno(1,2,3-c,d)pyrene	3.4	FALSE	3.4	3.4	3.4	5.9698348	5.972981	5.976131
Dibenzo[a,h]anthracene	0.81	FALSE	0.81	0.81	0.81	1.4222253	1.4229749	1.423725
Benzo[g,h,i]perylene	3.4	FALSE	3.4	3.4	3.4	5.9698348	5.972981	5.976131
Total of 16 Priority PAHs	61		56.953	56.923	56.89	100	100	100



PAH Compound	FTL144 0.14-0.25m 17-Jul-2024		Full LOD	Half LOD	LOD=0	% Full LOD	% Half LOD	% LOD=0
Naphthalene	0.07	FALSE	0.07	0.07	0.07	0.0477473	0.0477473	0.047747
Acenaphthylene	0.195	FALSE	0.195	0.195	0.195	0.1330105	0.1330105	0.13301
Acenaphthene	1.12	FALSE	1.12	1.12	1.12	0.7639576	0.7639576	0.763958
Fluorene	0.52	FALSE	0.52	0.52	0.52	0.3546946	0.3546946	0.354695
Anthracene	2.5	FALSE	2.5	2.5	2.5	1.7052624	1.7052624	1.705262
Phenanthrene	5.8	FALSE	5.8	5.8	5.8	3.9562089	3.9562089	3.956209
Fluoranthene	21	FALSE	21	21	21	14.324204	14.324204	14.3242
Pyrene	25	FALSE	25	25	25	17.052624	17.052624	17.05262
Benzo[a]anthracene	10.8	FALSE	10.8	10.8	10.8	7.3667337	7.3667337	7.366734
Chrysene	9.9	FALSE	9.9	9.9	9.9	6.7528393	6.7528393	6.752839
Benzo[b]fluoranthene + Benzo[j]fluoranthene	17.9	FALSE	17.9	17.9	17.9	12.209679	12.209679	12.20968
Benzo[k]fluoranthene	6	FALSE	6	6	6	4.0926299	4.0926299	4.09263
Benzo[a]pyrene (BAP)	16.5	FALSE	16.5	16.5	16.5	11.254732	11.254732	11.25473
Indeno(1,2,3-c,d)pyrene	12.3	FALSE	12.3	12.3	12.3	8.3898912	8.3898912	8.389891
Dibenzo[a,h]anthracene	2.6	FALSE	2.6	2.6	2.6	1.7734729	1.7734729	1.773473
Benzo[g,h,i]perylene	14.4	FALSE	14.4	14.4	14.4	9.8223117	9.8223117	9.822312
Total of 16 Priority PAHs	162		146.605	146.605	146.6	100	100	100



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Appendix E

QA/QC

FTL149 [0 - 0.03]	DUP FTL149 [0 - 0.03m]	RPD (%)
< 0.10	< 0.10	-
< 0.10	< 0.15	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.23	< 0.25	-
< 0.3	< 0.3	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.5	< 0.5	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 0.10	< 0.10	-
< 3	< 3	-

FTL149 (0.03 - 0.13m)	DUP FTL149 (0.03 - 0.13m)	RPD (%)
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.026	< 0.026	-
< 0.026	< 0.026	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.06	< 0.06	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.011	< 0.011	-
< 0.3	< 0.3	-

Note: Results in *italics* exceed 30% RPD. Results in **red** exceed 50% RPD

Item	Description
Field Quality Assurance	
Sampling Team Details	Elliot Bish, Senior Environmental Scientist Alice Field, Environmental Scientist Ben Laing-McConnell, Environmental Scientist Cameron Lee, Engineering Geologist
Intended duplicate/blank frequency	Multiple duplicates collected and tested – refer RPD results.
Sample Records	- RJ Hill Laboratories chain of custody forms. - Sample locations shown in Figures 33205/CT01 – 33205/CT16 - Site observations stated in main report.
Chain of Custody	- FTL/RJ Hill Laboratories standard forms. - Directly taken to lab by FTL
Other	- All field work was completed in accordance with the current FTL field procedures, which are designed to eliminate cross-contamination and associated ‘false positive’ and ‘false negative’ sampling errors. - Between samples all sampling utensils were triple washed with potable tap water, then cleaned with a proprietary laboratory grade phosphate free detergent (Decon 90), and finally rinsed with clean water. During sampling, clean latex laboratory gloves were worn. - All samples were deposited into laboratory supplied clean glass jars, and placed into a ruggedised container. All samples were transported to an IANZ accredited laboratory under standard FTL chain of custody procedures.
Laboratory QA/QC	
Analytical methods and detection limits	- See Appendix B (RJ Hill Laboratories transcripts). - Compliance with sample holding times.
QA/QC Data evaluation	
General	Comparison of laboratory results with field observations

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Appendix F

ProUCL Statistical Analysis

	A	B	C	D	E	F	G	H	I	J	K	L
1	Gamma UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation		ProUCL 5.114/11/2024 12:07:56 pm									
5	From File		WorkSheet.xls									
6	Full Precision		OFF									
7	Confidence Coefficient		95%									
8	Number of Bootstrap Operations		2000									
9												
10												
11	Anth TCLP All											
12												
13	General Statistics											
14	Total Number of Observations				27		Number of Distinct Observations				21	
15							Number of Missing Observations				0	
16	Minimum				5.0000E-5		Mean				0.00369	
17	Maximum				0.0159		Median				6.4000E-4	
18	SD				0.005		SD of logged Data				2.082	
19	Coefficient of Variation				1.355		Skewness				1.454	
20												
21	Gamma GOF Test											
22	A-D Test Statistic				0.884		Anderson-Darling Gamma GOF Test					
23	5% A-D Critical Value				0.82		Data Not Gamma Distributed at 5% Significance Level					
24	K-S Test Statistic				0.171		Kolmogorov-Smirnov Gamma GOF Test					
25	5% K-S Critical Value				0.179		Data appear Gamma Distributed at 5% Significance Level					
26	Data appear to Follow Approximate Gamma Distribution at 5% Significance Level											
27												
28	Gamma Statistics											
29	k hat (MLE)				0.446		k star (bias corrected MLE)				0.421	
30	Theta hat (MLE)				0.00827		Theta star (bias corrected MLE)				0.00876	
31	nu hat (MLE)				24.1		nu star (bias corrected)				22.76	
32	MLE Mean (bias corrected)				0.00369		MLE Sd (bias corrected)				0.00569	
33							Approximate Chi Square Value (0.05)				12.91	
34	Adjusted Level of Significance				0.0401		Adjusted Chi Square Value				12.44	
35												
36	Assuming Gamma Distribution											
37	95% Approximate Gamma UCL (use when n>=50)				0.00651		95% Adjusted Gamma UCL (use when n<50)				0.00676	
38												
39	Suggested UCL to Use											
40	95% Adjusted Gamma UCL				0.00676							
41												
42	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
43	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
44												
45	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
46	Recommendations are based upon data size, data distribution, and skewness.											
47	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
48	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
49												