



LANDTEK LIMITED

Consulting Engineers

205 Nebo Road, Unit 3
Hamilton, Ontario
Canada
L8W 2E1

Phone: 905-383-3733
Fax: 905-383-8433
engineering@landteklimited.com
www.landteklimited.com

Phase Two Environmental Site Assessment

4933 Victoria Avenue North
Vineland Station (Town of Lincoln), Ontario
L0R 2E0

Prepared for:
Ms. Tracy Murray
Court Holdings Limited
5071 King Street
Beamsville, Ontario
L0R 1B0

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EXECUTIVE SUMMARY

Landtek Limited (Landtek) is pleased to submit the findings of the Phase Two Environmental Site Assessment (ESA) report for the property located at 4933 Victoria Avenue, in Vineland, Ontario (“the Phase One Property” or “the Site” or “the Subject Property”). The work was initiated following authorization to proceed from Mr. Mario Bevacqua of JSL Management Inc. (the Client) in April of 2022.

The Phase Two ESA was completed in general accordance with CSA Standard Z769-00 as well as current guidelines described in Ontario Regulation 153/04 as amended. The current soil and groundwater quality standards and regulations came into effect in 2011 (Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act, April 15, 2011). The Phase Two ESA covers physical sampling of soils and groundwater and chemical analyses where potential risks of environmental liability are evident from previous findings or past use of the property.

This Phase Two ESA has been completed to support the preparation of a Record of Site Condition (RSC) for the Phase Two Property in accordance with Ontario Regulation 153/04 (2011) (“O. Reg. 153/04”).

SITE DESCRIPTION

The Phase Two Property has an area of approximately 1.6 hectares (4.0 acres) and is situated approximately 25 m north of the intersection of Laurie Avenue and Victoria Avenue North, in Vineland Station (Town of Lincoln), Ontario.

The Phase Two Property is currently light industrial lands (northern portion) and commercial office space (central portion) with two (2) buildings present; the southern portion of the Site is vacant unutilized lands. Portions of the Site are regulated by the Niagara Peninsula Conservation Authority (NPCA).

The Site is currently light industrial / commercial usage and according to information provided by the Client is to be redeveloped into residential land use. O. Reg. 153/04 stipulates that for a property, the Site Condition Standards (SCS) that are applicable to the property are the standards that are applicable to the most sensitive type of property use, in this case residential is the most sensitive land use and therefore for the purpose of this Phase Two ESA residential is considered as the intended land-use.

SUMMARY OF WORK PLAN

In March of 2022, Landtek was retained by the Client, to prepare a Phase 1 ESA report for the Site, titled “Phase One Environmental Site Assessment, 4933 Vineland Avenue, Vineland Station (Town of Lincoln), Ontario, dated March 2022” (Phase I ESA). The Phase I ESA was conducted to assess the environmental liability, if any, associated with the Site.

The findings of the Phase I ESA identified Potentially Contaminating Activities (PCA) and corresponding areas of potential environmental concern (APEC) and associated contaminants of potential concern (CPC) at the Site. These PCAs, APECs and CPCs are related to:



APEC ¹	Location of APEC on the Phase One Property	PCA ²	Location of PCA (on-site or off- site)	Contaminants of Potential Concern ³	Media Potentially Impacted (groundwater, soil, and/or sediment) ⁴
1	Northern portion of the Site PCA-A	Other 1: Waste Generation	On-Site	BTEX and PHCs, VOCs, PAHs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil and groundwater
2	Northern portion of the Site PCA-B	28. Gasoline and Associated Products Stored in Fixed Tanks	On-Site	BTEX and PHCs, VOCs, PAHs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil and groundwater
3	Northern portion of the Site PCA-C	34. Metal Fabrication	On-Site	VOCs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil and groundwater
4	Northern portion of the Site PCA-D	30. Importation of fill material of unknown quality	Off-Site	BTEX and PHCs, VOCs, PAHs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil

Notes:

1 - Area of Potential Environmental Concern (APEC) means the area on, in or under the Phase One Property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through,

- (a) Identification of past or present uses on, in or under the phase one property, and
- (b) Identification of potentially contaminating activity.

2 - Potentially contaminating activity (PCA) means a use or activity set out in Column A of Table 2 of Schedule D that is occurring in a Phase One Study Area.

3 - Identify all contaminants of potential concern using the Method Groups as identified in the "Protocol for the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011.

4 - Media Potentially Impacted refers to soil, groundwater, surface water or sediment.

Metals - metals including hydrides (As, Sb, Se, Hg)

PHCs - petroleum hydrocarbons fractions F1-F4

BTEX - benzene, toluene, ethylbenzene, and xylenes

VOCs – Volatile Organic Compounds

PAHs – Polyaromatic Hydrocarbons

Based on the results of the Phase One ESA, a Phase Two ESA was recommended to investigate the areas of potential environmental concern identified. The investigation included sampling of soil and groundwater on the Phase Two Property.

Based on the APECs identified in the Phase I ESA, a program of soil and groundwater sampling and chemical analysis for inorganic and organic parameters, including petroleum hydrocarbons (PHCs), metals and inorganic parameters (M&I), polycyclic aromatic hydrocarbons (PAHs) and volatile organic compounds (VOCs) [collectively referred to as contaminants of concern (COCs)], was proposed.

Eleven (11) boreholes (BH1, MW2, MW3, MW4, BH5, BH6, BH7, MW8, MW9, BH10, and MW11) were drilled on the Site in April of 2022; six (6) boreholes were installed as groundwater monitoring wells (MW2, MW3, MW4, MW8, MW9, and MW11). The boreholes were advanced using a track mounted CME 75 drill rig and final borehole depths was approximately 4.5 meters below ground

surface (mbgs) (15 ft) and were established based on the subsurface conditions and likelihood of groundwater being encountered.

Selected soil samples from the boreholes were obtained and submitted for laboratory analysis from the fill material and underlying native soils for the COCs identified based on field-screening vapour measurements and/or field observations.

Laboratory analysis was carried out by Paracel Laboratories. The laboratory is accredited by the Canadian Association for Laboratory Accreditation (CALA). The parameters for which samples were analysed were selected based on a Sampling and Analysis Plan (SAP) and field conditions encountered.

Soil and groundwater samples were analysed for selected contaminants CPCs that included:

- petroleum hydrocarbons (PHCs);
- polycyclic aromatic hydrocarbons (PAHs);
- volatile organic compounds (VOCs); and,
- metals and inorganics (including calcium and magnesium); hydrides (including arsenic, antimony, selenium); and Other Related Parameters (ORPs) (including boron (hot water soluble), chloride, cyanide, electrical conductivity (EC), sodium absorption ratio (SAR), hexavalent chromium, nitrate/nitrogen, mercury, and pH).

The Site Condition Standards (SCS) adopted for this assessment were the Ontario Regulation 153/04 (O. Reg. 153/04) Table 1 SCS Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition and non agricultural (*Residential/Parkland/Institutional/Industrial/Commercial/Community*) property use (O. Reg. 153/04 Table 1 SCS).

All field work was carried out in accordance with standard quality assurance / quality control procedures as discussed in the report and the quality control samples analysed included duplicates and trip blanks.

CONCLUSIONS

Based on the available background information and testing completed during the course of this investigation, the findings of the Phase Two ESA are summarized as follows:

- Soil samples tested for PAHs, VOCs, PHC F1 to F4, and metals and inorganics (including hydrides and ORPs) were below the O. Reg. 153/04 Table 1 SCS for R/P/I/IC/C land-use in a potable groundwater condition in accordance with O. Reg. 153/04, with the exception of the following;
 - MW2-3 (sample depth 2.0 – 2.6 m) exceeded for various metals and inorganic parameters, PHC F3 and PHC F4;
 - BH6-1 (sample depth 0 – 0.6 m) exceeded for various PAH parameters; and,
 - BH7-2 (sample depth 0.8 – 1.4 m) exceeded for various PAH parameters;
 - MW9-2 (sample depth 0.8 – 1.4 m) exceeded for Xylenes (VOC parameter);
 - BH10-2 (sample depth 0.8 to 1.4 m) exceeded for various PAH parameters and PHC F4; and,
- Groundwater samples tested for PAHs, VOCs, PHC F1 to F4, and metals and inorganics (including hydrides and ORPs) were below the O. Reg. 153/04 Table 1 SCS for R/P/I/IC/C land-use in a potable groundwater condition in accordance with O. Reg. 153/04, with the exception of:

shallow
contamination.
dig and dump

- MW4, MW8 and MW9 which exceed for various M&I parameters and Trichloroethylene (a VOC parameter).

Impacted soils were identified at a maximum depth of 2.6 m, with an approximate average depth of 1.5 m. Groundwater impacts were identified at three (3) locations sampled.

RECOMMENDATIONS

Based on the findings of the Phase Two ESA, soil and groundwater did not meet the applicable O. Reg. 153/04 Table 1 SCS for R/P//IC/C land-use.

Based on the results of this Phase Two ESA, additional sampling and testing may be considered in an effort to isolate/delineate the area of impacts. An appropriate remediation strategy will need to be considered to confirm the suitability of the Site for its intended development and use and the submission of an RSC.

An RSC cannot be submitted based on the work completed on the Site.

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1.0 INTRODUCTION

Landtek Limited (Landtek) is pleased to submit the findings of the Phase Two Environmental Site Assessment (ESA) report for the property located at 4937 Victoria Avenue, in Vineland, Ontario (“the Phase One Property” or “the Site” or “the Subject Property”), as shown on **Figure 1**. The work was initiated following authorization to proceed from Mr. Mario Bevacqua of JSL Management Inc. (the Client) in April of 2022.

The Phase Two ESA was completed in general accordance with CSA Standard Z769-00 as well as current guidelines described in Ontario Regulation 153/04 as amended. The current soil and groundwater quality standards and regulations came into effect in 2011 (Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act, April 15, 2011). The Phase Two ESA covers physical sampling of soils and groundwater and chemical analyses where potential risks of environmental liability are evident from previous findings or past use of the property.

This Phase Two ESA has been completed to support the preparation of a Record of Site Condition (RSC) for the Phase Two Property in accordance with Ontario Regulation 153/04 (2011) (“O. Reg. 153/04”).

1.1 Site Description

The Phase Two Property has an area of approximately 1.6 hectares (4.0 acres) and is situated approximately 25 m north of the intersection of Laurie Avenue and Victoria Avenue North, in Vineland Station (Town of Lincoln), Ontario.

The Phase Two Property is currently light industrial lands (northern portion) and commercial office space (central portion) with two (2) buildings present; the southern portion of the Site is vacant unutilized lands. Portions of the Site are regulated by the Niagara Peninsula Conservation Authority (NPCA).

Figure 1 shows the general location of the Site.

The current land-use for the Site is light industrial which is not consistent with the zoning of the area. The Site is to be redeveloped into residential dwellings, which is consistent with the zoning of the area.

O. Reg. 153/04 stipulates that for a property, the Site Condition Standards (SCS) that are applicable to the property are the standards that are applicable to the most sensitive type of property use, in this case residential is the most sensitive land use and therefore for the purpose of this Phase Two ESA residential is considered as the intended land-use.

1.2 Applicable Site Condition Standards (SCS)

Under the O. Reg. 153/04, Part XV.1 of the Environmental Protection Act, the selection of SCS, against which laboratory results are compared, is based on a number of criteria. The SCS are published in the Ontario Ministry of the Environment, Conservation and Parks (MECP) Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act dated April 15, 2011.

Landtek considered the following criteria for the selection of the applicable SCS for the Site:



- Land Use: The current land is zoned industrial, while the intended land-use for the property is reported to be residential. O. Reg. 153/04 stipulates that for a property, the Site Condition Standards (SCS) that are applicable to the property are the standards that are applicable to the most sensitive type of property use, in this case residential is the most sensitive land use and therefore for the purpose of this Phase Two ESA residential is considered as the intended land-use;
- Potable or non-potable groundwater: Based on results from the Phase One ESA completed for the Site by Landtek (dated March 2022) potable water wells are located within 250 m of the Site;
- Proximity to surface water body: The Phase Two Property is located within 30 metres (m) of a waterbody. Lake Ontario is adjacent to the north and an unnamed stream is located to the east of the Site;
- Proximity to areas of natural significance or environmentally sensitive areas: The Site is considered to be within the proximity of an environmentally sensitive area, as the Town of Lincoln Official Plan (2017) designates all natural creeks and streams in the Town as environmentally significant;
- Depth to bedrock: A property is considered a shallow soil property if one-third or more of the Phase Two Property consists of soil depths of 2 metres below ground surface (mbgs) or less. Based on the subsurface conditions observed as part of the Phase Two ESA work conducted to date, the depth to bedrock is considered to be **less than 2 m** and therefore, shallow soil **was** observed on the Site at the locations investigated on the Phase Two Property;
- pH of soil: If the surface soil (soil <1.5 m in depth) has a pH value of less than 5 or greater than 9, or if the subsurface soil (soil >1.5 m in depth) has a pH value of less than 5 or greater than 11 then the site is considered to be an environmentally sensitive area and applicable full-depth generic or stratified site condition standards shall not be used, eliminating the use of the SCSs provided in Table 2 through 9. Therefore, if the pH of any soil on Site is outside the allowable range, the site must be evaluated using the Table 1 Site Condition Standards (Full Depth Background Site Condition Standards). For the purposes of this assessment the pH was found to be within the allowable limits and therefore, the Site is not considered to be an environmentally sensitive area; and,
- Soil texture: Based on the results of grain size analysis completed on the Site and the subsurface conditions encountered, the soil texture is considered to be coarse textured as defined in O. Reg153/04.

Based on the above information, *Table 1 SCS Full Depth Background Site Condition Standards in a potable Ground Water Condition and non agricultural (Residential/Parkland/Institutional/Industrial/Community/Commercial (R/P/I/I/C/C)) property use (O. Reg. 153/04 Table 1 SCS)* were selected as the applicable standards for the Phase Two Property.

2.0 BACKGROUND INFORMATION

2.1 Physical Setting

A review of the Ontario Base Mapping (OBM) map (Reference Map: Ontario Base Mapping (OBM) Data, Scale 1:22,000, Ontario Ministry of Natural Resources, 2010) provided by Ecolog ERIS for the Site and a 2 km radial search from the property boundaries indicates the local topography of the land slopes gently to the north towards Lake Ontario located adjacent to the north of the Site.

The elevation of the Site ranges between approximately 78 and 75 m above sea level (masl).

The properties surrounding the Phase Two Property and are predominantly residential and institutional.

Based on the Phase One ESA completed for the Site, there are no Areas of Natural and Scientific Interest (ANSIs) within 250 m of the Site.

2.2 Previous Investigations

No previous environmental reports were provided to Landtek for review for the Site.

3.0 SCOPE OF THE INVESTIGATION

The Phase Two ESA was carried out address the APECs identified in the Phase One ESA.

A summary of information on the PCAs, their locations and associated APECs and CPCs identified in the Phase One ESA and are presented in **Table 2** and depicted on **Figure 2**.

The boreholes/monitoring wells proposed for the Phase Two ESA corresponding to each of the APECs are also presented in **Table 2** which provides the rationale for the work proposed.

The investigation locations are shown on **Figure 3**.

Table 2: Areas of Potential Environmental Concern (APECs)

APEC	Location of APEC on the Phase Two Property	PCA	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (groundwater, soil, and/or sediment)	Borehole / Monitoring Well (BH/MW)
1	Northern portion of the Site PCA-A	Other 1: Waste Generation	On-Site	BTEX and PHCs, VOCs, PAHs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil and groundwater	BH1, MW2, MW3, MW4, BH7, MW8, BH9, BH10, and MW 11
2	Northern portion of the Site PCA-B	28. Gasoline and Associated Products Stored in Fixed Tanks	On-Site	BTEX and PHCs, VOCs, PAHs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil and groundwater	BH1, MW2, MW3, MW4, BH7, MW8, BH9, BH10, and MW 11
3	Northern portion of the Site PCA-C	34. Metal Fabrication	On-Site	VOCs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil and groundwater	BH1, MW2, MW3, MW4, BH7, MW8, BH9, BH10, and MW 11
4	Northern portion of the Site PCA-D	30. Importation of fill material of unknown quality	Off-Site	BTEX and PHCs, VOCs, PAHs, and Metals, CN-, B(HWS), Hg, SAR, EC	Soil	BH1, MW2, MW3, MW4, BH5, BH6, BH7, MW8, BH9, BH10, and MW 11

Notes:

1 - Area of Potential Environmental Concern (APEC) means the area on, in or under the Phase Two Property where one or more contaminants are potentially present, as determined through the phase two environmental site assessment, including through,

- (a) Identification of past or present uses on, in or under the phase two property, and
- (b) Identification of potentially contaminating activity.

2 - Potentially contaminating activity (PCA) means a use or activity set out in Column A of Table 2 of Schedule D that is occurring in a Phase One Study Area.

3 - Identify all contaminants of potential concern using the Method Groups as identified in the "Protocol for in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011.

4 - Media Potentially Impacted refers to soil, groundwater, surface water or sediment.

Metals - metals including hydrides (As, Sb, Se, Hg)

PHCs – petroleum hydrocarbons fractions F1-F4

VOCs – volatile organic compounds

PAHs – Polycyclic Aromatic Hydrocarbons

4.0 METHODOLOGY

The field work for this Phase Two ESA was carried out in April of 2022.

The field work was implemented in accordance with the Sampling and Analysis Plan (SAP), provided in **Appendix A**. The SAP was prepared based on the APEC identified on the Site and the corresponding PCAs, CPCs, and other potentially contaminating issues. Landtek proposed boreholes/monitoring wells on the Site to obtain soil samples, including near the water table and the installation of monitoring wells to obtain groundwater samples.

The analytical program presents information on the sampling locations, media sampled, sample depths and analytical parameters for which samples were analysed.

The rationale for the sampling and analysis is presented in **Section 3.0**.

Landtek retained experienced contractors for the drilling activities. Landtek field staff were briefed prior to commencement of the field work by the Project Manager and the Project QP_{ESA}. Field staff was responsible for supervising field activities, logging the soils during the drilling and test pitting activities, monitoring the depth of drilling and installation of monitoring wells, soil and groundwater sampling, and sorting and dispatch of samples under chain of custody documentation to the contract laboratory.

4.1 Drilling

As indicated in **Section 3.0**, Landtek used borehole drilling to conduct characterisation of the soil and groundwater monitoring well installations to conduct characterisation of the groundwater at the Site. The details of borehole drilling and installation of groundwater monitoring wells in the boreholes are discussed in the sections below.

4.1.2 Borehole Drilling and Monitoring

Eleven (11) boreholes (BH1, MW2, MW3, MW4, BH5, BH6, BH7, MW8, MW9, BH10, and MW11) were drilled on the Site in April of 2022, as shown on **Figure 3**; six (6) boreholes were installed as groundwater monitoring wells (MW2, MW3, MW4, MW8, MW9, and MW11). The boreholes were advanced using a track mounted CME 75 drill rig and final borehole depths was approximately 4.5 meters below ground surface (mbgs) (15 ft) and were established based on the subsurface conditions and likelihood of groundwater being encountered.

Borehole locations are shown on **Figure 3**.

The boreholes were advanced using a track mounted CME 75 drill rig operated by Pontill Drilling. Final borehole depths ranged from approximately 4.5 mbgs (15 ft) to 6.0 mbgs (20 ft) and were established based on the subsurface conditions and/or the likelihood of groundwater being encountered.

The soil was logged by qualified Landtek personnel using the Unified Soil Classification System (USCS) Standard Practices for Description and Identification of Soils, Visual Manual Procedure (ASTM D2488-09a), noting stratigraphy, subsurface conditions, and any physical evidence of soil quality impacts. A stratigraphy summary table is presented in **Appendix B**.

4.2 Soil Sampling

Each borehole was logged and information recorded including: drilling date, depth, headspace vapour concentrations, soil descriptions and measured depth to groundwater, (if encountered). Borehole soil samples were collected at discrete intervals using standard split spoon samples and test pit samples were obtained via grab samples from undisturbed soils in the backhoe bucket. Soil sampling locations were selected based on observations and field-screening (e.g., vapour readings, unique soil characteristics or visible staining).

Each soil sample taken was split into two (2) portions; one (1) portion was placed into laboratory-supplied sample jars for potential laboratory submission, and the other portion was placed in a sealable plastic bag for field-screening vapour measurement. PHC F1 and VOC samples were collected using a Terracore syringe pre-calibrated to deliver approximately 5 grams of wet weight soil and placed in laboratory-prepared methanol vials. All other soil samples, including those to be analysed for the remaining organic and metal parameters, were collected in laboratory-supplied containers.

Samples were stored on ice until delivery to Paracel Laboratories following standard chain-of-custody protocols. The soil samples selected for analysis were analyzed for selected COCs. The parameters included the measurement of pH which is required for the selection of the appropriate Site Condition Standards.

Stratigraphy summary table (**Appendix B**) provide a geologic description of overburden samples and the depths at which they were collected during the investigation.

4.3 Field Screening Measurements

Field-screening vapour measurements were conducted using an RKI Eagle 2 portable instrument fitted with two (2) sensors: one (1) for detection of hydrocarbons/combustibles and the other a photoionization detector (PID) for detection of volatile organic compounds. The instrument was supplied by Landtek and was calibrated prior to use with hexane and isobutylene span gases.

Each soil sample taken for screening was placed in a sealable plastic bag for field-screening vapour measurement. Prior to taking the field-screening vapour readings, the soil within the sealed plastic bags was agitated and allowed to equilibrate for a minimum of 30 minutes at 15°C or greater. The vapour measurements were collected by inserting the collection tube of the Eagle 2 into the plastic bag.

The frequency of field screening measurements during the drilling investigation was approximately 0.6 m (~2 ft) intervals.

4.4 Groundwater: Monitoring Well Installation

Six (6) groundwater monitoring wells (MW2, MW3, MW4, MW8, MW9, and MW11) were installed on the Site, to depths of approximately 4.5 mbgs (15 ft).

The monitoring wells were constructed using polyvinyl chloride ("PVC") well screens (3m lengths) and PVC riser pipe finished at grade. The well screens were installed in an attempt to straddle the apparent water table (if encountered). The elevations of the ground surface and the top of the groundwater monitoring wells were determined via an elevation survey (as discussed in **Section 4.7**). All wells were monument with flush mounted protective steel caps/casings.

Monitoring wells were installed in accordance with O. Reg. 903, as amended, for the purposes of assessing groundwater quality at the Site. Monitoring wells were constructed using 51 mm inside diameter (ID) Schedule 40 polyvinyl chloride (PVC) pipe. The well screens were installed to attempt to straddle the apparent water table (if encountered). All sections were machined with fine threaded flush joints to avoid the use of PVC glue and primer for connections as these bonding materials have the potential of introducing traces of organic contaminants. The screened sections of PVC pipe were manufactured with No. 10 (0.25 mm) machined slotting. Solid lengths of PVC pipe were used above the screened interval (i.e., riser pipe). Cleaned silica sand (10/20 size) was placed around the screen to a minimum level of 0.10 m above the top of the screen. Bentonite (hydrated with tap water) was used to backfill the borehole above the sand to create a well seal. Monitoring wells were designed to be installed with screens completed in discrete lithology units to investigate potential groundwater impacts within these units. Groundwater monitoring wells were finished with locking J-Plug caps and completed using monument protective casings.

Monitoring well locations are shown on **Figure 3**.

4.5 Groundwater Sampling

4.5.1 Monitoring Well Development

Prior to sampling, monitoring wells were developed using a foot-valve inertial pump technique to minimize sediment in the well. Well development was considered complete when a minimum of three (3) well volumes had been purged or when the well was purged to dryness at least three (3) times after a minimum 90% water level recovery.

4.5.2 Water Level Measurements

The depth to groundwater and total well depths were measured using a clean and calibrated electronic interface probe. The relative elevations were calculated by subtracting the measured groundwater depth from the surveyed top of the casing elevation.

To prevent cross-contamination, the interface probe was cleaned with a laboratory-grade phosphate-free detergent and distilled water solution, before each use and in between each well. All water level measurements were taken from the top of the well riser pipe.

4.5.3 Groundwater Sample Collection

Groundwater sampling was carried out on May 4 and May 10, 2022. Samples were obtained from all six (6) newly installed monitoring wells (MW2, MW3, MW4, MW8, MW9, and MW11). During the sampling, groundwater samples were collected using a low-flow peristaltic pump, with dedicated tubing installed in each of the monitoring wells. This method minimizes the velocity of the formation water entering the well screen, as the drawdown is kept to a minimum (i.e., less than 10 % of the initial water column height) by adjusting the pumping rate. Sample filtering was conducted by ALS Environmental.

Samples were placed into laboratory-supplied containers and stored on ice in coolers for transport and delivery to Paracel Laboratories under a chain of custody protocol.

4.6 Analytical Testing

Laboratory analysis was carried out by Paracel Laboratories Ltd. The parameters for which samples were analysed were selected based on the SAP and field conditions encountered. The laboratory is accredited by the Canadian Association for Laboratory Accreditation (CALA). The methods used for analysis were consistent with those stipulated in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. The Analytical Program and laboratory certificates are provided in **Appendix C**.

4.7 Quality Assurance and Quality Control (QA/QC) Measures

All field work was performed following Landtek's Standard Operating Procedures (SOPs), which were developed in accordance with O. Reg. 153/04, as amended and included the following:

- Appropriate measures to avoid cross contamination and carry out decontamination where necessary, collection of all samples in laboratory provided containers, and placement of containers in coolers containing ice;
- The SAP, field conditions, as documented on the borehole and test pit logs and results of field screening, were reviewed to confirm that the appropriate samples were selected for laboratory analysis and that samples were scheduled for analysis of the required chemical parameters;
- The samples listed on the chain-of-custody form were cross-checked with the samples being shipped to the contract laboratory. A further check was carried out to ensure that the relevant analytical parameters had been requested for analysis;
- All coolers contained ice packs along with the sample containers to maintain the minimum temperature required on arrival at the contract laboratory;
- QA/QC samples were collected as required by O. Reg. 153/04 and included the following:
 - Duplicate soil and groundwater samples collected at a frequency of a minimum of 10% i.e., one duplicate for every ten (10) samples submitted for laboratory analysis;
 - A field blank was dispatched to the contract laboratory with the groundwater samples.
- Duplicate soil samples were collected by splitting the sample collected into two equal volumes prior to placing them in a primary and duplicate sample containers. Duplicate groundwater samples were collected by filling a duplicate sample container immediately following the collection of the primary sample for each of the sample bottle types. The labelling on the duplicate samples were such that they were considered "blind" duplicates by the laboratory.

5.0 REVIEW AND EVALUATION

5.1 Geology

Geological and Hydrogeological information sources were reviewed to determine the nature of the subsurface strata on Site.

The Ontario Geology Survey has a web application, OGS Earth, which provides geoscience data, collected by the Mines and Minerals division, which can be viewed using user-friendly geographic information programs such as Google Earth. The Surficial Geology and Bedrock Geology applications were reviewed to determine the geologic characteristics mapped at the Site. A review of this data as well as MOE water well records indicate that the predominant Quaternary geology at the Site likely consists of coarse textured glaciolacustrine deposits of sand, gravelly sand and gravel underlying the Site. There is no indication that there are significant depths of fill on the property associated with old landforms such as ravines and watercourses.

The Bedrock geology at the Site likely consists of sandstone, shale, dolostone and/or siltstone of the Lockport Formation, which is predominant within the Hamilton area.

Depth to bedrock on the Site was referenced from the Ecolog ERIS report Borehole and Water Well Information System databases; red shale bedrock was reported to range from approximately 9.7 m (32 ft) to 11.3 m (37 ft) below ground surface and depth to static groundwater was reported to range from (6 feet to 10 feet) 1.8 m to 3.0 m below ground surface.

5.2 Groundwater: Elevations and Flow Direction

Based on the Site geology information presented in **Section 5.1**, the main hydrogeological unit that was investigated at the Phase Two Property was the shallow groundwater table, present within the weathered shale bedrock on the Site.

Table 3: Depth to Groundwater Summary

Monitoring Well ID	Depth to Groundwater (Meters bgs)
MW2	1.54
MW3	2.24
MW4	2.23
MW8	1.76
MW9	2.60
MW11	2.56

high water table.
bathtub or surface
parking

The groundwater flow direction is inferred to be towards the north. The groundwater contours are interpreted based on the six (6) monitoring wells located on the Site.

5.3 Soil: Field Screening

Results of field screening ranged from 0 ppm (non-detect) (various) to 125 ppm, measured at BH(MW)2-3.

5.4 Soil Quality

The results of the laboratory analysis of the soil samples analysed have been compared with the O. Reg. 153/04 Table 1 SCS (non-agricultural, coarse textured soils) and are presented in **Table 4**. Laboratory certificates are presented in **Appendix C**.

The schedule of chemical testing and the summary of test results for soils are shown in **Table 4**. Samples were selected based on location and depth of potential areas of concern as well as olfactory or vapour reading indicators, where possible.

Table 4: Schedule of Chemical Analyses and Summary of Test Results for Soils

Sample	Depth (metres)	Analyses	Exceedances (ug/g)		
			Parameter	Sample Results	Table 1 RPI Standard**
MW1-2	0.7 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	Conductivity	602	0.57
MW1-3	1.5 – 2.1	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW2-1	0.5 – 1.0	PAHs, M&I, VOCs and PHC F1-F4	SAR	4.99	2.4
MW2-2	1.2 – 1.8	PAHs, M&I, VOCs and PHC F1-F4	SAR	4.28	2.4
MW2-3	2.0 – 2.6	PAHs, M&I, VOCs and PHC F1-F4	Vanadium PHC F3 PHC F4	91.3 376 211	86 240 120
MW2-4	2.7 – 3.3	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW3-1	0 – 0.6	PAHs, M&I, VOCs and PHC F1-F4	Conductivity	1210	0.57
MW3-3	1.5 – 2.1	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW3-4	2.3 – 2.9	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW3-5	3.0 – 3.6	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW4-1	0 – 0.6	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW4-2	0.8 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW4-3	1.5 – 2.1	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
BH5-1 (DUP1)	0 – 0.6	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
BH5-2	0.8 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--

Sample	Depth (metres)	Analyses	Exceedances (ug/g)		
			Parameter	Sample Results	Table 1 RPI Standard**
BH6-1 (DUP2)	0 – 0.6	PAHs, M&I, VOCs and PHC F1-F4	Indeno[1,2,3-cd] pyrene Naphthalene Phenanthrene Pyrene	1.46 0.16 1.48 1.9	0.23 0.09 0.69 1.0
BH6-2	0.8 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	SAR Conductivity	2.4 1040	2.4 0.57
BH6-4	2.3 – 2.9	PAHs, M&I, VOCs and PHC F1-F4	Conductivity	780	0.57
BH7-2	0.8 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	Acenaphthene Acenaphthylene Anthracene Benzo [a] anthracene Benzo [a] pyrene Benzo [b] fluoranthene Benzo [g,h,i] perylene Dibenzo [a,h] anthracene Fluoranthene Fluorene Indeno [1,2,3-cd] pyrene Naphthalene Phenanthrene Pyrene	0.10 0.57 0.54 0.97 1.22 0.75 0.80 0.59 1.63 0.25 1.11 0.14 1.32 1.02	0.072 0.093 0.16 0.36 0.3 0.47 0.68 0.1 0.56 0.12 0.23 0.09 0.69 1.0
BH7-4	2.3 – 2.9	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW8-2	0.8 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW8-3	1.5 – 2.1	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW8-4	2.3 – 2.9	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW9-1 (DUP3)	0 – 0.6	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW9-2	0.8 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	Xylenes	0.48	0.05
MW9-3	1.5 – 2.1	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW9-4	2.3 – 2.9	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
BH10-2	0.8 – 1.4	M&I, VOCs and PHC F1-F4	Conductivity PHC F4 Benzo [a] pyrene Fluoranthene Indeno [1,2,3-cd] pyrene	1660 705 0.33 0.67 0.26	0.57 120 0.3 0.56 0.23
MW11-2 (DUP3)	0.8 – 1.4	PAHs, M&I, VOCs and PHC F1-F4	SAR Conductivity	4.34 1090	2.4 0.57



Sample	Depth (metres)	Analyses	Exceedances (ug/g)		
			Parameter	Sample Results	Table 1 RPI Standard**
MW11-3	1.5 – 2.1	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--

** Sample results compared with *Soil, Ground Water, and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*, April 2011. O. Reg. 153/04 Table 1 R/P/I land use standards

M&I – Metals and Inorganics

PHC F1-F4 – Petroleum Hydrocarbons Fraction 1 to Fraction 4 (PHC F1-F4)

VOCs – Volatile Organic Compounds

PAHs – Polycyclic Aromatic Hydrocarbons

SAR and conductivity are related to the application of de-icing and salting substances on the parking lot and the adjacent roadway – Victoria Avenue is located immediately adjacent to the Site, to ensure that these roadways and parking lot are kept free of snow and ice during the winter months. The SAR and EC exceedances were determined by the QP to be attributable to the de-icing activities, and pursuant to O. Reg. 153/04, Section 49.1 (1), are deemed not to exceed the Standards for the purposes of Part XV.1 of the Environmental Protection Act.

Impacted soils were identified at a maximum depth of 2.6 m, with an approximate average depth of 1.5 m.

5.5 Groundwater Quality

The schedule of chemical testing and the summary of test results for groundwater are shown in **Table 5**.

Table 5: Schedule of Chemical Analyses and Summary of Test Results for Groundwater

Sample	Analyses Completed	Exceedances (ug/L)		
		Parameter	Sample Results	Table 1 Standard **
MW2	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW3	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW4	PAHs, M&I, VOCs and PHC F1-F4	Uranium	44.6	8.9
		Trichloroethylene	1.0	0.5
MW8	PAHs, M&I, VOCs and PHC F1-F4	Chloride	1070	790
		Uranium	46.4	8.9
		Trichloroethylene	1.43	0.5
		Anthracene	0.12	0.1
MW9	PAHs, M&I, VOCs and PHC F1-F4	--	No exceedance	--
MW11 (DUPA)	PAHs, M&I, VOCs and PHC F1-F4	Molybdenum	26.2	23
		Trichloroethylene	1.0	0.5

** Sample results compared with *Soil, Ground Water, and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*, April 2011. O. Reg. 153/04 Table 1 R/P/I land use standards

M&I – Metals and Inorganics

PHC F1-F4 – Petroleum Hydrocarbons Fractions F1-F4

VOCs – Volatile Organic Compounds

PAHs – Polycyclic Aromatic Hydrocarbons

The results of the groundwater analysis from the six (6) monitoring wells sampled were reported to be below the O. Reg. 153/04 Table 1 SCS, with the exception of MW4, MW8 and MW9 which

exceeded for various M&I parameters and Trichloroethylene (a VOC parameter).

5.6 QA/QC Results

The following duplicate samples were submitted to the laboratory for analysis of selected COCs:

- Soil:
 - parent sample BH5-1 and duplicate sample Dup1
 - parent sample BH6-1 and duplicate sample Dup2
 - parent sample MW9-2 and duplicate sample Dup3
- Groundwater: parent sample MW11 and duplicate sample DupA.

The Relative Percent Differences (RPD) were calculated between the parent and duplicate samples using the following formula:

$$\left| \frac{C_o - C_s}{(C_o + C_s)/2} \right| \times 100$$

Where:

Co = concentration of the original/parent sample; and,
Cs = concentration of the duplicate sample.

Groundwater RPDs ranged from 0% to 22.2%, while soil RPDs ranged from 99% to 0%. Based on the absolute concentrations and the nature of the matrix, the RPD results between all the primary and duplicate samples analysed are considered to be acceptable.

The results of the field blank analysed indicated that there was no interference from extraneous sources of contamination during handling and transport of the samples.

The reported recoveries in the matrix spike analysed along with the batch of groundwater samples were between 72 % and 108.2 % which is considered to be acceptable and demonstrates that there was a minimum loss of volatiles during the sampling, handling and transport of samples to the laboratory.

In addition to the field quality control samples, the analytical laboratory has its internal QA/QC programs to verify the acceptance of the data generated. The results of the laboratory QA/QC program are presented in the Laboratory Certificate of Analysis provided in **Appendix C**.

The overall QA/QC results are considered to be acceptable and support the reliability of the results of the field samples analysed.

6.0 RESULTS AND CONCLUSIONS

6.1 Soil Quality

The soil samples collected for analysis as described in the relevant sections of this report indicate that impacted soils were identified at a maximum depth of 2.6 m, with an approximate average depth of 1.5 m, as discussed in **Section 5.4**.

6.2 Groundwater Quality

The results of the groundwater analysis from the six (6) monitoring wells sampled were reported to be below the O. Reg. 153/04 Table 1 SCS, with the exception of MW4, MW8 and MW9 which exceeded for various M&I parameters and Trichloroethylene (a VOC parameter), as discussed in **Section 5.5**.

6.3 Phase Two Property Certification

Based on the results of this Phase Two ESA, additional sampling and testing may be considered in an effort to isolate/delineate the area of impacts. An appropriate remediation strategy will need to be considered to confirm the suitability of the Site for its intended development and use and the submission of an RSC.

Given the soil and groundwater results do demonstrated exceedances when compared to the Table 1 SCS for the COCs, Certification of the Phase Two Property is not deemed acceptable by Landtek.

An RSC cannot be submitted based on the work completed on the Site.

6.4 Signatures

We trust this report is satisfactory for your purposes. If you have any questions regarding our submission, please do not hesitate to contact this office.

Yours truly,

LANDTEK LIMITED



Nicole Harper, H.B.Sc.



Paul Blunt, P.Eng., QP_{ESA}

7.0 LIMITATIONS

This report was prepared for the exclusive use of the Client. It is intended to provide an assessment of the soil and groundwater conditions with respect to potential contamination prevailing at the time of the assessment. Any use of this document by any party other than the Client is at the sole risk of such user. Any reliance upon this report by any party other than the Client requires the prior written approval of Landtek Limited.

Landtek does not provide any warranty, expressed or implied, that this assessment has identified all potential contaminants at the Site or that the Site is free from any and all contamination from past or current practices other than noted, nor that all issues of environmental compliance have been addressed. The assessment of environmental conditions and potential hazards at the Site has been made using the historical information that supported the preparation of the Phase Two Environmental Site Assessment, on which the scope of this investigation was based, as well as the results of chemical analysis of soil and groundwater samples collected at the tested locations at the time of this investigation. The report must be considered in its entirety and no assurance is made regarding changes in conditions subsequent to the time of investigation.

The Site conditions have been inferred based on conditions observed at a limited number of sampling locations in accessible areas; however, it should be noted that conditions between and beyond sampling locations may vary. In addition, the assessment is dependent upon the accuracy of the analytical data generated through sample analysis and is limited to determining the presence of contaminants for which analysis have been conducted. Findings derived from this Phase Two Environmental Site Assessment are limited and Landtek Limited cannot state that areas of the Site, or neighbouring properties, or portion thereof, are unaffected by the contaminants of concern. The Client still bears risk that such contaminants may be present on or may migrate to or off the property after the time of this investigation. Landtek Limited is not responsible for any follow-up action and /or costs.

In evaluating the Property, Landtek Limited has relied in good faith on information provided by individuals and companies noted in this report. We assume that the information provided is factual and accurate and Landtek Limited has not independently confirmed any such information.

8.0 REFERENCES

- Ontario Regulation 153/04, as amended by O. Reg. 511/09;
- Provincial Topographic Map – Ontario Base Mapping Data, Ontario Ministry of Natural Resources, 2010;
- Area of Natural and Scientific Interest Map, Ontario Ministry of Natural Resources, March 2017;
- The Surficial Geology of Southern Ontario Map, Ontario Geological Survey, 2010;
- Physiography of Southern Ontario Map, Ontario Geological Survey, 2007;
- *Bedrock Geology of Ontario, Southern Sheet*; Ontario Geological Survey, Map 2544, Scale 1: 1,000,000, 1991; and,
- *Quaternary Geology of Southern Ontario, Southern Sheet*, Map 2556, Scale 1:1,000,000, Ministry of Northern Development and Mines, Queen's Printer for Ontario, 1991.

LIMITATIONS OF THE REPORT

This report was prepared for the sole use of the Client and their legal counsel and is intended to provide an evaluation of the current environmental conditions at the subject site. Any use that a third party makes of this report, or decisions made based on it, are the responsibility of the third party. Landtek Limited accepts no responsibility for damages of any type suffered by the third party as a result of actions or decisions made based on this report.

The conclusions and recommendations given in this report are based on information determined at the borehole locations. Subsurface conditions, ground water conditions and contaminant concentrations between and beyond the boreholes may be different from those encountered at the borehole locations, and conditions may become apparent during construction that could not be detected or anticipated at the time of the subsurface investigation. It is recommended practice that Landtek be retained during construction to confirm that the subsurface conditions throughout the site are consistent with the conditions encountered in the boreholes.

The conclusions and recommendations given in this report are based on information obtained from various sources noted, subsurface investigation, and a visual examination of the site. It is based on the conditions of the subject property at the time of the field investigation supplemented by a review of historical information to assess environmental conditions at the site reported. Landtek assumes that information provided by others is factual and accurate, and accepts no responsibility for any deficiency, misstatement, or inaccuracy in this report from information provided by others.

This assessment should not be considered a comprehensive audit that outlines all environmental liabilities or eliminates all risks of encountering environmental problems in some portions of the site. There is no warranty expressed or implied by this report concerning the status of the study site.



The report has been prepared in accordance with generally accepted environmental study and/or engineering practices. No other warranties, either expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report.

The objective of this report was to assess the environmental conditions at the site, with respect to existing environmental regulations within the applicable jurisdiction. Compliance of past owners with applicable local, provincial and federal government laws and regulations was not included in our contract for services.

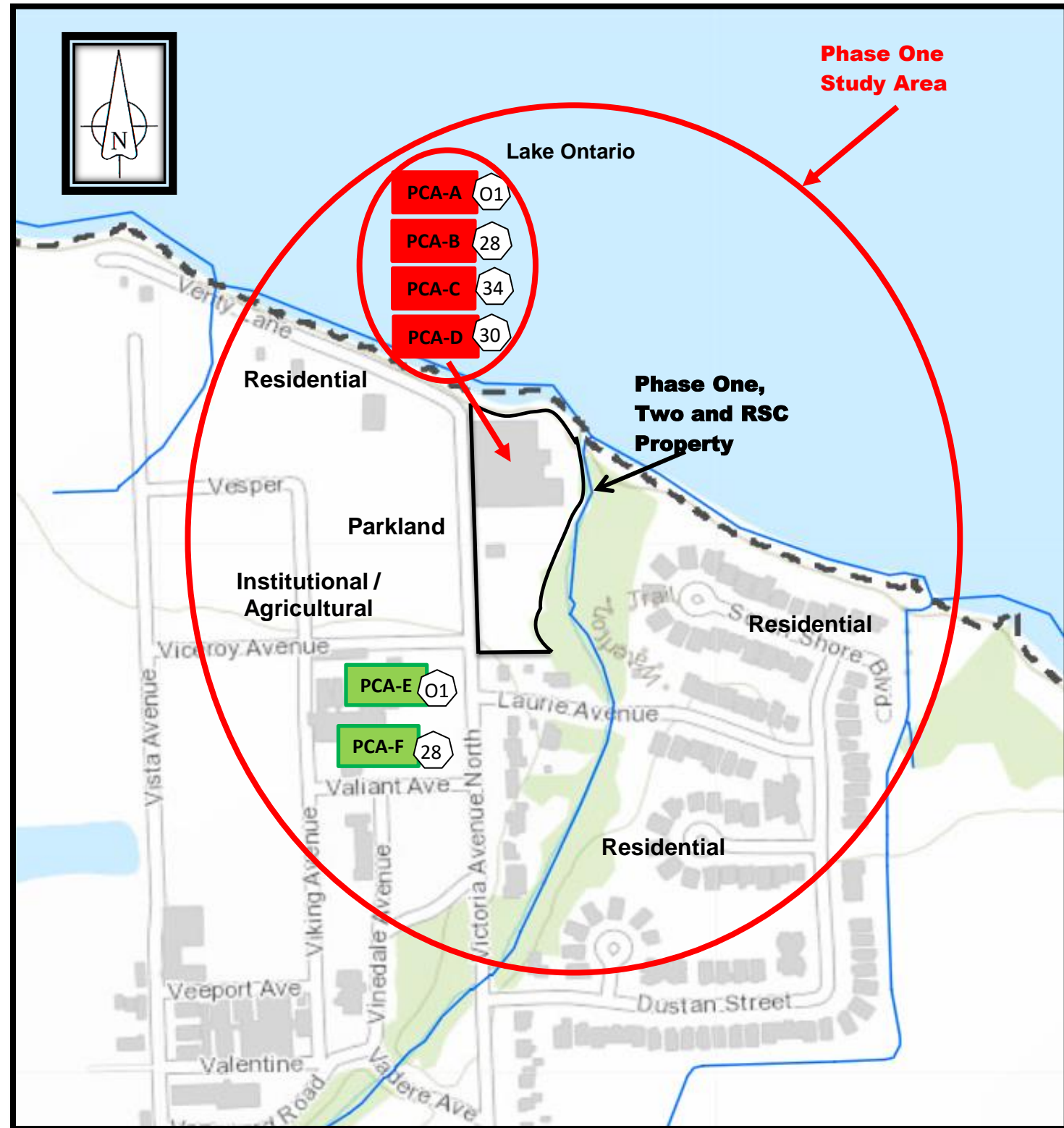
The site history performed herein relies on information supplied by others, such as local, provincial and federal agencies as other consultants. No attempt has been made to independently verify the accuracy of such information, unless specifically noted in our report.

Should the site conditions change, or additional background data become available after this report has been issued, Landtek Limited should be made aware of the information and be given an opportunity to reassess the findings if it relates to environmental concerns.

Potentially Contaminating Activity (PCA)

PCA-A.	Waste Generation (PCA#Other1)
PCA B.	Gasoline and Associated Products Storage in Fixed Tanks (PCA# 28)
PCA C.	Metal Fabrication (PCA#34)
PCA D.	Importation of Fill Material of Unknown Quality (PCA#30)
PCA E.	Gasoline and Associated Products Storage in Fixed Tanks (PCA# 28)
PCA F.	Waste Generation (PCA#Other1)

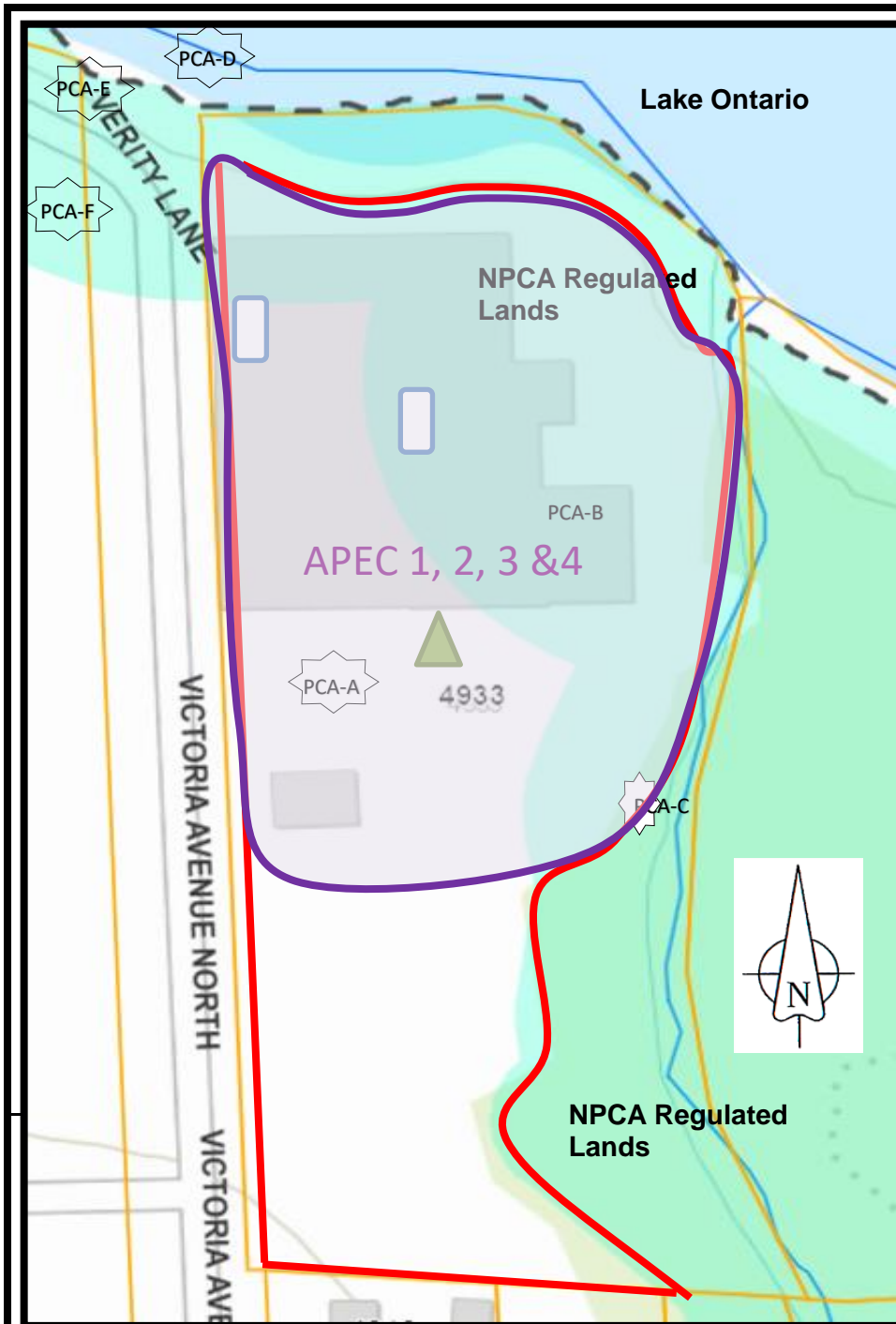
Note PCAs outlines in red are considered to lead to APECs.
PCAs outline in green DO NOT lead to APECs





SCALE




		Scale:	as shown	June 2022
		Project:	Phase 1 ESA 4393 Victoira Avenue North Vineland Station (Town of Lincoln), Ontario	
		Title:	Figure 1 - Site Location Plan & PCAs	
		Project No.	22122	

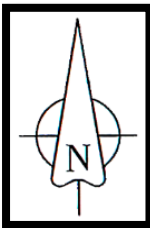
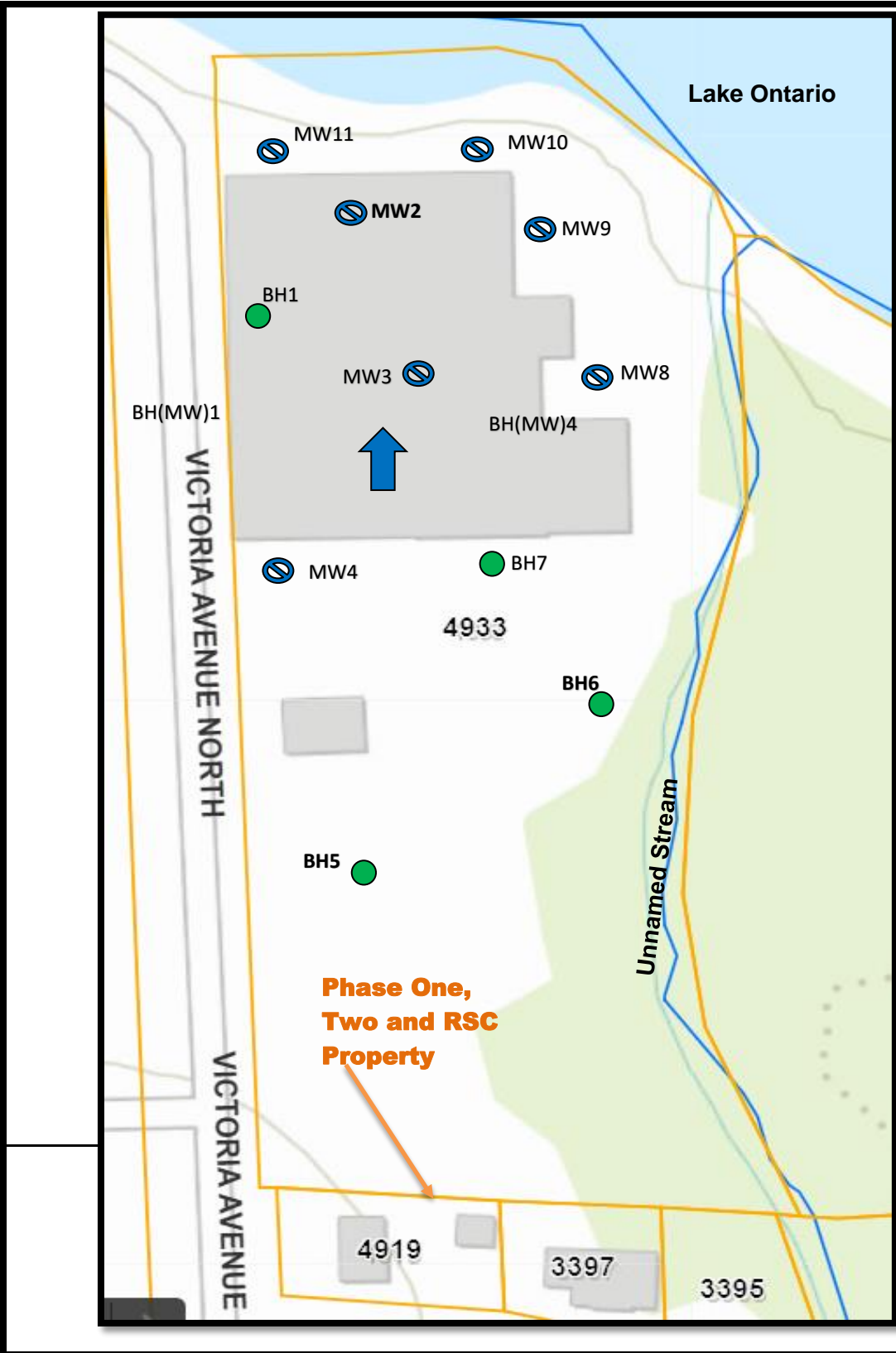


Areas of Potential Environmental Concern
APEC 1: Other 1: Waste Generation
APEC 2: Gasoline and Associated Products Stored in Fixed Tanks
APEC 3 : Metal Fabrication
APEC 4 : Importation of fill material of unknown quality





-  Historical Paint Booth
-  Electrical Transformer



		LANDTEK LIMITED
Scale:	as shown	June 2022
Project:	Phase One ESA 4393 Victoira Avenue North Vineland Station (Town of Lincoln), Ontario	
Title:	Fig 2: PCA & APECs	
Project No.	22122	




LEGEND

-  Monitoring Well
-  Borehole
-  Inferred Groundwater Flow Direction
-  Building Footprint

SCALE



 LANDTEK LIMITED	
Scale:	as shown June 2022
Project:	Phase Two ESA 4393 Victoira Avenue North Vineland Station (Town of Lincoln), Ontario
Title:	Fig 3: Boreholes & Monitoring Wells
Project No.	22122

APPENDIX A
SAMPLING AND ANALYSIS PLAN

APPENDIX B
STRATIGRAPHY SUMMARY TABLE

Stratigraphy Summary Table

Borehole ID	Depth m bgs	Sample ID: Sample Depth	Description
BH1	0 to 0.4		Concrete
	0.4 to 0.8	SS1: 0.7 to 1.4	FILL Material
	1.4 to 2.1	SS2: 1.5 to 2.1	Red/Brown, Silty Clay till, moist
	2.1 to 3.6		Red weathered shale bedrock
MW2	0 to 0.4		Concrete
	0.4 to 1.2	SS1: 0.5 – 1.0	FILL Material
	1.2 to 2.7	SS2: 1.2 – 1.8 SS3: 2.0 – 2.6	Red/Brown, Silty Clay till, moist
	2.7 to 3.6	SS4: 2.6 – 3.3	Red weathered shale bedrock - Potential PHC odours @ 2.7 m
MW3	0 to 0.4		Concrete
	0.4 to 1.2	SS1: 0 to 0.6	FILL Material
	1.2 to 2.1	SS3: 1.5 to 2.1	Red/Brown, Silty Clay till, moist
	2.3 to 3.6	SS4: 2.3 – 2.9 SS5: 3.0 to 3.6	Red weathered shale bedrock
MW4	0 to 0.6	SS1: 0 to 0.6 SS2: 0.8 to 1.4	FILL Material
	0.8 to 2.1	SS3: 1.5 to 2.1	Brown, Clay Silty some stones, moist
	2.1 to 3.6		Red weathered shale bedrock
BH5	0 to 0.6	SS1: 0 to 0.6	FILL Material
	0.8 to 1.4	SS2: 0.8 to 1.4	Brown, Silty Clay with stones, moist
	1.5 to 2.9		Red weathered shale bedrock
BH6	0 to 0.6	SS1: 0 to 0.6	FILL Material
	0.8 to 1.4	SS2: 0.8 to 1.4	Brown, Silty Clay with stones, moist
	3.0 to 3.6	SS4: 2.3 to 3.6	Red weathered shale bedrock
BH7	0 to 0.6		FILL Material
	0.8 to 1.4	SS2: 0.8 to 1.4	Brown, Silty Clay with stones, moist
	3.0 to 3.6	SS4: 2.3 to 2.9	Red weathered shale bedrock
MW8	0 to 0.6		FILL Material
	0.8 to 1.4	SS2: 0.8 to 1.4 SS3: 1.5 to 2.1	Brown, Silty Clay with stones, moist
	3.0 to 4.5	SS3: 2.3 to 2.9	Red weathered shale bedrock
MW9	0 to 0.6		FILL Material
	0.8 to 1.4	SS2: 0.8 to 1.4 SS3: 1.5 to 2.1	Brown, Silty Clay with stones, moist
	3.0 to 4.5	SS3: 2.3 to 2.9	Red weathered shale bedrock
BH10	0 to 3.6	SS2: 0.8 to 1.4	FILL Material
MW11	0 to 0.6		FILL Material
	0.8 to 2.1	SS2: 0.8 to 1.4 SS3: 1.5 to 2.1	Brown, Silty Clay with stones, moist
	2.2 to 4.5		Red weathered shale bedrock

APPENDIX C

**LABORATORY CERTIFICATES OF ANALYSES
Including Laboratory QA/QC Data**

Soil and Groundwater Results

Certificate of Analysis

Landtek Limited

205 Nebo Road, Unit 3
Hamilton, ON L8W 2E1
Attn: Rachel Hlywka

Client PO: 22122
Project: 22122
Custody: 65552,65553

Report Date: 21-Apr-2022
Order Date: 18-Apr-2022

Order #: 2217014

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2217014-01	MW1-2
2217014-02	MW1-3
2217014-03	BH3-1
2217014-04	BH3-3
2217014-05	BH3-4
2217014-06	BH3-5
2217014-07	MW2-1
2217014-08	MW2-2
2217014-09	MW2-3
2217014-10	MW2-4

Approved By:



Milan Ralitsch, PhD

Senior Technical Manager

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	20-Apr-22	20-Apr-22
Chromium, hexavalent - soil	MOE E3056 - Extraction, colourimetric	20-Apr-22	21-Apr-22
Conductivity	MOE E3138 - probe @25 °C, water ext	20-Apr-22	20-Apr-22
Cyanide, free	MOE E3015 - Auto Colour, water extraction	20-Apr-22	20-Apr-22
Mercury by CVAA	EPA 7471B - CVAA, digestion	20-Apr-22	20-Apr-22
PHC F1	CWS Tier 1 - P&T GC-FID	19-Apr-22	20-Apr-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	19-Apr-22	20-Apr-22
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	20-Apr-22	20-Apr-22
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	20-Apr-22	20-Apr-22
REG 153: pH, soil	EPA 150.1 - pH probe @ 25 °C, CaCl buffered ext.	19-Apr-22	20-Apr-22
REG 153: VOCs by P&T GC-MS	EPA 8260 - P&T GC-MS	19-Apr-22	20-Apr-22
SAR	Calculated	20-Apr-22	21-Apr-22
Solids, %	Gravimetric, calculation	19-Apr-22	20-Apr-22

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T1 Res	-
MW1-2	Conductivity	5 uS/cm	602	0.57 mS/cm	-
BH3-1	Conductivity	5 uS/cm	1210	0.57 mS/cm	-
MW2-1	SAR	0.01 N/A	4.99	2.4 N/A	-
MW2-2	SAR	0.01 N/A	4.28	2.4 N/A	-
MW2-3	Vanadium	10.0 ug/g	91.3	86 ug/g	-
MW2-3	F3 PHCs (C16-C34)	8 ug/g	376	240 ug/g	-
MW2-3	F4 PHCs (C34-C50)	6 ug/g	211	120 ug/g	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW1-2	MW1-3	BH3-1	BH3-3	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-01	2217014-02	2217014-03	2217014-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	84.9	93.7	84.0	87.3	-	-
----------	--------------	------	------	------	------	---	---

General Inorganics

SAR	0.01 N/A	0.35	0.23	0.28	0.52	2.4 N/A	-
Conductivity	5 uS/cm	602	186	1210	514	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	<0.03	<0.03	<0.03	0.051 ug/g	-
pH	0.05 pH Units	7.82	7.58	7.36	7.40	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.3 ug/g	-
Arsenic	1.0 ug/g	4.5	3.3	6.3	4.8	18 ug/g	-
Barium	1.0 ug/g	118	78.3	120	149	220 ug/g	-
Beryllium	0.5 ug/g	0.7	0.8	1.0	0.9	2.5 ug/g	-
Boron, available	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	-	-
Boron	5.0 ug/g	14.3	25.1	10.7	23.1	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	0.3	<0.2	0.5	<0.2	0.66 ug/g	-
Chromium	5.0 ug/g	26.6	22.0	29.1	24.1	70 ug/g	-
Cobalt	1.0 ug/g	11.9	12.9	14.1	12.5	21 ug/g	-
Copper	5.0 ug/g	27.2	7.3	31.1	9.9	92 ug/g	-
Lead	1.0 ug/g	15.7	4.6	12.4	10.7	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1.0 ug/g	1.2	1.2	<1.0	<1.0	2 ug/g	-
Nickel	5.0 ug/g	23.1	27.3	30.0	27.4	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW1-2	MW1-3	BH3-1	BH3-3	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-01	2217014-02	2217014-03	2217014-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Metals	MDL/Units	MW1-2	MW1-3	BH3-1	BH3-3	Criteria
Uranium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2.5 ug/g -
Vanadium	10.0 ug/g	41.9	22.7	40.8	30.1	86 ug/g -
Zinc	20.0 ug/g	101	56.7	102	61.8	290 ug/g -

Volatiles

Volatiles	MDL/Units	MW1-2	MW1-3	BH3-1	BH3-3	Criteria
Acetone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g -
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g -
Bromodichloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Bromoform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Bromomethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Carbon Tetrachloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Chlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Chloroform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Dibromochloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Dichlorodifluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,3-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,4-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,1-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,1-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichloropropane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	- -
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	- -

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW1-2	MW1-3	BH3-1	BH3-3	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-01	2217014-02	2217014-03	2217014-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Toluene-d8	Surrogate	109%	108%	110%	110%	-	-
4-Bromofluorobenzene	Surrogate	87.6%	86.9%	88.9%	87.2%	-	-
Dibromofluoromethane	Surrogate	87.0%	86.4%	85.7%	83.0%	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW1-2	MW1-3	BH3-1	BH3-3	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-01	2217014-02	2217014-03	2217014-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

Parameter	MW1-2	MW1-3	BH3-1	BH3-3	Criteria
F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	25 ug/g -
F2 PHCs (C10-C16)	4 ug/g	<4	<4	-	10 ug/g -
F3 PHCs (C16-C34)	8 ug/g	<8	<8	-	240 ug/g -
F4 PHCs (C34-C50)	6 ug/g	<6	<6	-	120 ug/g -

Semi-Volatiles

Parameter	MW1-2	MW1-3	BH3-1	BH3-3	Criteria
Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	0.072 ug/g -
Acenaphthylene	0.02 ug/g	<0.02	<0.02	0.04	<0.02 0.093 ug/g -
Anthracene	0.02 ug/g	<0.02	<0.02	0.03	<0.02 0.16 ug/g -
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	0.12	<0.02 0.36 ug/g -
Benzo [a] pyrene	0.02 ug/g	<0.02	<0.02	0.17	0.03 0.3 ug/g -
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	0.20	0.02 0.47 ug/g -
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	0.10	<0.02 0.68 ug/g -
Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	0.08	<0.02 0.48 ug/g -
Chrysene	0.02 ug/g	<0.02	<0.02	0.17	0.02 2.8 ug/g -
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	0.02	<0.02 0.1 ug/g -
Fluoranthene	0.02 ug/g	<0.02	<0.02	0.41	0.03 0.56 ug/g -
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02 0.12 ug/g -
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	<0.02	0.09	<0.02 0.23 ug/g -
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02 0.59 ug/g -
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02 0.59 ug/g -
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	<0.03	<0.03	<0.03 0.59 ug/g -
Naphthalene	0.01 ug/g	<0.01	<0.01	<0.01	<0.01 0.09 ug/g -
Phenanthrene	0.02 ug/g	<0.02	<0.02	0.13	<0.02 0.69 ug/g -
Pyrene	0.02 ug/g	<0.02	<0.02	0.25	0.02 1 ug/g -
2-Fluorobiphenyl	Surrogate	77.9%	74.7%	80.7%	85.7% -

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW1-2	MW1-3	BH3-1	BH3-3	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res
Sample ID:	2217014-01	2217014-02	2217014-03	2217014-04	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	83.1%	92.2%	79.0%	93.0%	-	-
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Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH3-4	BH3-5	MW2-1	MW2-2	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-05	2217014-06	2217014-07	2217014-08	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	75.6	85.4	81.6	85.9	-	-
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General Inorganics

SAR	0.01 N/A	0.85	0.61	4.99	4.28	2.4 N/A	-
Conductivity	5 uS/cm	220	211	508	410	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	<0.03	<0.03	<0.03	0.051 ug/g	-
pH	0.05 pH Units	6.77	7.08	7.54	7.79	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.3 ug/g	-
Arsenic	1.0 ug/g	2.2	4.5	6.1	4.7	18 ug/g	-
Barium	1.0 ug/g	41.3	106	150	120	220 ug/g	-
Beryllium	0.5 ug/g	<0.5	1.0	0.9	0.7	2.5 ug/g	-
Boron	5.0 ug/g	<5.0	27.5	8.8	9.1	36 ug/g	-
Boron, available	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	-	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	<0.2	0.3	<0.2	0.66 ug/g	-
Chromium	5.0 ug/g	13.4	28.8	33.0	27.6	70 ug/g	-
Cobalt	1.0 ug/g	5.8	15.6	13.3	13.3	21 ug/g	-
Copper	5.0 ug/g	8.3	7.6	40.4	59.8	92 ug/g	-
Lead	1.0 ug/g	7.0	7.2	17.9	16.4	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	1.2	<1.0	<1.0	2 ug/g	-
Nickel	5.0 ug/g	10.4	34.9	29.6	26.7	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH3-4	BH3-5	MW2-1	MW2-2	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-05	2217014-06	2217014-07	2217014-08	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Uranium	1.0 ug/g	<1.0	<1.0	1.1	<1.0	2.5 ug/g	-
Vanadium	10.0 ug/g	23.2	29.9	48.5	42.1	86 ug/g	-
Zinc	20.0 ug/g	36.4	65.7	84.2	70.4	290 ug/g	-

Volatiles

Acetone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g	-
Bromodichloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Bromoform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Bromomethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Carbon Tetrachloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Chlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Chloroform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Dibromochloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Dichlorodifluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,2-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,3-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,4-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,2-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,2-Dichloropropane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH3-4	BH3-5	MW2-1	MW2-2	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res
Sample ID:	2217014-05	2217014-06	2217014-07	2217014-08	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Dibromofluoromethane	Surrogate	80.5%	83.1%	84.8%	83.3%	-	-
4-Bromofluorobenzene	Surrogate	88.4%	86.8%	88.7%	86.0%	-	-
Toluene-d8	Surrogate	111%	109%	110%	110%	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH3-4	BH3-5	MW2-1	MW2-2	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-05	2217014-06	2217014-07	2217014-08	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

	7 ug/g	<7	<7	<7	<7	25 ug/g	-
F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	<7	25 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	<4	<4	<4	10 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	10	8	14	87	240 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	<6	<6	<6	<6	120 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.072 ug/g	-
Acenaphthylene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.093 ug/g	-
Anthracene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.16 ug/g	-
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.36 ug/g	-
Benzo [a] pyrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.47 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.68 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.48 ug/g	-
Chrysene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	2.8 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.1 ug/g	-
Fluoranthene	0.02 ug/g	0.03	<0.02	<0.02	<0.02	0.56 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.12 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.23 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.59 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.59 ug/g	-
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	<0.03	<0.03	<0.03	0.59 ug/g	-
Naphthalene	0.01 ug/g	<0.01	<0.01	<0.01	<0.01	0.09 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.69 ug/g	-
Pyrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	1 ug/g	-
2-Fluorobiphenyl	Surrogate	83.2%	84.9%	144% [2]	91.3%	-	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH3-4	BH3-5	MW2-1	MW2-2	Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	14-Apr-22 00:00	Reg 153/04 -T1 Res -
Sample ID:	2217014-05	2217014-06	2217014-07	2217014-08	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	92.6%	89.1%	90.1%	90.4%	-	-
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Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2-3	MW2-4			Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00			Reg 153/04 -T1 Res
Sample ID:	2217014-09	2217014-10			-
Matrix:	Soil	Soil			
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	89.7	92.1	-	-	-	-
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General Inorganics

SAR	0.01 N/A	0.68	0.82	-	-	2.4 N/A	-
Conductivity	5 uS/cm	189	182	-	-	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	<0.03	-	-	0.051 ug/g	-
pH	0.05 pH Units	7.67	7.63	-	-	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	-	-	1.3 ug/g	-
Arsenic	1.0 ug/g	10.2	5.1	-	-	18 ug/g	-
Barium	1.0 ug/g	82.9	108	-	-	220 ug/g	-
Beryllium	0.5 ug/g	0.8	0.9	-	-	2.5 ug/g	-
Boron	5.0 ug/g	20.3	28.7	-	-	36 ug/g	-
Boron, available	0.5 ug/g	<0.5	<0.5	-	-	-	-
Cadmium	0.5 ug/g	<0.5	<0.5	-	-	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	<0.2	-	-	0.66 ug/g	-
Chromium	5.0 ug/g	20.4	24.4	-	-	70 ug/g	-
Cobalt	1.0 ug/g	15.3	13.3	-	-	21 ug/g	-
Copper	5.0 ug/g	5.1	6.1	-	-	92 ug/g	-
Lead	1.0 ug/g	37.5	5.6	-	-	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	-	-	0.27 ug/g	-
Molybdenum	1.0 ug/g	1.7	1.2	-	-	2 ug/g	-
Nickel	5.0 ug/g	28.6	28.4	-	-	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	-	-	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	-	-	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	-	-	1 ug/g	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2-3	MW2-4			Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00			Reg 153/04 -T1 Res -
Sample ID:	2217014-09	2217014-10			
Matrix:	Soil	Soil			
MDL/Units					

Metals

Uranium	1.0 ug/g	2.3	<1.0	-	-	2.5 ug/g	-
Vanadium	10.0 ug/g	91.3	29.7	-	-	86 ug/g	-
Zinc	20.0 ug/g	55.7	53.7	-	-	290 ug/g	-

Volatiles

Acetone	0.50 ug/g	<0.50	<0.50	-	-	0.5 ug/g	-
Benzene	0.02 ug/g	<0.02	<0.02	-	-	0.02 ug/g	-
Bromodichloromethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Bromoform	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Bromomethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Carbon Tetrachloride	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Chlorobenzene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Chloroform	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Dibromochloromethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Dichlorodifluoromethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,2-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,3-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,4-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,1-Dichloroethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,2-Dichloroethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,1-Dichloroethylene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,2-Dichloropropane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	-	-	-	-
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	-	-	-	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2-3	MW2-4			Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00			Reg 153/04 -T1 Res
Sample ID:	2217014-09	2217014-10			-
Matrix:	Soil	Soil			
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	<0.50	-	-	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	<0.50	-	-	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	-	-	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	<0.05	-	-	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	<0.02	-	-	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	-	-	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	-	-	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	-	-	0.05 ug/g	-
Toluene-d8	Surrogate	107%	107%	-	-	-	-
4-Bromofluorobenzene	Surrogate	84.1%	83.5%	-	-	-	-
Dibromofluoromethane	Surrogate	80.8%	84.0%	-	-	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2-3	MW2-4			Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00			Reg 153/04 -T1 Res
Sample ID:	2217014-09	2217014-10			-
Matrix:	Soil	Soil			
MDL/Units					

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	<7	-	-	25 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	<4	-	-	10 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	376	94	-	-	240 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	211	<6	-	-	120 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	-	-	0.072 ug/g	-
Acenaphthylene	0.02 ug/g	<0.02	<0.02	-	-	0.093 ug/g	-
Anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.16 ug/g	-
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.36 ug/g	-
Benzo [a] pyrene	0.02 ug/g	<0.02	<0.02	-	-	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	-	-	0.47 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	-	-	0.68 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	-	-	0.48 ug/g	-
Chrysene	0.02 ug/g	<0.02	<0.02	-	-	2.8 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.1 ug/g	-
Fluoranthene	0.02 ug/g	<0.02	<0.02	-	-	0.56 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	-	-	0.12 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	<0.02	-	-	0.23 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	-	-	0.59 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	-	-	0.59 ug/g	-
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	<0.03	-	-	0.59 ug/g	-
Naphthalene	0.01 ug/g	<0.01	<0.01	-	-	0.09 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	<0.02	-	-	0.69 ug/g	-
Pyrene	0.02 ug/g	<0.02	<0.02	-	-	1 ug/g	-
2-Fluorobiphenyl	Surrogate	94.1%	94.1%	-	-	-	-

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2-3	MW2-4			Criteria:
Sample Date:	14-Apr-22 00:00	14-Apr-22 00:00			Reg 153/04 -T1 Res
Sample ID:	2217014-09	2217014-10			-
Matrix:	Soil	Soil			
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	89.3%	82.4%	-	-	-	-
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Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics								
Conductivity	ND	5	uS/cm					
Cyanide, free	ND	0.03	ug/g					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	7	ug/g					
F2 PHCs (C10-C16)	ND	4	ug/g					
F3 PHCs (C16-C34)	ND	8	ug/g					
F4 PHCs (C34-C50)	ND	6	ug/g					
Metals								
Antimony	ND	1.0	ug/g					
Arsenic	ND	1.0	ug/g					
Barium	ND	1.0	ug/g					
Beryllium	ND	0.5	ug/g					
Boron, available	ND	0.5	ug/g					
Boron	ND	5.0	ug/g					
Cadmium	ND	0.5	ug/g					
Chromium (VI)	ND	0.2	ug/g					
Chromium	ND	5.0	ug/g					
Cobalt	ND	1.0	ug/g					
Copper	ND	5.0	ug/g					
Lead	ND	1.0	ug/g					
Mercury	ND	0.1	ug/g					
Molybdenum	ND	1.0	ug/g					
Nickel	ND	5.0	ug/g					
Selenium	ND	1.0	ug/g					
Silver	ND	0.3	ug/g					
Thallium	ND	1.0	ug/g					
Uranium	ND	1.0	ug/g					
Vanadium	ND	10.0	ug/g					
Zinc	ND	20.0	ug/g					
Semi-Volatiles								
Acenaphthene	ND	0.02	ug/g					
Acenaphthylene	ND	0.02	ug/g					

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Anthracene	ND	0.02	ug/g					
Benzo [a] anthracene	ND	0.02	ug/g					
Benzo [a] pyrene	ND	0.02	ug/g					
Benzo [b] fluoranthene	ND	0.02	ug/g					
Benzo [g,h,i] perylene	ND	0.02	ug/g					
Benzo [k] fluoranthene	ND	0.02	ug/g					
Chrysene	ND	0.02	ug/g					
Dibenzo [a,h] anthracene	ND	0.02	ug/g					
Fluoranthene	ND	0.02	ug/g					
Fluorene	ND	0.02	ug/g					
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g					
1-Methylnaphthalene	ND	0.02	ug/g					
2-Methylnaphthalene	ND	0.02	ug/g					
Methylnaphthalene (1&2)	ND	0.03	ug/g					
Naphthalene	ND	0.01	ug/g					
Phenanthrene	ND	0.02	ug/g					
Pyrene	ND	0.02	ug/g					
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>0.400</i>		<i>ug/g</i>	<i>80.1</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>0.462</i>		<i>ug/g</i>	<i>92.4</i>	<i>50-140</i>			
Volatiles								
Acetone	ND	0.50	ug/g					
Benzene	ND	0.02	ug/g					
Bromodichloromethane	ND	0.05	ug/g					
Bromoform	ND	0.05	ug/g					
Bromomethane	ND	0.05	ug/g					
Carbon Tetrachloride	ND	0.05	ug/g					
Chlorobenzene	ND	0.05	ug/g					
Chloroform	ND	0.05	ug/g					
Dibromochloromethane	ND	0.05	ug/g					
Dichlorodifluoromethane	ND	0.05	ug/g					
1,2-Dichlorobenzene	ND	0.05	ug/g					
1,3-Dichlorobenzene	ND	0.05	ug/g					

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	ND	0.05	ug/g					
1,1-Dichloroethane	ND	0.05	ug/g					
1,2-Dichloroethane	ND	0.05	ug/g					
1,1-Dichloroethylene	ND	0.05	ug/g					
cis-1,2-Dichloroethylene	ND	0.05	ug/g					
trans-1,2-Dichloroethylene	ND	0.05	ug/g					
1,2-Dichloropropane	ND	0.05	ug/g					
cis-1,3-Dichloropropylene	ND	0.05	ug/g					
trans-1,3-Dichloropropylene	ND	0.05	ug/g					
1,3-Dichloropropene, total	ND	0.05	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g					
Hexane	ND	0.05	ug/g					
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g					
Methyl Isobutyl Ketone	ND	0.50	ug/g					
Methyl tert-butyl ether	ND	0.05	ug/g					
Methylene Chloride	ND	0.05	ug/g					
Styrene	ND	0.05	ug/g					
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g					
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g					
Tetrachloroethylene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
1,1,1-Trichloroethane	ND	0.05	ug/g					
1,1,2-Trichloroethane	ND	0.05	ug/g					
Trichloroethylene	ND	0.05	ug/g					
Trichlorofluoromethane	ND	0.05	ug/g					
Vinyl chloride	ND	0.02	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
Surrogate: 4-Bromofluorobenzene	6.93		ug/g	86.6	50-140			
Surrogate: Dibromofluoromethane	7.01		ug/g	87.6	50-140			

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: Toluene-d8	8.68		ug/g	108	50-140			

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
SAR	0.35	0.01	N/A	0.35			0.0	30	
Conductivity	605	5	uS/cm	602			0.5	5	
Cyanide, free	ND	0.03	ug/g	ND			NC	35	
pH	6.82	0.05	pH Units	6.77			0.7	10	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g	ND			NC	30	
F3 PHCs (C16-C34)	14	8	ug/g	ND			NC	30	
F4 PHCs (C34-C50)	ND	6	ug/g	15			NC	30	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	35.5	1.0	ug/g	32.1			9.9	30	
Barium	45.7	1.0	ug/g	40.7			11.8	30	
Beryllium	1.0	0.5	ug/g	0.9			13.6	30	
Boron, available	ND	0.5	ug/g	ND			NC	35	
Boron	15.5	5.0	ug/g	14.6			5.9	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium (VI)	ND	0.2	ug/g	ND			NC	35	
Chromium	23.0	5.0	ug/g	20.8			10.1	30	
Cobalt	15.5	1.0	ug/g	13.8			11.5	30	
Copper	72.8	5.0	ug/g	65.2			11.1	30	
Lead	10.7	1.0	ug/g	9.4			13.3	30	
Mercury	ND	0.1	ug/g	ND			NC	30	
Molybdenum	1.6	1.0	ug/g	1.2			29.9	30	
Nickel	28.5	5.0	ug/g	25.4			11.4	30	
Selenium	1.8	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	31.4	10.0	ug/g	28.7			8.9	30	

Certificate of Analysis

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Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Zinc	79.9	20.0	ug/g	78.8			1.4	30	
Physical Characteristics									
% Solids	88.3	0.1	% by Wt.	81.3			8.3	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	ND	0.02	ug/g	ND			NC	40	
Anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] pyrene	ND	0.02	ug/g	ND			NC	40	
Benzo [b] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Benzo [g,h,i] perylene	ND	0.02	ug/g	ND			NC	40	
Benzo [k] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Chrysene	ND	0.02	ug/g	ND			NC	40	
Dibenzo [a,h] anthracene	ND	0.02	ug/g	ND			NC	40	
Fluoranthene	ND	0.02	ug/g	ND			NC	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g	ND			NC	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	ND	0.02	ug/g	ND			NC	40	
Pyrene	ND	0.02	ug/g	ND			NC	40	
Surrogate: 2-Fluorobiphenyl	0.460		ug/g		78.1	50-140			
Surrogate: Terphenyl-d14	0.514		ug/g		87.4	50-140			
Volatiles									
Acetone	ND	0.50	ug/g	ND			NC	50	
Benzene	ND	0.02	ug/g	ND			NC	50	
Bromodichloromethane	ND	0.05	ug/g	ND			NC	50	
Bromoform	ND	0.05	ug/g	ND			NC	50	
Bromomethane	ND	0.05	ug/g	ND			NC	50	
Carbon Tetrachloride	ND	0.05	ug/g	ND			NC	50	

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Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Chlorobenzene	ND	0.05	ug/g	ND			NC	50	
Chloroform	ND	0.05	ug/g	ND			NC	50	
Dibromochloromethane	ND	0.05	ug/g	ND			NC	50	
Dichlorodifluoromethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,3-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,4-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
cis-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
trans-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloropropane	ND	0.05	ug/g	ND			NC	50	
cis-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
trans-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g	ND			NC	50	
Hexane	ND	0.05	ug/g	ND			NC	50	
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g	ND			NC	50	
Methyl Isobutyl Ketone	ND	0.50	ug/g	ND			NC	50	
Methyl tert-butyl ether	ND	0.05	ug/g	ND			NC	50	
Methylene Chloride	ND	0.05	ug/g	ND			NC	50	
Styrene	ND	0.05	ug/g	ND			NC	50	
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
Tetrachloroethylene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
1,1,1-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
Trichloroethylene	ND	0.05	ug/g	ND			NC	50	
Trichlorofluoromethane	ND	0.05	ug/g	ND			NC	50	

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Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Vinyl chloride	ND	0.02	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
Surrogate: 4-Bromofluorobenzene	9.24		ug/g		87.5	50-140			
Surrogate: Dibromofluoromethane	9.44		ug/g		89.3	50-140			
Surrogate: Toluene-d8	11.2		ug/g		106	50-140			

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	1.10	0.03	ug/g	ND	110	70-130			
Hydrocarbons									
F1 PHCs (C6-C10)	68	7	ug/g	ND	95.8	80-120			
F2 PHCs (C10-C16)	88	4	ug/g	ND	106	60-140			
F3 PHCs (C16-C34)	176	8	ug/g	ND	95.2	60-140			
F4 PHCs (C34-C50)	181	6	ug/g	15	124	60-140			
Metals									
Antimony	121	1.0	ug/g	ND	97.1	70-130			
Arsenic	176	1.0	ug/g	32.1	115	70-130			
Barium	179	1.0	ug/g	40.7	111	70-130			
Beryllium	133	0.5	ug/g	0.9	106	70-130			
Boron, available	4.22	0.5	ug/g	ND	84.5	70-122			
Boron	157	5.0	ug/g	14.6	114	70-130			
Cadmium	135	0.5	ug/g	ND	108	70-130			
Chromium (VI)	4.3	0.2	ug/g	ND	80.0	70-130			
Chromium	163	5.0	ug/g	20.8	114	70-130			
Cobalt	150	1.0	ug/g	13.8	109	70-130			
Copper	203	5.0	ug/g	65.2	110	70-130			
Lead	138	1.0	ug/g	9.4	103	70-130			
Mercury	1.69	0.1	ug/g	ND	113	70-130			
Molybdenum	144	1.0	ug/g	1.2	115	70-130			
Nickel	162	5.0	ug/g	25.4	109	70-130			
Selenium	143	1.0	ug/g	ND	114	70-130			
Silver	126	0.3	ug/g	ND	101	70-130			
Thallium	130	1.0	ug/g	ND	104	70-130			
Uranium	133	1.0	ug/g	ND	107	70-130			
Vanadium	170	10.0	ug/g	28.7	113	70-130			
Zinc	210	20.0	ug/g	78.8	105	70-130			
Semi-Volatiles									
Acenaphthene	0.765	0.02	ug/g	ND	130	50-140			

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Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthylene	0.620	0.02	ug/g	ND	105	50-140			
Anthracene	0.639	0.02	ug/g	ND	108	50-140			
Benzo [a] anthracene	0.503	0.02	ug/g	ND	85.4	50-140			
Benzo [a] pyrene	0.484	0.02	ug/g	ND	82.2	50-140			
Benzo [b] fluoranthene	0.603	0.02	ug/g	ND	102	50-140			
Benzo [g,h,i] perylene	0.602	0.02	ug/g	ND	102	50-140			
Benzo [k] fluoranthene	0.640	0.02	ug/g	ND	109	50-140			
Chrysene	0.567	0.02	ug/g	ND	96.2	50-140			
Dibenzo [a,h] anthracene	0.631	0.02	ug/g	ND	107	50-140			
Fluoranthene	0.758	0.02	ug/g	ND	129	50-140			
Fluorene	0.801	0.02	ug/g	ND	136	50-140			
Indeno [1,2,3-cd] pyrene	0.587	0.02	ug/g	ND	99.6	50-140			
1-Methylnaphthalene	0.770	0.02	ug/g	ND	131	50-140			
2-Methylnaphthalene	0.762	0.02	ug/g	ND	129	50-140			
Naphthalene	0.732	0.01	ug/g	ND	124	50-140			
Phenanthrene	0.697	0.02	ug/g	ND	118	50-140			
Pyrene	0.503	0.02	ug/g	ND	85.4	50-140			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>0.633</i>		<i>ug/g</i>		<i>108</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>0.475</i>		<i>ug/g</i>		<i>80.6</i>	<i>50-140</i>			
Volatiles									
Acetone	8.94	0.50	ug/g	ND	89.4	50-140			
Benzene	4.40	0.02	ug/g	ND	109	60-130			
Bromodichloromethane	4.07	0.05	ug/g	ND	101	60-130			
Bromoform	3.92	0.05	ug/g	ND	97.5	60-130			
Bromomethane	3.46	0.05	ug/g	ND	86.4	50-140			
Carbon Tetrachloride	4.18	0.05	ug/g	ND	105	60-130			
Chlorobenzene	3.87	0.05	ug/g	ND	96.3	60-130			
Chloroform	3.94	0.05	ug/g	ND	97.9	60-130			
Dibromochloromethane	4.01	0.05	ug/g	ND	100	60-130			
Dichlorodifluoromethane	4.09	0.05	ug/g	ND	102	50-140			
1,2-Dichlorobenzene	3.54	0.05	ug/g	ND	88.6	60-130			

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Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,3-Dichlorobenzene	3.63	0.05	ug/g	ND	90.8	60-130			
1,4-Dichlorobenzene	3.62	0.05	ug/g	ND	90.0	60-130			
1,1-Dichloroethane	4.23	0.05	ug/g	ND	106	60-130			
1,2-Dichloroethane	4.33	0.05	ug/g	ND	108	60-130			
1,1-Dichloroethylene	4.27	0.05	ug/g	ND	107	60-130			
cis-1,2-Dichloroethylene	4.25	0.05	ug/g	ND	106	60-130			
trans-1,2-Dichloroethylene	4.07	0.05	ug/g	ND	101	60-130			
1,2-Dichloropropane	4.34	0.05	ug/g	ND	109	60-130			
cis-1,3-Dichloropropylene	3.76	0.05	ug/g	ND	94.0	60-130			
trans-1,3-Dichloropropylene	3.78	0.05	ug/g	ND	93.9	60-130			
Ethylbenzene	3.67	0.05	ug/g	ND	91.2	60-130			
Ethylene dibromide (dibromoethane, 1,2-)	3.60	0.05	ug/g	ND	89.5	60-130			
Hexane	3.66	0.05	ug/g	ND	91.6	60-130			
Methyl Ethyl Ketone (2-Butanone)	9.81	0.50	ug/g	ND	98.1	50-140			
Methyl Isobutyl Ketone	9.86	0.50	ug/g	ND	98.6	50-140			
Methyl tert-butyl ether	11.7	0.05	ug/g	ND	117	50-140			
Methylene Chloride	4.45	0.05	ug/g	ND	111	60-130			
Styrene	3.78	0.05	ug/g	ND	93.5	60-130			
1,1,1,2-Tetrachloroethane	3.78	0.05	ug/g	ND	94.4	60-130			
1,1,2,2-Tetrachloroethane	3.49	0.05	ug/g	ND	86.8	60-130			
Tetrachloroethylene	4.15	0.05	ug/g	ND	103	60-130			
Toluene	4.17	0.05	ug/g	ND	104	60-130			
1,1,1-Trichloroethane	4.01	0.05	ug/g	ND	100	60-130			
1,1,2-Trichloroethane	4.23	0.05	ug/g	ND	105	60-130			
Trichloroethylene	4.35	0.05	ug/g	ND	108	60-130			
Trichlorofluoromethane	4.21	0.05	ug/g	ND	105	50-140			
Vinyl chloride	3.84	0.02	ug/g	ND	95.9	50-140			
m,p-Xylenes	7.82	0.05	ug/g	ND	97.5	60-130			
o-Xylene	3.82	0.05	ug/g	ND	95.0	60-130			
Surrogate: 4-Bromofluorobenzene	7.83		ug/g		97.9	50-140			
Surrogate: Dibromofluoromethane	8.70		ug/g		109	50-140			

Certificate of Analysis

Report Date: 21-Apr-2022

Client: Landtek Limited

Order Date: 18-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<i>Surrogate: Toluene-d8</i>	7.93		<i>ug/g</i>		99.1	50-140			

Certificate of Analysis

Client: Landtek Limited

Client PO: 22122

Report Date: 21-Apr-2022

Order Date: 18-Apr-2022

Project Description: 22122

Qualifier Notes:

QC Qualifiers :

Sample Qualifiers :

2: Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Sample Data Revisions:

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.

- F1 range corrected for BTEX.

- F2 to F3 ranges corrected for appropriate PAHs where available.

- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.

- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Parcel Order Number (Lab Use Only) 2217014	Chain Of Custody (Lab Use Only) No 65552
--	--

Client Name: Landtek	Project Ref: 22122	Page <u>L</u> of <u>2</u>
Contact Name: Rachel Hlynka	Quote #:	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 205 Nebo Rd. Hamilton	PO #: 22122	
Telephone:	E-mail: nicole@landtek.ca Rachel@landtek.ca	
		Date Required: _____

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19	Other Regulation	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)		Required Analysis															
<input checked="" type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input checked="" type="checkbox"/> Med/Fine <input type="checkbox"/> Table 2 <input checked="" type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix	Air Volume	# of Containers	Sample Taken Date Time		m/i	PHC/VOC	PAH										
Sample ID/Location Name																			
1	mw1-2	S		3	April 14, 22		X	X	X										
2	mw1-3	S		3			X	X	X										
3	BH3-1	S		3			X	X	X										
4	BH3-3	S		3			X	X	X										
5	BH3-4	S		3			X	X	X										
6	BH3-5	S		3			X	X	X										
7	MW2-1	S		3			X	X	X										
8	MW2-2	S		3			X	X	X										
9	MW2-3	S		3			X	X	X										
10	MW2-4	S		3			X	X	X										

Comments:	Method of Delivery: Walkin	
Relinquished By (Sign): <i>Rachel Hlynka</i>	Received By Driver/Depot:	Received at Lab: BB
Relinquished By (Print): Rachel Hlynka	Date/Time: April 14, 2022 5:10	Verified By: BB
Date/Time: April 14, 2022 5:10	Temperature: _____ °C	Date/Time: 18/4/2022 8:35
		Date/Time: 18/4/2022 9:25am
		Temperature: 19.7 °C
		pH Verified: <input type="checkbox"/> By: NIP



Order Number
(Lab Use Only)

Chain Of Custody
(Lab Use Only)

No 65553

Client Name: <u>Landtek</u>	Project Ref: <u>22122</u>	Page <u>2</u> of <u>2</u>
Contact Name: <u>Rachel Hlywka</u>	Quote #:	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: <u>205 Nebo Rd.</u>	PO #: <u>22122</u>	
Telephone:	E-mail: <u>nicoie@landtek.ca</u> <u>Rachel@landtek.ca</u>	Date Required: _____

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19	Other Regulation	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)		Required Analysis															
<input checked="" type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input checked="" type="checkbox"/> Med/Fine <input type="checkbox"/> Table 2 <input checked="" type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix	Air Volume	# of Containers	Sample Taken		Voc												
Sample ID/Location Name					Date	Time													
1	<u>Dup 1</u>	<u>S</u>		<u>1</u>	<u>April 14, 22</u>		<u>X</u>												
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Comment:			Method of Delivery: <u>Walk</u>		
Relinquished By (Sign): <u>Rachel Hlywka</u>	Received By Driver/Depot:	Received at Lab: <u>BB</u>	Verified By: <u>BB</u>		
Relinquished By (Print): <u>Rachel Hlywka</u>	Date/Time:	Date/Time: <u>18/4/2022 8:35</u>	Date/Time: <u>18/4/2022 9:25am</u>		
Date/Time: <u>April 14, 22 5:10</u>	Temperature: _____ °C	Temperature: <u>19.7</u> °C	pH Verified: <input type="checkbox"/>	By: <u>N/A</u>	

Certificate of Analysis

Landtek Limited

205 Nebo Road, Unit 3
Hamilton, ON L8W 2E1
Attn: Rachel Hlywka

Client PO: 22122

Project: 22122

Custody: 65589/90/91

Report Date: 4-May-2022

Order Date: 27-Apr-2022

Order #: 2218476

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID	Parcel ID	Client ID
2218476-01	MW4-1	2218476-17	MW9-3
2218476-02	MW4-2	2218476-18	MW9-4
2218476-03	MW4-3	2218476-19	MW11-2
2218476-04	BH5-1	2218476-20	MW11-3
2218476-05	DUP1	2218476-21	DUP4
2218476-06	BH5-2	2218476-22	MW10-2
2218476-07	BH6-1	2218476-23	P1
2218476-08	DUP2	2218476-24	P2
2218476-09	BH6-2	2218476-25	MW8-4
2218476-10	BH6-4		
2218476-11	BH7-2		
2218476-12	BH7-4		
2218476-13	MW8-2		
2218476-14	MW8-3		
2218476-15	MW9-2		
2218476-16	DUP3		

Approved By:



Milan Ralitsch, PhD

Senior Technical Manager

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	3-May-22	3-May-22
Chromium, hexavalent - soil	MOE E3056 - Extraction, colourimetric	2-May-22	3-May-22
Conductivity	MOE E3138 - probe @25 °C, water ext	3-May-22	3-May-22
Cyanide, free	MOE E3015 - Auto Colour, water extraction	2-May-22	2-May-22
Mercury by CVAA	EPA 7471B - CVAA, digestion	3-May-22	3-May-22
PHC F1	CWS Tier 1 - P&T GC-FID	29-Apr-22	2-May-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	2-May-22	2-May-22
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	3-May-22	3-May-22
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	29-Apr-22	3-May-22
REG 153: Pesticides, OC	EPA 8081B - GC-ECD	28-Apr-22	4-May-22
REG 153: pH, soil	EPA 150.1 - pH probe @ 25 °C, CaCl buffered ext.	2-May-22	2-May-22
REG 153: VOCs by P&T GC-MS	EPA 8260 - P&T GC-MS	29-Apr-22	2-May-22
SAR	Calculated	3-May-22	3-May-22
Solids, %	Gravimetric, calculation	2-May-22	3-May-22

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

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Sample	Analyte	MDL / Units	Result	Reg 153/04 -T1 Res	-
MW4-1	SAR	0.01 N/A	3.59	2.4 N/A	-
MW4-1	Conductivity	5 uS/cm	737	0.57 mS/cm	-
MW4-2	SAR	0.01 N/A	5.73	2.4 N/A	-
MW4-2	Conductivity	5 uS/cm	918	0.57 mS/cm	-
MW4-3	Conductivity	5 uS/cm	1360	0.57 mS/cm	-
MW4-3	F4 PHCs (C34-C50)	6 ug/g	161	120 ug/g	-
BH5-1	SAR	0.01 N/A	3.40	2.4 N/A	-
BH5-1	Conductivity	5 uS/cm	839	0.57 mS/cm	-
BH6-1	Conductivity	5 uS/cm	1580	0.57 mS/cm	-
BH6-1	F3 PHCs (C16-C34)	8 ug/g	260	240 ug/g	-
BH6-1	F4 PHCs (C34-C50)	6 ug/g	735	120 ug/g	-
BH6-1	Acenaphthene	0.02 ug/g	0.14	0.072 ug/g	-
BH6-1	Acenaphthylene	0.02 ug/g	0.40	0.093 ug/g	-
BH6-1	Anthracene	0.02 ug/g	0.67	0.16 ug/g	-
BH6-1	Benzo [a] anthracene	0.02 ug/g	1.64	0.36 ug/g	-
BH6-1	Benzo [a] pyrene	0.02 ug/g	1.74	0.3 ug/g	-
BH6-1	Benzo [b] fluoranthene	0.02 ug/g	1.10	0.47 ug/g	-
BH6-1	Benzo [g,h,i] perylene	0.02 ug/g	1.04	0.68 ug/g	-
BH6-1	Benzo [k] fluoranthene	0.02 ug/g	0.71	0.48 ug/g	-
BH6-1	Dibenzo [a,h] anthracene	0.02 ug/g	0.78	0.1 ug/g	-
BH6-1	Fluoranthene	0.02 ug/g	2.77	0.56 ug/g	-
BH6-1	Fluorene	0.02 ug/g	0.19	0.12 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Summary of Criteria Exceedances

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Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

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Sample	Analyte	MDL / Units	Result	Reg 153/04 -T1 Res	-
BH6-1	Indeno [1,2,3-cd] pyrene	0.02 ug/g	1.46	0.23 ug/g	-
BH6-1	Naphthalene	0.01 ug/g	0.16	0.09 ug/g	-
BH6-1	Phenanthrene	0.02 ug/g	1.48	0.69 ug/g	-
BH6-1	Pyrene	0.02 ug/g	1.90	1 ug/g	-
BH6-2	SAR	0.01 N/A	2.44	2.4 N/A	-
BH6-2	Conductivity	5 uS/cm	1040	0.57 mS/cm	-
BH6-4	Conductivity	5 uS/cm	780	0.57 mS/cm	-
BH7-2	Acenaphthene	0.02 ug/g	0.10	0.072 ug/g	-
BH7-2	Acenaphthylene	0.02 ug/g	0.57	0.093 ug/g	-
BH7-2	Anthracene	0.02 ug/g	0.54	0.16 ug/g	-
BH7-2	Benzo [a] anthracene	0.02 ug/g	0.97	0.36 ug/g	-
BH7-2	Benzo [a] pyrene	0.02 ug/g	1.22	0.3 ug/g	-
BH7-2	Benzo [b] fluoranthene	0.02 ug/g	0.75	0.47 ug/g	-
BH7-2	Benzo [g,h,i] perylene	0.02 ug/g	0.80	0.68 ug/g	-
BH7-2	Dibenzo [a,h] anthracene	0.02 ug/g	0.59	0.1 ug/g	-
BH7-2	Fluoranthene	0.02 ug/g	1.63	0.56 ug/g	-
BH7-2	Fluorene	0.02 ug/g	0.25	0.12 ug/g	-
BH7-2	Indeno [1,2,3-cd] pyrene	0.02 ug/g	1.11	0.23 ug/g	-
BH7-2	Naphthalene	0.01 ug/g	0.14	0.09 ug/g	-
BH7-2	Phenanthrene	0.02 ug/g	1.32	0.69 ug/g	-
BH7-2	Pyrene	0.02 ug/g	1.02	1 ug/g	-
MW9-2	Xylenes, total	0.05 ug/g	0.48	0.05 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Summary of Criteria Exceedances

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Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

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Sample	Analyte	MDL / Units	Result	Reg 153/04 -T1 Res	-
MW11-2	SAR	0.01 N/A	4.34	2.4 N/A	-
MW11-2	Conductivity	5 uS/cm	1090	0.57 mS/cm	-
MW10-2	Conductivity	5 uS/cm	1660	0.57 mS/cm	-
MW10-2	F4 PHCs (C34-C50)	6 ug/g	705	120 ug/g	-
MW10-2	Benzo [a] pyrene	0.02 ug/g	0.33	0.3 ug/g	-
MW10-2	Fluoranthene	0.02 ug/g	0.67	0.56 ug/g	-
MW10-2	Indeno [1,2,3-cd] pyrene	0.02 ug/g	0.26	0.23 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW4-1	MW4-2	MW4-3	BH5-1	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-01	2218476-02	2218476-03	2218476-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	82.5	84.5	84.3	94.8	-	-
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General Inorganics

SAR	0.01 N/A	3.59	5.73	2.35	3.40	2.4 N/A	-
Conductivity	5 uS/cm	737	918	1360	839	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	0.03	<0.03	<0.03	<0.03	0.051 ug/g	-
pH	0.05 pH Units	7.14	7.05	7.33	7.19	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.3 ug/g	-
Arsenic	1.0 ug/g	4.7	5.0	5.2	4.3	18 ug/g	-
Barium	1.0 ug/g	135	120	111	56.1	220 ug/g	-
Beryllium	0.5 ug/g	0.8	0.8	0.7	<0.5	2.5 ug/g	-
Boron, available	0.5 ug/g	1.3	<0.5	<0.5	<0.5	-	-
Boron	5.0 ug/g	<5.0	<5.0	9.9	<5.0	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	1.2 ug/g	-
Chromium	5.0 ug/g	22.2	26.4	26.4	17.8	70 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	0.4	<0.2	0.4	0.66 ug/g	-
Cobalt	1.0 ug/g	10.4	13.3	12.5	7.5	21 ug/g	-
Copper	5.0 ug/g	22.7	27.0	22.2	19.0	92 ug/g	-
Lead	1.0 ug/g	13.5	11.4	21.7	5.7	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2 ug/g	-
Nickel	5.0 ug/g	21.1	27.0	23.9	15.5	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW4-1	MW4-2	MW4-3	BH5-1	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-01	2218476-02	2218476-03	2218476-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Element	MW4-1	MW4-2	MW4-3	BH5-1	Criteria
Uranium	1.0 ug/g	1.5	<1.0	<1.0	2.5 ug/g -
Vanadium	10.0 ug/g	33.2	37.2	32.9	27.0 86 ug/g -
Zinc	20.0 ug/g	65.2	53.5	111	26.9 290 ug/g -

Volatiles

Compound	MW4-1	MW4-2	MW4-3	BH5-1	Criteria
Acetone	0.50 ug/g	<0.50	<0.50	<0.50	0.5 ug/g -
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	0.02 ug/g -
Bromodichloromethane	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
Bromoform	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
Bromomethane	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
Carbon Tetrachloride	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
Chlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
Chloroform	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
Dibromochloromethane	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
Dichlorodifluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
1,3-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
1,4-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
1,1-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
1,1-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichloropropane	0.05 ug/g	<0.05	<0.05	<0.05	0.05 ug/g -
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	- -
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	- -

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW4-1	MW4-2	MW4-3	BH5-1	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-01	2218476-02	2218476-03	2218476-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
4-Bromofluorobenzene	Surrogate	92.1%	95.4%	94.3%	94.5%	-	-
Toluene-d8	Surrogate	109%	113%	113%	111%	-	-
Dibromofluoromethane	Surrogate	85.4%	83.1%	79.7%	86.5%	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW4-1	MW4-2	MW4-3	BH5-1	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-01	2218476-02	2218476-03	2218476-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

	7 ug/g	<7	<7	<7	<7	25 ug/g	-
F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	<7	25 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	<4	<4	<4	10 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	12	<8	70	<8	240 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	<6	<6	161	<6	120 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.072 ug/g	-
Acenaphthylene	0.02 ug/g	0.03	<0.02	<0.02	<0.02	0.093 ug/g	-
Anthracene	0.02 ug/g	0.02	<0.02	<0.02	<0.02	0.16 ug/g	-
Benzo [a] anthracene	0.02 ug/g	0.06	<0.02	<0.02	<0.02	0.36 ug/g	-
Benzo [a] pyrene	0.02 ug/g	0.06	<0.02	<0.02	<0.02	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	0.04	<0.02	<0.02	<0.02	0.47 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	0.04	0.02	<0.02	<0.02	0.68 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	0.02	<0.02	<0.02	<0.02	0.48 ug/g	-
Chrysene	0.02 ug/g	0.05	<0.02	<0.02	<0.02	2.8 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	0.02	<0.02	<0.02	<0.02	0.1 ug/g	-
Fluoranthene	0.02 ug/g	0.14	<0.02	<0.02	<0.02	0.56 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.12 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	0.06	<0.02	<0.02	<0.02	0.23 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.59 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.59 ug/g	-
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	<0.03	<0.03	<0.03	0.59 ug/g	-
Naphthalene	0.01 ug/g	<0.01	<0.01	<0.01	<0.01	0.09 ug/g	-
Phenanthrene	0.02 ug/g	0.05	<0.02	<0.02	<0.02	0.69 ug/g	-
Pyrene	0.02 ug/g	0.08	<0.02	<0.02	<0.02	1 ug/g	-
2-Fluorobiphenyl	Surrogate	74.2%	70.2%	54.3%	65.0%	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW4-1	MW4-2	MW4-3	BH5-1	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-01	2218476-02	2218476-03	2218476-04	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	75.3%	77.1%	63.8%	69.2%	-	-
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Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP1	BH5-2	BH6-1	DUP2	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-05	2218476-06	2218476-07	2218476-08	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	87.7	86.9	91.7	94.7	-	-
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General Inorganics

SAR	0.01 N/A	-	0.71	1.79	-	2.4 N/A	-
Conductivity	5 uS/cm	-	488	1580	-	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	-	<0.03	<0.03	-	0.051 ug/g	-
pH	0.05 pH Units	-	7.43	7.42	-	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.3 ug/g	-
Arsenic	1.0 ug/g	4.9	5.5	7.3	6.9	18 ug/g	-
Barium	1.0 ug/g	80.6	122	46.7	50.8	220 ug/g	-
Beryllium	0.5 ug/g	0.7	0.7	<0.5	<0.5	2.5 ug/g	-
Boron, available	0.5 ug/g	<0.5	<0.5	0.7	0.7	-	-
Boron	5.0 ug/g	<5.0	6.4	6.3	7.1	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	0.7	0.7	1.2 ug/g	-
Chromium	5.0 ug/g	21.5	21.0	9.4	10.8	70 ug/g	-
Chromium (VI)	0.2 ug/g	0.3	0.3	<0.2	<0.2	0.66 ug/g	-
Cobalt	1.0 ug/g	9.9	12.9	4.3	4.5	21 ug/g	-
Copper	5.0 ug/g	24.6	29.9	20.7	19.3	92 ug/g	-
Lead	1.0 ug/g	7.7	9.0	45.0	48.5	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	<0.1	0.2	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2 ug/g	-
Nickel	5.0 ug/g	21.8	27.6	11.1	12.0	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP1	BH5-2	BH6-1	DUP2	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-05	2218476-06	2218476-07	2218476-08	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Metals	DUP1	BH5-2	BH6-1	DUP2	Criteria	
Uranium	1.0 ug/g	<1.0	<1.0	<1.0	2.5 ug/g -	
Vanadium	10.0 ug/g	30.8	29.2	12.9	13.6	86 ug/g -
Zinc	20.0 ug/g	42.0	49.7	177	171	290 ug/g -

Volatiles

Volatiles	DUP1	BH5-2	BH6-1	DUP2	Criteria	
Acetone	0.50 ug/g	-	<0.50	<0.50	-	0.5 ug/g -
Benzene	0.02 ug/g	-	<0.02	<0.02	-	0.02 ug/g -
Bromodichloromethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
Bromoform	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
Bromomethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
Carbon Tetrachloride	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
Chlorobenzene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
Chloroform	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
Dibromochloromethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
Dichlorodifluoromethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
1,2-Dichlorobenzene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
1,3-Dichlorobenzene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
1,4-Dichlorobenzene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
1,1-Dichloroethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
1,2-Dichloroethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
1,1-Dichloroethylene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
cis-1,2-Dichloroethylene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
trans-1,2-Dichloroethylene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
1,2-Dichloropropane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g -
cis-1,3-Dichloropropylene	0.05 ug/g	-	<0.05	<0.05	-	- -
trans-1,3-Dichloropropylene	0.05 ug/g	-	<0.05	<0.05	-	- -

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP1	BH5-2	BH6-1	DUP2	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-05	2218476-06	2218476-07	2218476-08	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Hexane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	-	<0.50	<0.50	-	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	-	<0.50	<0.50	-	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Styrene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Toluene	0.05 ug/g	-	<0.05	<0.05	-	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	-	<0.05	<0.05	-	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	-	<0.02	<0.02	-	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	-	<0.05	<0.05	-	-	-
o-Xylene	0.05 ug/g	-	<0.05	<0.05	-	-	-
Xylenes, total	0.05 ug/g	-	<0.05	<0.05	-	0.05 ug/g	-
Dibromofluoromethane	Surrogate	-	80.3%	86.2%	-	-	-
4-Bromofluorobenzene	Surrogate	-	91.9%	90.9%	-	-	-
Toluene-d8	Surrogate	-	110%	110%	-	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP1	BH5-2	BH6-1	DUP2	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-05	2218476-06	2218476-07	2218476-08	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	-	<7	<7	-	25 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	-	<4	<4	-	10 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	-	<8	260	-	240 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	-	<6	735	-	120 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	-	<0.02	0.14	-	0.072 ug/g	-
Acenaphthylene	0.02 ug/g	-	<0.02	0.40	-	0.093 ug/g	-
Anthracene	0.02 ug/g	-	<0.02	0.67	-	0.16 ug/g	-
Benzo [a] anthracene	0.02 ug/g	-	0.03	1.64	-	0.36 ug/g	-
Benzo [a] pyrene	0.02 ug/g	-	0.02	1.74	-	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	-	<0.02	1.10	-	0.47 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	-	0.03	1.04	-	0.68 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	-	<0.02	0.71	-	0.48 ug/g	-
Chrysene	0.02 ug/g	-	0.02	1.28	-	2.8 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	-	0.04	0.78	-	0.1 ug/g	-
Fluoranthene	0.02 ug/g	-	<0.02	2.77	-	0.56 ug/g	-
Fluorene	0.02 ug/g	-	<0.02	0.19	-	0.12 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	-	0.03	1.46	-	0.23 ug/g	-
1-Methylnaphthalene	0.02 ug/g	-	<0.02	0.10	-	0.59 ug/g	-
2-Methylnaphthalene	0.02 ug/g	-	<0.02	0.13	-	0.59 ug/g	-
Methylnaphthalene (1&2)	0.03 ug/g	-	<0.03	0.23	-	0.59 ug/g	-
Naphthalene	0.01 ug/g	-	<0.01	0.16	-	0.09 ug/g	-
Phenanthrene	0.02 ug/g	-	<0.02	1.48	-	0.69 ug/g	-
Pyrene	0.02 ug/g	-	<0.02	1.90	-	1 ug/g	-
2-Fluorobiphenyl	Surrogate	-	47.5% [5]	77.0%	-	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP1	BH5-2	BH6-1	DUP2	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-05	2218476-06	2218476-07	2218476-08	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	-	64.4%	74.2%	-	-	-
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Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH6-2	BH6-4	BH7-2	BH7-4	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-09	2218476-10	2218476-11	2218476-12	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	90.3	82.7	81.9	87.0	-	-
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General Inorganics

SAR	0.01 N/A	2.44	1.22	0.64	0.50	2.4 N/A	-
Conductivity	5 uS/cm	1040	780	241	275	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	<0.03	0.03	<0.03	0.051 ug/g	-
pH	0.05 pH Units	7.41	7.36	7.38	7.40	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.3 ug/g	-
Arsenic	1.0 ug/g	5.2	3.4	3.7	14.2	18 ug/g	-
Barium	1.0 ug/g	126	63.2	78.9	81.6	220 ug/g	-
Beryllium	0.5 ug/g	0.7	0.5	0.6	0.7	2.5 ug/g	-
Boron, available	0.5 ug/g	0.6	<0.5	0.7	0.9	-	-
Boron	5.0 ug/g	17.8	<5.0	<5.0	12.5	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	1.2 ug/g	-
Chromium	5.0 ug/g	22.4	16.3	16.7	23.5	70 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	<0.2	<0.2	<0.2	0.66 ug/g	-
Cobalt	1.0 ug/g	11.9	8.6	7.2	13.7	21 ug/g	-
Copper	5.0 ug/g	16.0	11.2	6.9	32.6	92 ug/g	-
Lead	1.0 ug/g	10.4	6.4	24.4	50.5	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2 ug/g	-
Nickel	5.0 ug/g	25.8	17.0	13.4	35.4	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH6-2	BH6-4	BH7-2	BH7-4	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-09	2218476-10	2218476-11	2218476-12	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

	MDL/Units	BH6-2	BH6-4	BH7-2	BH7-4	Criteria
Uranium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2.5 ug/g -
Vanadium	10.0 ug/g	28.2	24.7	24.7	31.9	86 ug/g -
Zinc	20.0 ug/g	54.3	33.3	66.5	85.2	290 ug/g -

Volatiles

	MDL/Units	BH6-2	BH6-4	BH7-2	BH7-4	Criteria
Acetone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g -
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g -
Bromodichloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Bromoform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Bromomethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Carbon Tetrachloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Chlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Chloroform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Dibromochloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
Dichlorodifluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,3-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,4-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,1-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,1-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
1,2-Dichloropropane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g -
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	- -
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	- -

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH6-2	BH6-4	BH7-2	BH7-4	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-09	2218476-10	2218476-11	2218476-12	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Dibromofluoromethane	Surrogate	82.1%	78.6%	80.8%	80.4%	-	-
Toluene-d8	Surrogate	112%	111%	114%	112%	-	-
4-Bromofluorobenzene	Surrogate	93.2%	91.4%	93.3%	92.2%	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH6-2	BH6-4	BH7-2	BH7-4	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-09	2218476-10	2218476-11	2218476-12	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	<7	25 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	<4	<4	<4	10 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	<8	<8	14	<8	240 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	<6	<6	<6	<6	120 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	0.10	<0.02	0.072 ug/g	-
Acenaphthylene	0.02 ug/g	<0.02	<0.02	0.57	<0.02	0.093 ug/g	-
Anthracene	0.02 ug/g	<0.02	<0.02	0.54	<0.02	0.16 ug/g	-
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	0.97	<0.02	0.36 ug/g	-
Benzo [a] pyrene	0.02 ug/g	0.02	<0.02	1.22	<0.02	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	0.75	<0.02	0.47 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	0.80	<0.02	0.68 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	0.46	<0.02	0.48 ug/g	-
Chrysene	0.02 ug/g	<0.02	<0.02	0.81	<0.02	2.8 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	0.59	<0.02	0.1 ug/g	-
Fluoranthene	0.02 ug/g	0.03	<0.02	1.63	<0.02	0.56 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	0.25	<0.02	0.12 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	0.02	<0.02	1.11	<0.02	0.23 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	0.12	<0.02	0.59 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	0.02	0.12	<0.02	0.59 ug/g	-
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	0.04	0.25	<0.03	0.59 ug/g	-
Naphthalene	0.01 ug/g	<0.01	<0.01	0.14	<0.01	0.09 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	<0.02	1.32	<0.02	0.69 ug/g	-
Pyrene	0.02 ug/g	<0.02	<0.02	1.02	<0.02	1 ug/g	-
2-Fluorobiphenyl	Surrogate	59.4%	61.8%	67.2%	44.1% [5]	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	BH6-2	BH6-4	BH7-2	BH7-4	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-09	2218476-10	2218476-11	2218476-12	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	65.9%	71.2%	67.6%	58.7%	-	-
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Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-2	MW8-3	MW9-2	DUP3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-13	2218476-14	2218476-15	2218476-16	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	89.8	89.1	88.7	87.2	-	-
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General Inorganics

SAR	0.01 N/A	1.16	0.76	2.37	-	2.4 N/A	-
Conductivity	5 uS/cm	278	310	553	-	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	<0.03	<0.03	-	0.051 ug/g	-
pH	0.05 pH Units	7.53	7.65	7.57	-	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.3 ug/g	-
Arsenic	1.0 ug/g	5.1	5.4	3.8	4.1	18 ug/g	-
Barium	1.0 ug/g	85.0	120	78.5	87.5	220 ug/g	-
Beryllium	0.5 ug/g	0.6	0.7	0.6	0.6	2.5 ug/g	-
Boron, available	0.5 ug/g	<0.5	<0.5	0.6	0.7	-	-
Boron	5.0 ug/g	<5.0	8.1	<5.0	<5.0	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	1.2 ug/g	-
Chromium	5.0 ug/g	21.1	21.9	21.4	21.1	70 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	<0.2	<0.2	<0.2	0.66 ug/g	-
Cobalt	1.0 ug/g	11.6	12.0	9.9	10.6	21 ug/g	-
Copper	5.0 ug/g	29.7	30.9	25.9	27.1	92 ug/g	-
Lead	1.0 ug/g	9.1	8.8	8.8	9.9	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2 ug/g	-
Nickel	5.0 ug/g	24.8	25.9	21.4	22.9	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-2	MW8-3	MW9-2	DUP3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-13	2218476-14	2218476-15	2218476-16	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Uranium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2.5 ug/g	-
Vanadium	10.0 ug/g	30.3	31.4	32.3	32.4	86 ug/g	-
Zinc	20.0 ug/g	55.0	53.5	42.7	49.0	290 ug/g	-

Volatiles

Acetone	0.50 ug/g	<0.50	<0.50	<0.50	-	0.5 ug/g	-
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	-	0.02 ug/g	-
Bromodichloromethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Bromoform	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Bromomethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Carbon Tetrachloride	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Chlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Chloroform	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Dibromochloromethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Dichlorodifluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,2-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,3-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,4-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,1-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,2-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,1-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,2-Dichloropropane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	-	-	-
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	-	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-2	MW8-3	MW9-2	DUP3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-13	2218476-14	2218476-15	2218476-16	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	<0.50	<0.50	-	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	<0.50	<0.50	-	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	-	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	-	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	<0.02	<0.02	-	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	0.09	-	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	0.39	-	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	0.48	-	0.05 ug/g	-
4-Bromofluorobenzene	Surrogate	90.1%	96.8%	88.7%	-	-	-
Toluene-d8	Surrogate	110%	110%	112%	-	-	-
Dibromofluoromethane	Surrogate	79.9%	88.3%	78.7%	-	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-2	MW8-3	MW9-2	DUP3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-13	2218476-14	2218476-15	2218476-16	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

	MW8-2	MW8-3	MW9-2	DUP3	Criteria
F1 PHCs (C6-C10)	7 ug/g	<7	<7	-	25 ug/g -
F2 PHCs (C10-C16)	4 ug/g	<4	<4	-	10 ug/g -
F3 PHCs (C16-C34)	8 ug/g	<8	<8	-	240 ug/g -
F4 PHCs (C34-C50)	6 ug/g	<6	<6	-	120 ug/g -

Semi-Volatiles

	MW8-2	MW8-3	MW9-2	DUP3	Criteria
Acenaphthene	0.02 ug/g	<0.02	<0.02	-	0.072 ug/g -
Acenaphthylene	0.02 ug/g	<0.02	<0.02	-	0.093 ug/g -
Anthracene	0.02 ug/g	<0.02	<0.02	0.03	0.16 ug/g -
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	0.18	0.36 ug/g -
Benzo [a] pyrene	0.02 ug/g	<0.02	<0.02	0.14	0.3 ug/g -
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	0.27	0.47 ug/g -
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	0.10	0.68 ug/g -
Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	0.11	0.48 ug/g -
Chrysene	0.02 ug/g	<0.02	<0.02	0.24	2.8 ug/g -
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	0.03	0.1 ug/g -
Fluoranthene	0.02 ug/g	<0.02	<0.02	0.33	0.56 ug/g -
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	0.12 ug/g -
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	<0.02	0.17	0.23 ug/g -
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	0.59 ug/g -
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	0.59 ug/g -
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	<0.03	<0.03	0.59 ug/g -
Naphthalene	0.01 ug/g	<0.01	<0.01	<0.01	0.09 ug/g -
Phenanthrene	0.02 ug/g	<0.02	<0.02	0.08	0.69 ug/g -
Pyrene	0.02 ug/g	<0.02	<0.02	0.28	1 ug/g -
2-Fluorobiphenyl	Surrogate	66.1%	64.3%	73.7%	- -

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-2	MW8-3	MW9-2	DUP3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-13	2218476-14	2218476-15	2218476-16	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	89.4%	84.3%	81.6%	-	-	-
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Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9-3	MW9-4	MW11-2	MW11-3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	27-Apr-22 09:00	27-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-17	2218476-18	2218476-19	2218476-20	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	81.5	90.6	85.9	88.8	-	-
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General Inorganics

SAR	0.01 N/A	1.71	0.75	4.34	2.40	2.4 N/A	-
Conductivity	5 uS/cm	455	341	1090	368	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	<0.03	<0.03	<0.03	0.051 ug/g	-
pH	0.05 pH Units	7.61	7.56	7.60	7.62	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.3 ug/g	-
Arsenic	1.0 ug/g	5.9	5.2	5.0	4.6	18 ug/g	-
Barium	1.0 ug/g	106	119	86.0	101	220 ug/g	-
Beryllium	0.5 ug/g	0.7	0.8	0.7	0.6	2.5 ug/g	-
Boron, available	0.5 ug/g	0.7	1.3	1.0	0.6	-	-
Boron	5.0 ug/g	6.9	17.7	6.6	6.4	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	1.2 ug/g	-
Chromium	5.0 ug/g	26.3	24.8	21.5	19.9	70 ug/g	-
Chromium (VI)	0.2 ug/g	0.3	<0.2	<0.2	0.3	0.66 ug/g	-
Cobalt	1.0 ug/g	11.1	12.0	10.9	11.1	21 ug/g	-
Copper	5.0 ug/g	25.5	18.3	23.7	26.9	92 ug/g	-
Lead	1.0 ug/g	9.0	6.5	9.0	7.8	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2 ug/g	-
Nickel	5.0 ug/g	24.7	27.4	24.0	24.4	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9-3	MW9-4	MW11-2	MW11-3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	27-Apr-22 09:00	27-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-17	2218476-18	2218476-19	2218476-20	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Uranium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	2.5 ug/g	-
Vanadium	10.0 ug/g	35.3	32.3	31.4	27.5	86 ug/g	-
Zinc	20.0 ug/g	51.1	49.2	46.5	47.8	290 ug/g	-

Volatiles

Acetone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g	-
Bromodichloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Bromoform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Bromomethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Carbon Tetrachloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Chlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Chloroform	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Dibromochloromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Dichlorodifluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,2-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,3-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,4-Dichlorobenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,2-Dichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,2-Dichloropropane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9-3	MW9-4	MW11-2	MW11-3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	27-Apr-22 09:00	27-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-17	2218476-18	2218476-19	2218476-20	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	<0.50	<0.50	<0.50	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	0.05 ug/g	-
Dibromofluoromethane	Surrogate	81.2%	80.4%	81.8%	80.5%	-	-
4-Bromofluorobenzene	Surrogate	89.6%	92.0%	89.3%	90.0%	-	-
Toluene-d8	Surrogate	110%	111%	111%	111%	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9-3	MW9-4	MW11-2	MW11-3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	27-Apr-22 09:00	27-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-17	2218476-18	2218476-19	2218476-20	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

	MW9-3	MW9-4	MW11-2	MW11-3	Criteria
F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	25 ug/g -
F2 PHCs (C10-C16)	4 ug/g	<4	<4	<4	10 ug/g -
F3 PHCs (C16-C34)	8 ug/g	<8	<8	<8	240 ug/g -
F4 PHCs (C34-C50)	6 ug/g	<6	<6	<6	120 ug/g -

Semi-Volatiles

	MW9-3	MW9-4	MW11-2	MW11-3	Criteria
Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	0.072 ug/g -
Acenaphthylene	0.02 ug/g	<0.02	<0.02	<0.02	0.093 ug/g -
Anthracene	0.02 ug/g	<0.02	<0.02	<0.02	0.16 ug/g -
Benzo [a] anthracene	0.02 ug/g	<0.02	0.10	<0.02	0.36 ug/g -
Benzo [a] pyrene	0.02 ug/g	<0.02	0.08	<0.02	0.3 ug/g -
Benzo [b] fluoranthene	0.02 ug/g	<0.02	0.12	<0.02	0.47 ug/g -
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	0.05	<0.02	0.68 ug/g -
Benzo [k] fluoranthene	0.02 ug/g	<0.02	0.05	<0.02	0.48 ug/g -
Chrysene	0.02 ug/g	<0.02	0.13	<0.02	2.8 ug/g -
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	<0.02	0.1 ug/g -
Fluoranthene	0.02 ug/g	0.02	0.19	<0.02	0.56 ug/g -
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	0.12 ug/g -
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	0.10	<0.02	0.23 ug/g -
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	0.59 ug/g -
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	0.59 ug/g -
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	<0.03	<0.03	0.59 ug/g -
Naphthalene	0.01 ug/g	<0.01	<0.01	<0.01	0.09 ug/g -
Phenanthrene	0.02 ug/g	<0.02	0.07	<0.02	0.69 ug/g -
Pyrene	0.02 ug/g	<0.02	0.16	<0.02	1 ug/g -
2-Fluorobiphenyl	Surrogate	73.8%	65.5%	55.6%	55.0% -

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9-3	MW9-4	MW11-2	MW11-3	Criteria:
Sample Date:	26-Apr-22 09:00	26-Apr-22 09:00	27-Apr-22 09:00	27-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-17	2218476-18	2218476-19	2218476-20	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	82.2%	73.3%	85.4%	71.5%	-	-
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Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP4	MW10-2	P1	P2	Criteria:
Sample Date:	27-Apr-22 09:00	27-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-21	2218476-22	2218476-23	2218476-24	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	89.2	94.8	85.3	83.9	-	-
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General Inorganics

SAR	0.01 N/A	-	2.29	-	-	2.4 N/A	-
Conductivity	5 uS/cm	-	1660	-	-	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	-	<0.03	-	-	0.051 ug/g	-
pH	0.05 pH Units	-	7.70	-	-	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	<1.0	-	-	1.3 ug/g	-
Arsenic	1.0 ug/g	4.6	7.3	-	-	18 ug/g	-
Barium	1.0 ug/g	93.1	134	-	-	220 ug/g	-
Beryllium	0.5 ug/g	0.6	<0.5	-	-	2.5 ug/g	-
Boron, available	0.5 ug/g	0.7	1.0	-	-	-	-
Boron	5.0 ug/g	<5.0	9.0	-	-	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	0.8	-	-	1.2 ug/g	-
Chromium	5.0 ug/g	19.7	12.4	-	-	70 ug/g	-
Chromium (VI)	0.2 ug/g	0.3	<0.2	-	-	0.66 ug/g	-
Cobalt	1.0 ug/g	11.3	4.6	-	-	21 ug/g	-
Copper	5.0 ug/g	29.8	30.1	-	-	92 ug/g	-
Lead	1.0 ug/g	8.6	82.8	-	-	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	-	-	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	<1.0	-	-	2 ug/g	-
Nickel	5.0 ug/g	24.1	10.7	-	-	82 ug/g	-
Selenium	1.0 ug/g	<1.0	<1.0	-	-	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	-	-	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	<1.0	-	-	1 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP4	MW10-2	P1	P2	Criteria:
Sample Date:	27-Apr-22 09:00	27-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-21	2218476-22	2218476-23	2218476-24	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Uranium	1.0 ug/g	<1.0	<1.0	-	-	2.5 ug/g	-
Vanadium	10.0 ug/g	26.7	17.9	-	-	86 ug/g	-
Zinc	20.0 ug/g	48.4	256	-	-	290 ug/g	-

Hydrocarbons

F2 PHCs (C10-C16)	4 ug/g	-	<4	-	-	10 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	-	156	-	-	240 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	-	705	-	-	120 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	-	0.06	-	-	0.072 ug/g	-
Acenaphthylene	0.02 ug/g	-	0.02	-	-	0.093 ug/g	-
Anthracene	0.02 ug/g	-	0.09	-	-	0.16 ug/g	-
Benzo [a] anthracene	0.02 ug/g	-	0.33	-	-	0.36 ug/g	-
Benzo [a] pyrene	0.02 ug/g	-	0.33	-	-	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	-	0.25	-	-	0.47 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	-	0.14	-	-	0.68 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	-	0.11	-	-	0.48 ug/g	-
Chrysene	0.02 ug/g	-	0.31	-	-	2.8 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	-	0.04	-	-	0.1 ug/g	-
Fluoranthene	0.02 ug/g	-	0.67	-	-	0.56 ug/g	-
Fluorene	0.02 ug/g	-	0.05	-	-	0.12 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	-	0.26	-	-	0.23 ug/g	-
1-Methylnaphthalene	0.02 ug/g	-	0.10	-	-	0.59 ug/g	-
2-Methylnaphthalene	0.02 ug/g	-	0.12	-	-	0.59 ug/g	-
Methylnaphthalene (1&2)	0.03 ug/g	-	0.22	-	-	0.59 ug/g	-
Naphthalene	0.01 ug/g	-	0.07	-	-	0.09 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP4	MW10-2	P1	P2	Criteria:
Sample Date:	27-Apr-22 09:00	27-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res -
Sample ID:	2218476-21	2218476-22	2218476-23	2218476-24	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Compound	DUP4	MW10-2	P1	P2	Criteria
Phenanthrene	0.02 ug/g	-	0.48	-	0.69 ug/g
Pyrene	0.02 ug/g	-	0.50	-	1 ug/g
2-Fluorobiphenyl	Surrogate	-	83.7%	-	-
Terphenyl-d14	Surrogate	-	81.5%	-	-

Pesticides, OC

Compound	DUP4	MW10-2	P1	P2	Criteria	
Aldrin	0.01 ug/g	-	-	<0.01	<0.01	0.05 ug/g
gamma-BHC (Lindane)	0.01 ug/g	-	-	<0.01	<0.01	0.01 ug/g
alpha-Chlordane	0.01 ug/g	-	-	<0.01	<0.01	-
gamma-Chlordane	0.01 ug/g	-	-	<0.01	<0.01	-
Chlordane	0.01 ug/g	-	-	<0.01	<0.01	0.05 ug/g
o,p'-DDD	0.01 ug/g	-	-	<0.01	<0.01	-
p,p'-DDD	0.02 ug/g	-	-	<0.02	<0.02	-
DDD	0.02 ug/g	-	-	<0.02	<0.02	0.05 ug/g
o,p'-DDE	0.01 ug/g	-	-	<0.01	<0.01	-
p,p'-DDE	0.01 ug/g	-	-	<0.01	<0.01	-
DDE	0.01 ug/g	-	-	<0.01	<0.01	0.05 ug/g
o,p'-DDT	0.01 ug/g	-	-	<0.01	<0.01	-
p,p'-DDT	0.01 ug/g	-	-	<0.01	<0.01	-
DDT	0.01 ug/g	-	-	<0.01	<0.01	1.4 ug/g
Dieldrin	0.02 ug/g	-	-	<0.02	<0.02	0.05 ug/g
Endrin	0.02 ug/g	-	-	<0.02	<0.02	0.04 ug/g
Endosulfan I	0.01 ug/g	-	-	<0.01	<0.01	-
Endosulfan II	0.02 ug/g	-	-	<0.02	<0.02	-
Endosulfan I/II	0.02 ug/g	-	-	<0.02	<0.02	0.04 ug/g
Heptachlor	0.01 ug/g	-	-	<0.01	<0.01	0.05 ug/g

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	DUP4	MW10-2	P1	P2	Criteria:
Sample Date:	27-Apr-22 09:00	27-Apr-22 09:00	26-Apr-22 09:00	26-Apr-22 09:00	Reg 153/04 -T1 Res
Sample ID:	2218476-21	2218476-22	2218476-23	2218476-24	-
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Pesticides, OC

Heptachlor epoxide	0.01 ug/g	-	-	<0.01	<0.01	0.04 ug/g	-
Hexachlorobenzene	0.01 ug/g	-	-	<0.01	<0.01	0.01 ug/g	-
Hexachlorobutadiene	0.01 ug/g	-	-	<0.01	<0.01	0.01 ug/g	-
Hexachloroethane	0.01 ug/g	-	-	<0.01	<0.01	0.01 ug/g	-
Methoxychlor	0.01 ug/g	-	-	<0.01	<0.01	0.05 ug/g	-
Decachlorobiphenyl	Surrogate	-	-	136%	132%	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-4					Criteria:
Sample Date:	27-Apr-22 09:00					Reg 153/04 -T1 Res -
Sample ID:	2218476-25					
Matrix:	Soil					
MDL/Units						

Physical Characteristics

% Solids	0.1 % by Wt.	90.7	-	-	-	-
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General Inorganics

SAR	0.01 N/A	0.39	-	-	-	2.4 N/A	-
Conductivity	5 uS/cm	221	-	-	-	0.57 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	-	-	-	0.051 ug/g	-
pH	0.05 pH Units	7.67	-	-	-	5.00 - 9.00 pH Units	-

Metals

Antimony	1.0 ug/g	<1.0	-	-	-	1.3 ug/g	-
Arsenic	1.0 ug/g	3.7	-	-	-	18 ug/g	-
Barium	1.0 ug/g	149	-	-	-	220 ug/g	-
Beryllium	0.5 ug/g	0.8	-	-	-	2.5 ug/g	-
Boron, available	0.5 ug/g	1.4	-	-	-	-	-
Boron	5.0 ug/g	26.0	-	-	-	36 ug/g	-
Cadmium	0.5 ug/g	<0.5	-	-	-	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	-	-	-	0.66 ug/g	-
Chromium	5.0 ug/g	30.6	-	-	-	70 ug/g	-
Cobalt	1.0 ug/g	13.1	-	-	-	21 ug/g	-
Copper	5.0 ug/g	7.2	-	-	-	92 ug/g	-
Lead	1.0 ug/g	5.1	-	-	-	120 ug/g	-
Mercury	0.1 ug/g	<0.1	-	-	-	0.27 ug/g	-
Molybdenum	1.0 ug/g	<1.0	-	-	-	2 ug/g	-
Nickel	5.0 ug/g	34.5	-	-	-	82 ug/g	-
Selenium	1.0 ug/g	<1.0	-	-	-	1.5 ug/g	-
Silver	0.3 ug/g	<0.3	-	-	-	0.5 ug/g	-
Thallium	1.0 ug/g	<1.0	-	-	-	1 ug/g	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-4					Criteria:
Sample Date:	27-Apr-22 09:00					Reg 153/04 -T1 Res
Sample ID:	2218476-25					-
Matrix:	Soil					
MDL/Units						

Metals

Uranium	1.0 ug/g	<1.0	-	-	-	2.5 ug/g	-
Vanadium	10.0 ug/g	27.4	-	-	-	86 ug/g	-
Zinc	20.0 ug/g	47.6	-	-	-	290 ug/g	-

Volatiles

Acetone	0.50 ug/g	<0.50	-	-	-	0.5 ug/g	-
Benzene	0.02 ug/g	<0.02	-	-	-	0.02 ug/g	-
Bromodichloromethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Bromoform	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Bromomethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Carbon Tetrachloride	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Chlorobenzene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Chloroform	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Dibromochloromethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Dichlorodifluoromethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,2-Dichlorobenzene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,3-Dichlorobenzene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,4-Dichlorobenzene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,1-Dichloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,2-Dichloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,1-Dichloroethylene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,2-Dichloropropane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	-	-	-	-	-
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	-	-	-	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-4					Criteria:
Sample Date:	27-Apr-22 09:00					Reg 153/04 -T1 Res
Sample ID:	2218476-25					-
Matrix:	Soil					
MDL/Units						

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.50 ug/g	<0.50	-	-	-	0.5 ug/g	-
Methyl Isobutyl Ketone	0.50 ug/g	<0.50	-	-	-	0.5 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Styrene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Toluene	0.05 ug/g	<0.05	-	-	-	0.2 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	-	-	-	0.25 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	-	-	-	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	-	-	-	-	-
o-Xylene	0.05 ug/g	<0.05	-	-	-	-	-
Xylenes, total	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Toluene-d8	Surrogate	108%	-	-	-	-	-
Dibromofluoromethane	Surrogate	86.9%	-	-	-	-	-
4-Bromofluorobenzene	Surrogate	92.8%	-	-	-	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-4					Criteria:
Sample Date:	27-Apr-22 09:00					Reg 153/04 -T1 Res
Sample ID:	2218476-25					-
Matrix:	Soil					
MDL/Units						

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	-	-	-	25 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	-	-	-	10 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	<8	-	-	-	240 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	<6	-	-	-	120 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	-	-	-	0.072 ug/g	-
Acenaphthylene	0.02 ug/g	<0.02	-	-	-	0.093 ug/g	-
Anthracene	0.02 ug/g	<0.02	-	-	-	0.16 ug/g	-
Benzo [a] anthracene	0.02 ug/g	<0.02	-	-	-	0.36 ug/g	-
Benzo [a] pyrene	0.02 ug/g	<0.02	-	-	-	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	<0.02	-	-	-	0.47 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	-	-	-	0.68 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	<0.02	-	-	-	0.48 ug/g	-
Chrysene	0.02 ug/g	<0.02	-	-	-	2.8 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	-	-	-	0.1 ug/g	-
Fluoranthene	0.02 ug/g	<0.02	-	-	-	0.56 ug/g	-
Fluorene	0.02 ug/g	<0.02	-	-	-	0.12 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	-	-	-	0.23 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	-	-	-	0.59 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	-	-	-	0.59 ug/g	-
Methylnaphthalene (1&2)	0.03 ug/g	<0.03	-	-	-	0.59 ug/g	-
Naphthalene	0.01 ug/g	<0.01	-	-	-	0.09 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	-	-	-	0.69 ug/g	-
Pyrene	0.02 ug/g	<0.02	-	-	-	1 ug/g	-
2-Fluorobiphenyl	Surrogate	52.5%	-	-	-	-	-

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW8-4					Criteria:
Sample Date:	27-Apr-22 09:00					Reg 153/04 -T1 Res
Sample ID:	2218476-25					-
Matrix:	Soil					
MDL/Units						

Semi-Volatiles

Terphenyl-d14	Surrogate	63.9%	-	-	-	-	-
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Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics								
Conductivity	ND	5	uS/cm					
Cyanide, free	ND	0.03	ug/g					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	7	ug/g					
F2 PHCs (C10-C16)	ND	4	ug/g					
F3 PHCs (C16-C34)	ND	8	ug/g					
F4 PHCs (C34-C50)	ND	6	ug/g					
Metals								
Antimony	ND	1.0	ug/g					
Arsenic	ND	1.0	ug/g					
Barium	ND	1.0	ug/g					
Beryllium	ND	0.5	ug/g					
Boron, available	ND	0.5	ug/g					
Boron	ND	5.0	ug/g					
Cadmium	ND	0.5	ug/g					
Chromium (VI)	ND	0.2	ug/g					
Chromium	ND	5.0	ug/g					
Cobalt	ND	1.0	ug/g					
Copper	ND	5.0	ug/g					
Lead	ND	1.0	ug/g					
Mercury	ND	0.1	ug/g					
Molybdenum	ND	1.0	ug/g					
Nickel	ND	5.0	ug/g					
Selenium	ND	1.0	ug/g					
Silver	ND	0.3	ug/g					
Thallium	ND	1.0	ug/g					
Uranium	ND	1.0	ug/g					
Vanadium	ND	10.0	ug/g					
Zinc	ND	20.0	ug/g					
Pesticides, OC								
Aldrin	ND	0.01	ug/g					
gamma-BHC (Lindane)	ND	0.01	ug/g					

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
alpha-Chlordane	ND	0.01	ug/g					
gamma-Chlordane	ND	0.01	ug/g					
Chlordane	ND	0.01	ug/g					
o,p'-DDD	ND	0.01	ug/g					
p,p'-DDD	ND	0.02	ug/g					
DDD	ND	0.02	ug/g					
o,p'-DDE	ND	0.01	ug/g					
p,p'-DDE	ND	0.01	ug/g					
DDE	ND	0.01	ug/g					
o,p'-DDT	ND	0.01	ug/g					
p,p'-DDT	ND	0.01	ug/g					
DDT	ND	0.01	ug/g					
Dieldrin	ND	0.02	ug/g					
Endrin	ND	0.02	ug/g					
Endosulfan I	ND	0.01	ug/g					
Endosulfan II	ND	0.02	ug/g					
Endosulfan I/II	ND	0.02	ug/g					
Heptachlor	ND	0.01	ug/g					
Heptachlor epoxide	ND	0.01	ug/g					
Hexachlorobenzene	ND	0.01	ug/g					
Hexachlorobutadiene	ND	0.01	ug/g					
Hexachloroethane	ND	0.01	ug/g					
Methoxychlor	ND	0.01	ug/g					
Surrogate: Decachlorobiphenyl	0.124		ug/g	124	50-140			
Semi-Volatiles								
Acenaphthene	ND	0.02	ug/g					
Acenaphthylene	ND	0.02	ug/g					
Anthracene	ND	0.02	ug/g					
Benzo [a] anthracene	ND	0.02	ug/g					
Benzo [a] pyrene	ND	0.02	ug/g					
Benzo [b] fluoranthene	ND	0.02	ug/g					
Benzo [g,h,i] perylene	ND	0.02	ug/g					

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzo [k] fluoranthene	ND	0.02	ug/g					
Chrysene	ND	0.02	ug/g					
Dibenzo [a,h] anthracene	ND	0.02	ug/g					
Fluoranthene	ND	0.02	ug/g					
Fluorene	ND	0.02	ug/g					
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g					
1-Methylnaphthalene	ND	0.02	ug/g					
2-Methylnaphthalene	ND	0.02	ug/g					
Methylnaphthalene (1&2)	ND	0.03	ug/g					
Naphthalene	ND	0.01	ug/g					
Phenanthrene	ND	0.02	ug/g					
Pyrene	ND	0.02	ug/g					
Surrogate: 2-Fluorobiphenyl	0.381		ug/g	76.3	50-140			
Surrogate: Terphenyl-d14	0.440		ug/g	88.0	50-140			
Volatiles								
Acetone	ND	0.50	ug/g					
Benzene	ND	0.02	ug/g					
Bromodichloromethane	ND	0.05	ug/g					
Bromoform	ND	0.05	ug/g					
Bromomethane	ND	0.05	ug/g					
Carbon Tetrachloride	ND	0.05	ug/g					
Chlorobenzene	ND	0.05	ug/g					
Chloroform	ND	0.05	ug/g					
Dibromochloromethane	ND	0.05	ug/g					
Dichlorodifluoromethane	ND	0.05	ug/g					
1,2-Dichlorobenzene	ND	0.05	ug/g					
1,3-Dichlorobenzene	ND	0.05	ug/g					
1,4-Dichlorobenzene	ND	0.05	ug/g					
1,1-Dichloroethane	ND	0.05	ug/g					
1,2-Dichloroethane	ND	0.05	ug/g					
1,1-Dichloroethylene	ND	0.05	ug/g					
cis-1,2-Dichloroethylene	ND	0.05	ug/g					

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
trans-1,2-Dichloroethylene	ND	0.05	ug/g					
1,2-Dichloropropane	ND	0.05	ug/g					
cis-1,3-Dichloropropylene	ND	0.05	ug/g					
trans-1,3-Dichloropropylene	ND	0.05	ug/g					
1,3-Dichloropropene, total	ND	0.05	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g					
Hexane	ND	0.05	ug/g					
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g					
Methyl Isobutyl Ketone	ND	0.50	ug/g					
Methyl tert-butyl ether	ND	0.05	ug/g					
Methylene Chloride	ND	0.05	ug/g					
Styrene	ND	0.05	ug/g					
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g					
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g					
Tetrachloroethylene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
1,1,1-Trichloroethane	ND	0.05	ug/g					
1,1,2-Trichloroethane	ND	0.05	ug/g					
Trichloroethylene	ND	0.05	ug/g					
Trichlorofluoromethane	ND	0.05	ug/g					
Vinyl chloride	ND	0.02	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
Surrogate: 4-Bromofluorobenzene	7.87		ug/g	98.4	50-140			
Surrogate: Dibromofluoromethane	7.63		ug/g	95.4	50-140			
Surrogate: Toluene-d8	8.77		ug/g	110	50-140			

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
SAR	3.54	0.01	N/A	3.59			1.4	30	
Conductivity	734	5	uS/cm	737			0.3	5	
Cyanide, free	ND	0.03	ug/g	ND			NC	35	
pH	7.51	0.05	pH Units	7.45			0.8	10	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g	ND			NC	30	
F3 PHCs (C16-C34)	76	8	ug/g	10			NC	30	
F4 PHCs (C34-C50)	ND	6	ug/g	ND			NC	30	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	14.2	1.0	ug/g	10.5			29.6	30	
Barium	87.1	1.0	ug/g	79.6			9.0	30	
Beryllium	0.7	0.5	ug/g	ND			NC	30	
Boron, available	1.12	0.5	ug/g	1.42			23.4	35	
Boron	8.8	5.0	ug/g	6.1			NC	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium (VI)	ND	0.2	ug/g	ND			NC	35	
Chromium	20.7	5.0	ug/g	16.3			23.4	30	
Cobalt	10.3	1.0	ug/g	9.4			9.7	30	
Copper	29.8	5.0	ug/g	27.4			8.3	30	
Lead	6.3	1.0	ug/g	6.4			0.2	30	
Mercury	ND	0.1	ug/g	ND			NC	30	
Molybdenum	2.7	1.0	ug/g	2.0			31.9	30	QR-05
Nickel	29.4	5.0	ug/g	22.3			27.5	30	
Selenium	1.2	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	33.6	10.0	ug/g	31.2			7.5	30	

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Client: Landtek Limited

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Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Zinc	122	20.0	ug/g	92.0			27.8	30	
Pesticides, OC									
Aldrin	ND	0.01	ug/g	ND			NC	40	
gamma-BHC (Lindane)	ND	0.01	ug/g	ND			NC	40	
alpha-Chlordane	ND	0.01	ug/g	ND			NC	40	
gamma-Chlordane	ND	0.01	ug/g	ND			NC	40	
o,p'-DDD	ND	0.01	ug/g	ND			NC	40	
p,p'-DDD	ND	0.02	ug/g	ND			NC	40	
o,p'-DDE	ND	0.01	ug/g	ND			NC	40	
p,p'-DDE	ND	0.01	ug/g	ND			NC	40	
o,p'-DDT	ND	0.01	ug/g	ND			NC	40	
p,p'-DDT	ND	0.01	ug/g	ND			NC	40	
Dieldrin	ND	0.02	ug/g	ND			NC	40	
Endrin	ND	0.02	ug/g	ND			NC	40	
Endosulfan I	ND	0.01	ug/g	ND			NC	40	
Endosulfan II	ND	0.02	ug/g	ND			NC	40	
Heptachlor	ND	0.01	ug/g	ND			NC	40	
Heptachlor epoxide	ND	0.01	ug/g	ND			NC	40	
Hexachlorobenzene	ND	0.01	ug/g	ND			NC	40	
Hexachlorobutadiene	ND	0.01	ug/g	ND			NC	40	
Hexachloroethane	ND	0.01	ug/g	ND			NC	40	
Methoxychlor	ND	0.01	ug/g	ND			NC	40	
<i>Surrogate: Decachlorobiphenyl</i>	<i>0.169</i>		<i>ug/g</i>		<i>138</i>	<i>50-140</i>			
Physical Characteristics									
% Solids	93.1	0.1	% by Wt.	92.7			0.4	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	ND	0.02	ug/g	ND			NC	40	
Anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] pyrene	ND	0.02	ug/g	ND			NC	40	

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Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzo [b] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Benzo [g,h,i] perylene	0.020	0.02	ug/g	ND			NC	40	
Benzo [k] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Chrysene	ND	0.02	ug/g	ND			NC	40	
Dibenzo [a,h] anthracene	ND	0.02	ug/g	ND			NC	40	
Fluoranthene	ND	0.02	ug/g	ND			NC	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g	ND			NC	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	ND	0.02	ug/g	ND			NC	40	
Pyrene	ND	0.02	ug/g	ND			NC	40	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>0.390</i>		<i>ug/g</i>		<i>65.9</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>0.453</i>		<i>ug/g</i>		<i>80.6</i>	<i>50-140</i>			
Volatiles									
Acetone	ND	0.50	ug/g	ND			NC	50	
Benzene	ND	0.02	ug/g	ND			NC	50	
Bromodichloromethane	ND	0.05	ug/g	ND			NC	50	
Bromoform	ND	0.05	ug/g	ND			NC	50	
Bromomethane	ND	0.05	ug/g	ND			NC	50	
Carbon Tetrachloride	ND	0.05	ug/g	ND			NC	50	
Chlorobenzene	ND	0.05	ug/g	ND			NC	50	
Chloroform	ND	0.05	ug/g	ND			NC	50	
Dibromochloromethane	ND	0.05	ug/g	ND			NC	50	
Dichlorodifluoromethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,3-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,4-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloroethane	ND	0.05	ug/g	ND			NC	50	

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,1-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
cis-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
trans-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloropropane	ND	0.05	ug/g	ND			NC	50	
cis-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
trans-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g	ND			NC	50	
Hexane	ND	0.05	ug/g	ND			NC	50	
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g	ND			NC	50	
Methyl Isobutyl Ketone	ND	0.50	ug/g	ND			NC	50	
Methyl tert-butyl ether	ND	0.05	ug/g	ND			NC	50	
Methylene Chloride	ND	0.05	ug/g	ND			NC	50	
Styrene	ND	0.05	ug/g	ND			NC	50	
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
Tetrachloroethylene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
1,1,1-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
Trichloroethylene	ND	0.05	ug/g	ND			NC	50	
Trichlorofluoromethane	ND	0.05	ug/g	ND			NC	50	
Vinyl chloride	ND	0.02	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
Surrogate: 4-Bromofluorobenzene	12.1		ug/g		90.7	50-140			
Surrogate: Dibromofluoromethane	10.8		ug/g		91.0	50-140			
Surrogate: Toluene-d8	14.9		ug/g		111	50-140			

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	1.04	0.03	ug/g	ND	104	70-130			
Hydrocarbons									
F1 PHCs (C6-C10)	60	7	ug/g	ND	84.9	80-120			
F2 PHCs (C10-C16)	91	4	ug/g	ND	90.2	60-140			
F3 PHCs (C16-C34)	209	8	ug/g	ND	92.3	60-140			
F4 PHCs (C34-C50)	172	6	ug/g	ND	105	60-140			
Metals									
Antimony	107	1.0	ug/g	ND	85.2	70-130			
Arsenic	151	1.0	ug/g	5.3	116	70-130			
Barium	233	1.0	ug/g	79.6	123	70-130			
Beryllium	132	0.5	ug/g	0.7	105	70-130			
Boron, available	4.55	0.5	ug/g	1.42	62.6	70-122			QM-07
Boron	129	5.0	ug/g	6.1	98.4	70-130			
Cadmium	141	0.5	ug/g	ND	113	70-130			
Chromium (VI)	4.3	0.2	ug/g	ND	85.5	70-130			
Chromium	164	5.0	ug/g	21.2	114	70-130			
Cobalt	146	1.0	ug/g	9.4	109	70-130			
Copper	168	5.0	ug/g	27.4	112	70-130			
Lead	145	1.0	ug/g	23.2	97.2	70-130			
Mercury	1.25	0.1	ug/g	ND	83.5	70-130			
Molybdenum	142	1.0	ug/g	ND	114	70-130			
Nickel	161	5.0	ug/g	20.5	113	70-130			
Selenium	144	1.0	ug/g	ND	115	70-130			
Silver	126	0.3	ug/g	ND	101	70-130			
Thallium	123	1.0	ug/g	ND	98.8	70-130			
Uranium	135	1.0	ug/g	ND	108	70-130			
Vanadium	175	10.0	ug/g	31.2	115	70-130			
Zinc	239	20.0	ug/g	105	108	70-130			
Pesticides, OC									
Aldrin	0.24	0.01	ug/g	ND	99.3	50-140			

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
gamma-BHC (Lindane)	0.26	0.01	ug/g	ND	106	50-140			
alpha-Chlordane	0.24	0.01	ug/g	ND	96.8	50-140			
gamma-Chlordane	0.26	0.01	ug/g	ND	105	50-140			
o,p'-DDD	0.20	0.01	ug/g	ND	81.8	50-140			
p,p'-DDD	0.19	0.02	ug/g	ND	77.9	50-140			
o,p'-DDE	0.25	0.01	ug/g	ND	104	50-140			
p,p'-DDE	0.24	0.01	ug/g	ND	97.0	50-140			
o,p'-DDT	0.17	0.01	ug/g	ND	67.8	50-140			
p,p'-DDT	0.21	0.01	ug/g	ND	84.8	50-140			
Endosulfan I	0.25	0.01	ug/g	ND	100	50-140			
Endosulfan II	0.12	0.02	ug/g	ND	50.5	50-140			
Heptachlor	0.27	0.01	ug/g	ND	112	50-140			
Heptachlor epoxide	0.24	0.01	ug/g	ND	95.9	50-140			
Hexachlorobenzene	0.25	0.01	ug/g	ND	103	50-140			
Hexachlorobutadiene	0.27	0.01	ug/g	ND	111	50-140			
Hexachloroethane	0.31	0.01	ug/g	ND	126	50-140			
Methoxychlor	0.17	0.01	ug/g	ND	69.8	50-140			
<i>Surrogate: Decachlorobiphenyl</i>	<i>0.164</i>		<i>ug/g</i>		<i>134</i>	<i>50-140</i>			
Semi-Volatiles									
Acenaphthene	0.530	0.02	ug/g	ND	106	50-140			
Acenaphthylene	0.520	0.02	ug/g	ND	104	50-140			
Anthracene	0.509	0.02	ug/g	ND	102	50-140			
Benzo [a] anthracene	0.538	0.02	ug/g	ND	108	50-140			
Benzo [a] pyrene	0.471	0.02	ug/g	ND	94.1	50-140			
Benzo [b] fluoranthene	0.430	0.02	ug/g	ND	86.0	50-140			
Benzo [g,h,i] perylene	0.479	0.02	ug/g	ND	95.8	50-140			
Benzo [k] fluoranthene	0.435	0.02	ug/g	ND	87.0	50-140			
Chrysene	0.469	0.02	ug/g	ND	93.8	50-140			
Dibenzo [a,h] anthracene	0.563	0.02	ug/g	ND	113	50-140			
Fluoranthene	0.561	0.02	ug/g	ND	112	50-140			
Fluorene	0.563	0.02	ug/g	ND	113	50-140			

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Indeno [1,2,3-cd] pyrene	0.480	0.02	ug/g	ND	95.9	50-140			
1-Methylnaphthalene	0.510	0.02	ug/g	ND	102	50-140			
2-Methylnaphthalene	0.489	0.02	ug/g	ND	97.9	50-140			
Naphthalene	0.492	0.01	ug/g	ND	98.4	50-140			
Phenanthrene	0.517	0.02	ug/g	ND	103	50-140			
Pyrene	0.451	0.02	ug/g	ND	90.2	50-140			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>0.396</i>		<i>ug/g</i>		<i>79.2</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>0.393</i>		<i>ug/g</i>		<i>78.5</i>	<i>50-140</i>			
Volatiles									
Acetone	9.92	0.50	ug/g	ND	99.2	50-140			
Benzene	3.40	0.02	ug/g	ND	84.5	60-130			
Bromodichloromethane	3.43	0.05	ug/g	ND	85.3	60-130			
Bromoform	3.42	0.05	ug/g	ND	85.0	60-130			
Bromomethane	4.36	0.05	ug/g	ND	109	50-140			
Carbon Tetrachloride	3.27	0.05	ug/g	ND	81.8	60-130			
Chlorobenzene	3.46	0.05	ug/g	ND	86.2	60-130			
Chloroform	3.67	0.05	ug/g	ND	91.3	60-130			
Dibromochloromethane	3.33	0.05	ug/g	ND	83.2	60-130			
Dichlorodifluoromethane	3.29	0.05	ug/g	ND	82.2	50-140			
1,2-Dichlorobenzene	3.41	0.05	ug/g	ND	85.3	60-130			
1,3-Dichlorobenzene	3.48	0.05	ug/g	ND	87.1	60-130			
1,4-Dichlorobenzene	3.39	0.05	ug/g	ND	84.2	60-130			
1,1-Dichloroethane	3.39	0.05	ug/g	ND	84.8	60-130			
1,2-Dichloroethane	3.51	0.05	ug/g	ND	87.3	60-130			
1,1-Dichloroethylene	3.02	0.05	ug/g	ND	75.4	60-130			
cis-1,2-Dichloroethylene	3.29	0.05	ug/g	ND	81.9	60-130			
trans-1,2-Dichloroethylene	3.18	0.05	ug/g	ND	79.0	60-130			
1,2-Dichloropropane	3.46	0.05	ug/g	ND	86.5	60-130			
cis-1,3-Dichloropropylene	3.36	0.05	ug/g	ND	83.9	60-130			
trans-1,3-Dichloropropylene	3.38	0.05	ug/g	ND	84.1	60-130			
Ethylbenzene	3.37	0.05	ug/g	ND	83.9	60-130			

Certificate of Analysis

Report Date: 04-May-2022

Client: Landtek Limited

Order Date: 27-Apr-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Ethylene dibromide (dibromoethane, 1,2-)	3.51	0.05	ug/g	ND	87.2	60-130			
Hexane	3.13	0.05	ug/g	ND	78.2	60-130			
Methyl Ethyl Ketone (2-Butanone)	8.95	0.50	ug/g	ND	89.5	50-140			
Methyl Isobutyl Ketone	8.77	0.50	ug/g	ND	87.7	50-140			
Methyl tert-butyl ether	8.50	0.05	ug/g	ND	85.0	50-140			
Methylene Chloride	3.51	0.05	ug/g	ND	87.3	60-130			
Styrene	3.48	0.05	ug/g	ND	86.1	60-130			
1,1,1,2-Tetrachloroethane	3.61	0.05	ug/g	ND	90.3	60-130			
1,1,2,2-Tetrachloroethane	3.58	0.05	ug/g	ND	89.1	60-130			
Tetrachloroethylene	3.33	0.05	ug/g	ND	82.7	60-130			
Toluene	3.46	0.05	ug/g	ND	86.4	60-130			
1,1,1-Trichloroethane	3.31	0.05	ug/g	ND	82.8	60-130			
1,1,2-Trichloroethane	3.56	0.05	ug/g	ND	88.6	60-130			
Trichloroethylene	3.45	0.05	ug/g	ND	85.7	60-130			
Trichlorofluoromethane	3.35	0.05	ug/g	ND	83.8	50-140			
Vinyl chloride	3.21	0.02	ug/g	ND	80.2	50-140			
m,p-Xylenes	6.73	0.05	ug/g	ND	84.0	60-130			
o-Xylene	3.44	0.05	ug/g	ND	85.4	60-130			
Surrogate: 4-Bromofluorobenzene	8.23		ug/g		103	50-140			
Surrogate: Dibromofluoromethane	10.5		ug/g		131	50-140			
Surrogate: Toluene-d8	7.89		ug/g		98.6	50-140			

Certificate of Analysis

Client: Landtek Limited

Client PO: 22122

Report Date: 04-May-2022

Order Date: 27-Apr-2022

Project Description: 22122

Qualifier Notes:

Login Qualifiers :

Applies to Samples: MW4-1, BH5-1, BH6-1, BH7-2

QC Qualifiers :

QM-07: The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on other acceptable QC.

QR-05: Duplicate RPDs higher than normally accepted. Remaining batch QA/QC was acceptable. May be sample effect.

Sample Qualifiers :

Sample Data Revisions:

None

Certificate of Analysis

Client: Landtek Limited

Client PO: 22122

Report Date: 04-May-2022

Order Date: 27-Apr-2022

Project Description: 22122

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.

Parcel ID: 2218476



Parcel Order Number
(Lab Use Only)

2218476

Chain Of Custody
(Lab Use Only)

No 65589

Client Name: Landtek
Contact Name: Rachel Hlywka
Address: 205 Nebo Rd. Hamilton
Telephone:

Project Ref: 22122
Quote #:
PO #: 22122
E-mail: nicole@landtek.ca
Rachel@landtek.ca

Page 1 of 3
Turnaround Time
 1 day 3 day
 2 day Regular
Date Required:

REG 153/04 REG 406/19
 Table 1 Res/Park Med/Fine
 Table 2 Ind/Comm Coarse
 Table 3 Agri/Other
 Table _____
For RSC: Yes No

Other Regulation
 REG 558 PWQO
 CCME MISA
 SU - Sani SU - Storm
Mun: _____
 Other: _____

Matrix Type: S (Soil/Sed.) GW (Ground Water)
SW (Surface Water) SS (Storm/Sanitary Sewer)
P (Paint) A (Air) O (Other)

Required Analysis

Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHC/VOC	M/I	PAH	metals	limited								
				Date	Time													
1 mw4-1	S			April 26	22	X	X	X										
2 mw4-2	S					X	X	X										
3 mw4-3	S					X	X	X										
4 BH5-1	S					X	X	X										
5 DUP1	S					X	X	X										
6 BH5-2	S					X	X	X										
7 BH6-1	S					X	X	X										
8 DUP2	S					X	X	X										
9 BH6-2	S					X	X	X										
10 BH6-4	S					X	X	X										

Comments:

Method of Delivery: Walk In

Relinquished By (Sign): Rachel Hlywka
Relinquished By (Print): Rachel Hlywka
Date/Time: April 27, 22

Received By Driver/Depot:
Date/Time:

Received at Lab: C-PAH
Date/Time: April 27, 2022 15:40
Temperature: 8.3 °C

Verified By: BS
Date/Time: 28/04/2022 14:00
pH Verified: By: N/A



Client Name: Landtek
 Contact Name: Rachel Hlywska
 Address: 205 Nebo Rd. Hamilton
 Telephone: _____

Project Ref: 22122
 Quote #: _____
 PO #: 22122
 E-mail: nicote@Landtek.ca
Rachel@Landtek.ca

Page 2 of 3
 Turnaround Time
 1 day 3 day
 2 day Regular
 Date Required: _____

REG 153/04 REG 406/19 Other Regulation
 Table 1 Res/Park Med/Fine REG 558 PWQO
 Table 2 Ind/Comm Coarse CCME MISA
 Table 3 Agri/Other
 Table _____
 For RSC: Yes No Other: _____

Matrix Type: S (Soil/Sed.) GW (Ground Water)
SW (Surface Water) SS (Storm/Sanitary Sewer)
P (Paint) A (Air) O (Other)

Required Analysis

Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		Pb/C/ROC	m/i	PAH	metals	Limited							
				Date	Time												
1 BH7-2	S			April 26.22		X	X	X									
2 BH7-4	S					X	X	X		X							
3 mw8-2	S					X	X	X									
4 mw8-3	S					X	X	X									
5 mw9-2	S		2			X	X	X									
6 Dup 3	S		2			X	X	X									
7 mw9-3	S					X	X	X									
8 mw9-4	S					X	X	X									
9 mw11-2	S		2	April 27.22		X	X	X									
10 mw11-3	S		2			X	X	X									

Comments: _____
 Method of Delivery: Walk In

Relinquished By (Sign): <u>Rachel Hlywska</u>	Received By Driver/Depot: _____	Received at Lab: <u>C-Plg</u>	Verified By: <u>BS</u>
Relinquished By (Print): <u>Rachel Hlywska</u>	Date/Time: _____	Date/Time: <u>April 27/2022 15:42</u>	Date/Time: <u>28/04/2022 14:00</u>
Date/Time: <u>April 27.22</u>	Temperature: _____ °C	Temperature: <u>8.3</u> °C	pH Verified: <input type="checkbox"/> By: <u>N/A</u>



Client Name: <i>Landtek</i>	Project Ref: <i>22122</i>	Page <i>3</i> of <i>3</i>
Contact Name: <i>Rachel Hlywnka</i>	Quote #:	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: <i>205 Nebo Rd. Hamilton</i>	PO #: <i>22122</i>	
Telephone:	E-mail: <i>nicole@landtek.ca</i> <i>Rachel@Landtek.ca</i>	Date Required: _____

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19	Other Regulation	Matrix Type: <i>S</i> (Soil/Sed.) <i>GW</i> (Ground Water) <i>SW</i> (Surface Water) <i>SS</i> (Storm/Sanitary Sewer) <i>P</i> (Paint) <i>A</i> (Air) <i>O</i> (Other)	Required Analysis																
<input checked="" type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input checked="" type="checkbox"/> Med/Fine <input type="checkbox"/> Table 2 <input checked="" type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix	Air Volume	# of Containers	Sample Taken	Date	Time	<i>m/i</i>	<i>PHC</i>	<i>PAH</i>	<i>Metals</i>	<i>OC pesticides</i>							
Sample ID/Location Name																			
1	<i>DUP4</i>	<i>S</i>		<i>1</i>	<i>April 27.22</i>				<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>							
2	<i>mw10-2</i>	<i>S</i>		<i>1</i>	<i>↓</i>				<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>							
3																			
4	<i>P1</i>	<i>S</i>		<i>1</i>	<i>April 26.22</i>							<i>X</i>							
5	<i>P2</i>	<i>S</i>		<i>1</i>	<i>↓</i>							<i>X</i>							
6																			
7																			
8																			
9																			
10																			

Comments:			Method of Delivery: <i>Walk In</i>		
Relinquished By (Sign): <i>Rachel Hlywnka</i>	Received By Driver/Depot:	Received at Lab: <i>C-PLY</i>	Verified By: <i>BB</i>		
Relinquished By (Print): <i>Rachel Hlywnka</i>	Date/Time:	Date/Time: <i>April 27 2022 15:42</i>	Date/Time: <i>28/04/2022 14:00</i>		
Date/Time: <i>Apr. 127.22</i>	Temperature: _____ °C	Temperature: <i>8.3</i> °C	pH Verified: <input type="checkbox"/>	By: <i>N/A</i>	

Certificate of Analysis

Landtek Limited

205 Nebo Road, Unit 3
Hamilton, ON L8W 2E1
Attn: Rachel Hlywka

Client PO: 22122
Project: 22122
Custody: 67154

Report Date: 12-May-2022
Order Date: 4-May-2022

Order #: 2219333

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2219333-01	MW2
2219333-02	MW3
2219333-03	MW4
2219333-04	MW8
2219333-05	MW11
2219333-06	Dup A
2219333-07	Trip Blank

Approved By:



Milan Ralitsch, PhD

Senior Technical Manager

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Anions	EPA 300.1 - IC	10-May-22	10-May-22
Chromium, hexavalent - water	MOE E3056 - colourimetric	5-May-22	5-May-22
Cyanide, free	MOE E3015 - Auto Colour	10-May-22	10-May-22
Mercury by CVAA	EPA 245.2 - Cold Vapour AA	10-May-22	10-May-22
pH	EPA 150.1 - pH probe @25 °C	10-May-22	10-May-22
PHC F1	CWS Tier 1 - P&T GC-FID	6-May-22	9-May-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	9-May-22	10-May-22
REG 153: Metals by ICP/MS, water	EPA 200.8, ICP-MS	6-May-22	7-May-22
REG 153: PAHs by GC-MS	EPA 625 - GC-MS, extraction	11-May-22	12-May-22
REG 153: VOCs by P&T GC-MS	EPA 624 - P&T GC-MS	9-May-22	9-May-22

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T1 Groundwater	-
MW4	Uranium	0.2 ug/L	44.6	8.9 ug/L	-
MW4	Trichloroethylene	0.5 ug/L	1.0	0.5 ug/L	-
MW8	Chloride	1.0 mg/L	1070	790000 ug/L	-
MW8	Uranium	0.2 ug/L	46.4	8.9 ug/L	-
MW8	Trichloroethylene	0.5 ug/L	1.4	0.5 ug/L	-
MW8	Anthracene	0.01 ug/L	0.12	0.1 ug/L	-
MW11	Molybdenum	0.5 ug/L	26.2	23 ug/L	-
MW11	Trichloroethylene	0.5 ug/L	1.0	0.5 ug/L	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2	MW3	MW4	MW8	Criteria:
Sample Date:	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	Reg 153/04 -T1 Groundwater
Sample ID:	2219333-01	2219333-02	2219333-03	2219333-04	
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	
MDL/Units					-

General Inorganics

Cyanide, free	2 ug/L	<2	<2	<2	<2	5 ug/L	-
pH	0.1 pH Units	7.2	7.1	7.0	7.4	5.00 - 9.00 pH Units	-

Anions

Chloride	1.0 mg/L	42.5	211	73.2	1070	790000 ug/L	-
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Metals

Mercury	0.1 ug/L	<0.1	<0.1	<0.1	<0.1	0.1 ug/L	-
Antimony	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1.5 ug/L	-
Arsenic	1.0 ug/L	<1.0	<1.0	1.4	1.4	13 ug/L	-
Barium	1.0 ug/L	51.9	111	96.4	65.8	610 ug/L	-
Beryllium	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Boron	10.0 ug/L	91.9	145	216	302	1700 ug/L	-
Cadmium	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	0.5 ug/L	-
Chromium (VI)	10 ug/L	<10	<10	<10	<10	25 ug/L	-
Chromium	1.0 ug/L	<1.0	<1.0	<1.0	<1.0	11 ug/L	-
Cobalt	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	3.8 ug/L	-
Copper	0.5 ug/L	0.8	0.8	1.8	2.1	5 ug/L	-
Lead	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	1.9 ug/L	-
Molybdenum	0.5 ug/L	3.9	3.3	7.5	21.5	23 ug/L	-
Nickel	1.0 ug/L	<1.0	1.2	1.9	<1.0	14 ug/L	-
Selenium	1.0 ug/L	1.6	<1.0	<1.0	<1.0	5 ug/L	-
Silver	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	0.3 ug/L	-
Sodium	200 ug/L	50600	90900	209000	38900	490000 ug/L	-
Thallium	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Uranium	0.2 ug/L	7.8	4.1	44.6	46.4	8.9 ug/L	-
Vanadium	0.5 ug/L	0.8	0.9	<0.5	1.8	3.9 ug/L	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2	MW3	MW4	MW8	Criteria:
Sample Date:	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	-
Sample ID:	2219333-01	2219333-02	2219333-03	2219333-04	Reg 153/04 -T1
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	Groundwater
MDL/Units					

Metals

Zinc	5.0 ug/L	<5.0	6.1	5.5	9.1	160 ug/L	-
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Volatiles

Acetone	5.0 ug/L	<5.0	<5.0	<5.0	<5.0	2700 ug/L	-
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Bromodichloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	2 ug/L	-
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5 ug/L	-
Bromomethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.89 ug/L	-
Carbon Tetrachloride	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	0.2 ug/L	-
Chlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	2 ug/L	-
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	2 ug/L	-
Dichlorodifluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0	590 ug/L	-
1,2-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
1,3-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
1,4-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
cis-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1.6 ug/L	-
trans-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1.6 ug/L	-
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
cis-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
1,3-Dichloropropene, total	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2	MW3	MW4	MW8	Criteria:
Sample Date:	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	-
Sample ID:	2219333-01	2219333-02	2219333-03	2219333-04	Reg 153/04 -T1
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	Groundwater
MDL/Units					

Volatiles

Ethylene dibromide (dibromoethane)	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	0.2 ug/L	-
Hexane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0	5 ug/L	-
Methyl Ethyl Ketone (2-Butanone)	5.0 ug/L	<5.0	<5.0	<5.0	<5.0	400 ug/L	-
Methyl Isobutyl Ketone	5.0 ug/L	<5.0	<5.0	<5.0	<5.0	640 ug/L	-
Methyl tert-butyl ether	2.0 ug/L	<2.0	<2.0	<2.0	<2.0	15 ug/L	-
Methylene Chloride	5.0 ug/L	<5.0	<5.0	<5.0	<5.0	5 ug/L	-
Styrene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1.1 ug/L	-
1,1,2,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.8 ug/L	-
1,1,1-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
1,1,2-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Trichloroethylene	0.5 ug/L	0.5	<0.5	1.0	1.4	0.5 ug/L	-
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	<1.0	150 ug/L	-
Vinyl chloride	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
Xylenes, total	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	72 ug/L	-
Dibromofluoromethane	Surrogate	60.7%	61.3%	60.8%	60.0%	-	-
Toluene-d8	Surrogate	117%	117%	117%	116%	-	-
4-Bromofluorobenzene	Surrogate	101%	100%	99.2%	98.1%	-	-

Hydrocarbons

F1 PHCs (C6-C10)	25 ug/L	<25	<25	<25	<25	420 ug/L	-
F2 PHCs (C10-C16)	100 ug/L	<100	<100	<100	<100	150 ug/L	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW2	MW3	MW4	MW8	Criteria:
Sample Date:	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	04-May-22 09:00	Reg 153/04 -T1 Groundwater
Sample ID:	2219333-01	2219333-02	2219333-03	2219333-04	
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	
MDL/Units					

Hydrocarbons

F3 PHCs (C16-C34)	100 ug/L	<100	<100	<100	<100	500 ug/L	-
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	<100	500 ug/L	-

Semi-Volatiles

Acenaphthene	0.05 ug/L	<0.05	<0.05	<0.05	0.22	4.1 ug/L	-
Acenaphthylene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	1 ug/L	-
Anthracene	0.01 ug/L	<0.01	<0.01	<0.01	0.12	0.1 ug/L	-
Benzo [a] anthracene	0.01 ug/L	<0.01	<0.01	<0.01	<0.01	0.2 ug/L	-
Benzo [a] pyrene	0.01 ug/L	<0.01	<0.01	<0.01	<0.01	0.01 ug/L	-
Benzo [b] fluoranthene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.1 ug/L	-
Benzo [g,h,i] perylene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.2 ug/L	-
Benzo [k] fluoranthene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.1 ug/L	-
Chrysene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.1 ug/L	-
Dibenzo [a,h] anthracene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.2 ug/L	-
Fluoranthene	0.01 ug/L	<0.01	<0.01	<0.01	0.20	0.4 ug/L	-
Fluorene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	120 ug/L	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.2 ug/L	-
1-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	2 ug/L	-
2-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	2 ug/L	-
Methylnaphthalene (1&2)	0.10 ug/L	<0.10	<0.10	<0.10	<0.10	2 ug/L	-
Naphthalene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	7 ug/L	-
Phenanthrene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.1 ug/L	-
Pyrene	0.01 ug/L	<0.01	<0.01	<0.01	<0.01	0.2 ug/L	-
2-Fluorobiphenyl	Surrogate	95.4%	94.4%	104%	101%	-	-
Terphenyl-d14	Surrogate	112%	110%	114%	116%	-	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW11	Dup A	Trip Blank		Criteria:
Sample Date:	04-May-22 09:00	04-May-22 09:00	28-Apr-22 14:11		Reg 153/04 -T1
Sample ID:	2219333-05	2219333-06	2219333-07		Groundwater
Matrix:	Ground Water	Ground Water	Water		-
MDL/Units					

General Inorganics

Cyanide, free	2 ug/L	<2	-	-	-	5 ug/L	-
pH	0.1 pH Units	7.4	-	-	-	5.00 - 9.00 pH Units	-

Anions

Chloride	1.0 mg/L	122	-	-	-	790000 ug/L	-
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Metals

Mercury	0.1 ug/L	<0.1	-	-	-	0.1 ug/L	-
Antimony	0.5 ug/L	<0.5	-	-	-	1.5 ug/L	-
Arsenic	1.0 ug/L	1.2	-	-	-	13 ug/L	-
Barium	1.0 ug/L	93.6	-	-	-	610 ug/L	-
Beryllium	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Boron	10.0 ug/L	226	-	-	-	1700 ug/L	-
Cadmium	0.2 ug/L	<0.2	-	-	-	0.5 ug/L	-
Chromium (VI)	10 ug/L	<10	-	-	-	25 ug/L	-
Chromium	1.0 ug/L	<1.0	-	-	-	11 ug/L	-
Cobalt	0.5 ug/L	<0.5	-	-	-	3.8 ug/L	-
Copper	0.5 ug/L	1.8	-	-	-	5 ug/L	-
Lead	0.2 ug/L	<0.2	-	-	-	1.9 ug/L	-
Molybdenum	0.5 ug/L	26.2	-	-	-	23 ug/L	-
Nickel	1.0 ug/L	1.8	-	-	-	14 ug/L	-
Selenium	1.0 ug/L	<1.0	-	-	-	5 ug/L	-
Silver	0.2 ug/L	<0.2	-	-	-	0.3 ug/L	-
Sodium	200 ug/L	110000	-	-	-	490000 ug/L	-
Thallium	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Uranium	0.2 ug/L	5.9	-	-	-	8.9 ug/L	-
Vanadium	0.5 ug/L	0.8	-	-	-	3.9 ug/L	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW11	Dup A	Trip Blank		Criteria:
Sample Date:	04-May-22 09:00	04-May-22 09:00	28-Apr-22 14:11		Reg 153/04 -T1
Sample ID:	2219333-05	2219333-06	2219333-07		Groundwater
Matrix:	Ground Water	Ground Water	Water		-
MDL/Units					

Metals

Zinc	5.0 ug/L	<5.0	-	-	-	160 ug/L	-
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Volatiles

Acetone	5.0 ug/L	<5.0	<5.0	<5.0	-	2700 ug/L	-
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
Bromodichloromethane	0.5 ug/L	<0.5	<0.5	<0.5	-	2 ug/L	-
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	-	5 ug/L	-
Bromomethane	0.5 ug/L	<0.5	<0.5	<0.5	-	0.89 ug/L	-
Carbon Tetrachloride	0.2 ug/L	<0.2	<0.2	<0.2	-	0.2 ug/L	-
Chlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	-	2 ug/L	-
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	-	2 ug/L	-
Dichlorodifluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	-	590 ug/L	-
1,2-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
1,3-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
1,4-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
cis-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-	1.6 ug/L	-
trans-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-	1.6 ug/L	-
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
cis-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	-	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	-	-	-
1,3-Dichloropropene, total	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW11	Dup A	Trip Blank		Criteria:
Sample Date:	04-May-22 09:00	04-May-22 09:00	28-Apr-22 14:11		Reg 153/04 -T1
Sample ID:	2219333-05	2219333-06	2219333-07		Groundwater
Matrix:	Ground Water	Ground Water	Water		-
MDL/Units					

Volatiles

Ethylene dibromide (dibromoethane,	0.2 ug/L	<0.2	<0.2	<0.2	-	0.2 ug/L	-
Hexane	1.0 ug/L	<1.0	<1.0	<1.0	-	5 ug/L	-
Methyl Ethyl Ketone (2-Butanone)	5.0 ug/L	<5.0	<5.0	<5.0	-	400 ug/L	-
Methyl Isobutyl Ketone	5.0 ug/L	<5.0	<5.0	<5.0	-	640 ug/L	-
Methyl tert-butyl ether	2.0 ug/L	<2.0	<2.0	<2.0	-	15 ug/L	-
Methylene Chloride	5.0 ug/L	<5.0	<5.0	<5.0	-	5 ug/L	-
Styrene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-	1.1 ug/L	-
1,1,2,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	-	0.8 ug/L	-
1,1,1-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
1,1,2-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
Trichloroethylene	0.5 ug/L	1.0	<0.5	<0.5	-	0.5 ug/L	-
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	<1.0	-	150 ug/L	-
Vinyl chloride	0.5 ug/L	<0.5	<0.5	<0.5	-	0.5 ug/L	-
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	<0.5	-	-	-
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	-	-	-
Xylenes, total	0.5 ug/L	<0.5	<0.5	<0.5	-	72 ug/L	-
Toluene-d8	Surrogate	117%	116%	114%	-	-	-
4-Bromofluorobenzene	Surrogate	97.6%	95.2%	101%	-	-	-
Dibromofluoromethane	Surrogate	59.1%	58.9%	68.2%	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	25 ug/L	<25	<25	-	-	420 ug/L	-
F2 PHCs (C10-C16)	100 ug/L	<100	<100	-	-	150 ug/L	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

	Client ID:	MW11	Dup A	Trip Blank		Criteria:
	Sample Date:	04-May-22 09:00	04-May-22 09:00	28-Apr-22 14:11		Reg 153/04 -T1
	Sample ID:	2219333-05	2219333-06	2219333-07		Groundwater
	Matrix:	Ground Water	Ground Water	Water		-
	MDL/Units					

Hydrocarbons

F3 PHCs (C16-C34)	100 ug/L	<100	<100	-	-	500 ug/L	-
F4 PHCs (C34-C50)	100 ug/L	<100	<100	-	-	500 ug/L	-

Semi-Volatiles

Acenaphthene	0.05 ug/L	<0.05	-	-	-	4.1 ug/L	-
Acenaphthylene	0.05 ug/L	<0.05	-	-	-	1 ug/L	-
Anthracene	0.01 ug/L	<0.01	-	-	-	0.1 ug/L	-
Benzo [a] anthracene	0.01 ug/L	<0.01	-	-	-	0.2 ug/L	-
Benzo [a] pyrene	0.01 ug/L	<0.01	-	-	-	0.01 ug/L	-
Benzo [b] fluoranthene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Benzo [g,h,i] perylene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
Benzo [k] fluoranthene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Chrysene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Dibenzo [a,h] anthracene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
Fluoranthene	0.01 ug/L	<0.01	-	-	-	0.4 ug/L	-
Fluorene	0.05 ug/L	<0.05	-	-	-	120 ug/L	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
1-Methylnaphthalene	0.05 ug/L	<0.05	-	-	-	2 ug/L	-
2-Methylnaphthalene	0.05 ug/L	<0.05	-	-	-	2 ug/L	-
Methylnaphthalene (1&2)	0.10 ug/L	<0.10	-	-	-	2 ug/L	-
Naphthalene	0.05 ug/L	<0.05	-	-	-	7 ug/L	-
Phenanthrene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Pyrene	0.01 ug/L	<0.01	-	-	-	0.2 ug/L	-
2-Fluorobiphenyl	Surrogate	98.1%	-	-	-	-	-
Terphenyl-d14	Surrogate	117%	-	-	-	-	-

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions								
Chloride	ND	1.0	mg/L					
General Inorganics								
Cyanide, free	ND	2	ug/L					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	25	ug/L					
F2 PHCs (C10-C16)	ND	100	ug/L					
F3 PHCs (C16-C34)	ND	100	ug/L					
F4 PHCs (C34-C50)	ND	100	ug/L					
Metals								
Mercury	ND	0.1	ug/L					
Antimony	ND	0.5	ug/L					
Arsenic	ND	1.0	ug/L					
Barium	ND	1.0	ug/L					
Beryllium	ND	0.5	ug/L					
Boron	ND	10.0	ug/L					
Cadmium	ND	0.2	ug/L					
Chromium (VI)	ND	10	ug/L					
Chromium	ND	1.0	ug/L					
Cobalt	ND	0.5	ug/L					
Copper	ND	0.5	ug/L					
Lead	ND	0.2	ug/L					
Molybdenum	ND	0.5	ug/L					
Nickel	ND	1.0	ug/L					
Selenium	ND	1.0	ug/L					
Silver	ND	0.2	ug/L					
Sodium	ND	200	ug/L					
Thallium	ND	0.5	ug/L					
Uranium	ND	0.2	ug/L					
Vanadium	ND	0.5	ug/L					
Zinc	ND	5.0	ug/L					
Semi-Volatiles								
Acenaphthene	ND	0.05	ug/L					

Certificate of Analysis

Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthylene	ND	0.05	ug/L					
Anthracene	ND	0.01	ug/L					
Benzo [a] anthracene	ND	0.01	ug/L					
Benzo [a] pyrene	ND	0.01	ug/L					
Benzo [b] fluoranthene	ND	0.05	ug/L					
Benzo [g,h,i] perylene	ND	0.05	ug/L					
Benzo [k] fluoranthene	ND	0.05	ug/L					
Chrysene	ND	0.05	ug/L					
Dibenzo [a,h] anthracene	ND	0.05	ug/L					
Fluoranthene	ND	0.01	ug/L					
Fluorene	ND	0.05	ug/L					
Indeno [1,2,3-cd] pyrene	ND	0.05	ug/L					
1-Methylnaphthalene	ND	0.05	ug/L					
2-Methylnaphthalene	ND	0.05	ug/L					
Methylnaphthalene (1&2)	ND	0.10	ug/L					
Naphthalene	ND	0.05	ug/L					
Phenanthrene	ND	0.05	ug/L					
Pyrene	ND	0.01	ug/L					
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>9.09</i>		<i>ug/L</i>	<i>90.9</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>12.0</i>		<i>ug/L</i>	<i>120</i>	<i>50-140</i>			
Volatiles								
Acetone	ND	5.0	ug/L					
Benzene	ND	0.5	ug/L					
Bromodichloromethane	ND	0.5	ug/L					
Bromoform	ND	0.5	ug/L					
Bromomethane	ND	0.5	ug/L					
Carbon Tetrachloride	ND	0.2	ug/L					
Chlorobenzene	ND	0.5	ug/L					
Chloroform	ND	0.5	ug/L					
Dibromochloromethane	ND	0.5	ug/L					
Dichlorodifluoromethane	ND	1.0	ug/L					
1,2-Dichlorobenzene	ND	0.5	ug/L					

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Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
1,3-Dichlorobenzene	ND	0.5	ug/L					
1,4-Dichlorobenzene	ND	0.5	ug/L					
1,1-Dichloroethane	ND	0.5	ug/L					
1,2-Dichloroethane	ND	0.5	ug/L					
1,1-Dichloroethylene	ND	0.5	ug/L					
cis-1,2-Dichloroethylene	ND	0.5	ug/L					
trans-1,2-Dichloroethylene	ND	0.5	ug/L					
1,2-Dichloropropane	ND	0.5	ug/L					
cis-1,3-Dichloropropylene	ND	0.5	ug/L					
trans-1,3-Dichloropropylene	ND	0.5	ug/L					
1,3-Dichloropropene, total	ND	0.5	ug/L					
Ethylbenzene	ND	0.5	ug/L					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.2	ug/L					
Hexane	ND	1.0	ug/L					
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L					
Methyl Isobutyl Ketone	ND	5.0	ug/L					
Methyl tert-butyl ether	ND	2.0	ug/L					
Methylene Chloride	ND	5.0	ug/L					
Styrene	ND	0.5	ug/L					
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L					
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L					
Tetrachloroethylene	ND	0.5	ug/L					
Toluene	ND	0.5	ug/L					
1,1,1-Trichloroethane	ND	0.5	ug/L					
1,1,2-Trichloroethane	ND	0.5	ug/L					
Trichloroethylene	ND	0.5	ug/L					
Trichlorofluoromethane	ND	1.0	ug/L					
Vinyl chloride	ND	0.5	ug/L					
m,p-Xylenes	ND	0.5	ug/L					
o-Xylene	ND	0.5	ug/L					
Xylenes, total	ND	0.5	ug/L					
Surrogate: 4-Bromofluorobenzene	83.6		ug/L	104	50-140			

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Client: Landtek Limited

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Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	58.5		ug/L	73.2	50-140			
Surrogate: Toluene-d8	90.1		ug/L	113	50-140			

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Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	43.4	1.0	mg/L	42.5			2.2	10	
General Inorganics									
Cyanide, free	ND	2	ug/L	ND			NC	20	
pH	7.2	0.1	pH Units	7.2			0.6	10	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	25	ug/L	ND			NC	30	
Metals									
Mercury	ND	0.1	ug/L	ND			NC	20	
Antimony	2.4	0.5	ug/L	ND			NC	20	
Arsenic	ND	1.0	ug/L	ND			NC	20	
Barium	51.6	1.0	ug/L	51.9			0.7	20	
Beryllium	ND	0.5	ug/L	ND			NC	20	
Boron	93.4	10.0	ug/L	91.9			1.6	20	
Cadmium	ND	0.2	ug/L	ND			NC	20	
Chromium (VI)	ND	10	ug/L	ND			NC	20	
Chromium	ND	1.0	ug/L	ND			NC	20	
Cobalt	ND	0.5	ug/L	ND			NC	20	
Copper	0.6	0.5	ug/L	0.8			NC	20	
Lead	ND	0.2	ug/L	ND			NC	20	
Molybdenum	4.2	0.5	ug/L	3.9			6.6	20	
Nickel	ND	1.0	ug/L	ND			NC	20	
Selenium	2.0	1.0	ug/L	1.6			NC	20	
Silver	ND	0.2	ug/L	ND			NC	20	
Sodium	50100	200	ug/L	50600			1.0	20	
Thallium	ND	0.5	ug/L	ND			NC	20	
Uranium	8.2	0.2	ug/L	7.8			5.8	20	
Vanadium	0.8	0.5	ug/L	0.8			1.9	20	
Zinc	ND	5.0	ug/L	ND			NC	20	
Volatiles									
Acetone	ND	5.0	ug/L	ND			NC	30	

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Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzene	ND	0.5	ug/L	ND			NC	30	
Bromodichloromethane	ND	0.5	ug/L	ND			NC	30	
Bromoform	ND	0.5	ug/L	ND			NC	30	
Bromomethane	ND	0.5	ug/L	ND			NC	30	
Carbon Tetrachloride	ND	0.2	ug/L	ND			NC	30	
Chlorobenzene	ND	0.5	ug/L	ND			NC	30	
Chloroform	ND	0.5	ug/L	ND			NC	30	
Dibromochloromethane	ND	0.5	ug/L	ND			NC	30	
Dichlorodifluoromethane	ND	1.0	ug/L	ND			NC	30	
1,2-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,3-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,4-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
cis-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
trans-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloropropane	ND	0.5	ug/L	ND			NC	30	
cis-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
Ethylbenzene	ND	0.5	ug/L	ND			NC	30	
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.2	ug/L	ND			NC	30	
Hexane	ND	1.0	ug/L	ND			NC	30	
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	ND			NC	30	
Methyl Isobutyl Ketone	ND	5.0	ug/L	ND			NC	30	
Methyl tert-butyl ether	ND	2.0	ug/L	ND			NC	30	
Methylene Chloride	ND	5.0	ug/L	ND			NC	30	
Styrene	ND	0.5	ug/L	ND			NC	30	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
Tetrachloroethylene	ND	0.5	ug/L	ND			NC	30	

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Client: Landtek Limited

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Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Toluene	ND	0.5	ug/L	ND			NC	30	
1,1,1-Trichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2-Trichloroethane	ND	0.5	ug/L	ND			NC	30	
Trichloroethylene	ND	0.5	ug/L	ND			NC	30	
Trichlorofluoromethane	ND	1.0	ug/L	ND			NC	30	
Vinyl chloride	ND	0.5	ug/L	ND			NC	30	
m,p-Xylenes	ND	0.5	ug/L	ND			NC	30	
o-Xylene	ND	0.5	ug/L	ND			NC	30	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>87.5</i>		<i>ug/L</i>		<i>109</i>	<i>50-140</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>62.8</i>		<i>ug/L</i>		<i>78.6</i>	<i>50-140</i>			
<i>Surrogate: Toluene-d8</i>	<i>90.5</i>		<i>ug/L</i>		<i>113</i>	<i>50-140</i>			

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Report Date: 12-May-2022

Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	51.5	1.0	mg/L	42.5	90.3	77-123			
General Inorganics									
Cyanide, free	27.8	2	ug/L	ND	124	70-130			
Hydrocarbons									
F1 PHCs (C6-C10)	636	25	ug/L	ND	90.0	68-117			
F2 PHCs (C10-C16)	1840	100	ug/L	ND	111	60-140			
F3 PHCs (C16-C34)	3980	100	ug/L	ND	107	60-140			
F4 PHCs (C34-C50)	2800	100	ug/L	ND	105	60-140			
Metals									
Mercury	3.03	0.1	ug/L	ND	101	70-130			
Antimony	43.6	0.5	ug/L	ND	87.3	70-130			
Arsenic	60.1	1.0	ug/L	ND	120	70-130			
Barium	105	1.0	ug/L	51.9	106	70-130			
Beryllium	59.3	0.5	ug/L	ND	119	70-130			
Boron	134	10.0	ug/L	91.9	84.8	70-130			
Cadmium	54.0	0.2	ug/L	ND	108	70-130			
Chromium (VI)	207	10	ug/L	ND	104	70-130			
Chromium	54.6	1.0	ug/L	ND	109	70-130			
Cobalt	52.3	0.5	ug/L	ND	105	70-130			
Copper	50.8	0.5	ug/L	0.8	100	70-130			
Lead	51.5	0.2	ug/L	ND	103	70-130			
Molybdenum	56.5	0.5	ug/L	3.9	105	70-130			
Nickel	51.6	1.0	ug/L	ND	103	70-130			
Selenium	62.2	1.0	ug/L	1.6	121	70-130			
Silver	43.0	0.2	ug/L	ND	86.1	70-130			
Sodium	46100	200	ug/L	50600	-450	70-130			QM-4X
Thallium	51.9	0.5	ug/L	ND	104	70-130			
Uranium	63.1	0.2	ug/L	7.8	111	70-130			
Vanadium	56.6	0.5	ug/L	0.8	112	70-130			
Zinc	57.6	5.0	ug/L	ND	115	70-130			

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Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Semi-Volatiles									
Acenaphthene	9.94	0.05	ug/L	ND	99.4	50-140			
Acenaphthylene	8.85	0.05	ug/L	ND	88.5	50-140			
Anthracene	9.06	0.01	ug/L	ND	90.6	50-140			
Benzo [a] anthracene	9.43	0.01	ug/L	ND	94.3	50-140			
Benzo [a] pyrene	9.09	0.01	ug/L	ND	90.9	50-140			
Benzo [b] fluoranthene	12.3	0.05	ug/L	ND	123	50-140			
Benzo [g,h,i] perylene	11.4	0.05	ug/L	ND	114	50-140			
Benzo [k] fluoranthene	12.5	0.05	ug/L	ND	125	50-140			
Chrysene	10.4	0.05	ug/L	ND	104	50-140			
Dibenzo [a,h] anthracene	11.4	0.05	ug/L	ND	114	50-140			
Fluoranthene	9.88	0.01	ug/L	ND	98.8	50-140			
Fluorene	9.88	0.05	ug/L	ND	98.8	50-140			
Indeno [1,2,3-cd] pyrene	10.8	0.05	ug/L	ND	108	50-140			
1-Methylnaphthalene	9.24	0.05	ug/L	ND	92.4	50-140			
2-Methylnaphthalene	9.66	0.05	ug/L	ND	96.6	50-140			
Naphthalene	9.64	0.05	ug/L	ND	96.4	50-140			
Phenanthrene	9.86	0.05	ug/L	ND	98.6	50-140			
Pyrene	10.1	0.01	ug/L	ND	101	50-140			
Surrogate: 2-Fluorobiphenyl	10.9		ug/L		109	50-140			
Surrogate: Terphenyl-d14	10.7		ug/L		107	50-140			
Volatiles									
Acetone	118	5.0	ug/L	ND	118	50-140			
Benzene	43.8	0.5	ug/L	ND	109	50-140			
Bromodichloromethane	42.5	0.5	ug/L	ND	106	50-140			
Bromoform	41.7	0.5	ug/L	ND	104	50-140			
Bromomethane	46.6	0.5	ug/L	ND	116	50-140			
Carbon Tetrachloride	42.6	0.2	ug/L	ND	106	50-140			
Chlorobenzene	43.0	0.5	ug/L	ND	107	50-140			
Chloroform	47.3	0.5	ug/L	ND	118	50-140			
Dibromochloromethane	41.9	0.5	ug/L	ND	105	50-140			

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Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Dichlorodifluoromethane	35.7	1.0	ug/L	ND	89.3	50-140			
1,2-Dichlorobenzene	43.8	0.5	ug/L	ND	110	50-140			
1,3-Dichlorobenzene	44.1	0.5	ug/L	ND	110	50-140			
1,4-Dichlorobenzene	43.5	0.5	ug/L	ND	108	50-140			
1,1-Dichloroethane	45.5	0.5	ug/L	ND	114	50-140			
1,2-Dichloroethane	43.4	0.5	ug/L	ND	108	50-140			
1,1-Dichloroethylene	42.9	0.5	ug/L	ND	107	50-140			
cis-1,2-Dichloroethylene	43.8	0.5	ug/L	ND	109	50-140			
trans-1,2-Dichloroethylene	44.5	0.5	ug/L	ND	111	50-140			
1,2-Dichloropropane	44.0	0.5	ug/L	ND	110	50-140			
cis-1,3-Dichloropropylene	43.9	0.5	ug/L	ND	110	50-140			
trans-1,3-Dichloropropylene	43.8	0.5	ug/L	ND	109	50-140			
Ethylbenzene	42.2	0.5	ug/L	ND	105	50-140			
Ethylene dibromide (dibromoethane, 1,2-)	43.5	0.2	ug/L	ND	108	50-140			
Hexane	44.3	1.0	ug/L	ND	111	50-140			
Methyl Ethyl Ketone (2-Butanone)	113	5.0	ug/L	ND	113	50-140			
Methyl Isobutyl Ketone	123	5.0	ug/L	ND	123	50-140			
Methyl tert-butyl ether	114	2.0	ug/L	ND	114	50-140			
Methylene Chloride	41.0	5.0	ug/L	ND	102	50-140			
Styrene	43.7	0.5	ug/L	ND	108	50-140			
1,1,1,2-Tetrachloroethane	44.2	0.5	ug/L	ND	111	50-140			
1,1,2,2-Tetrachloroethane	45.2	0.5	ug/L	ND	112	50-140			
Tetrachloroethylene	43.2	0.5	ug/L	ND	107	50-140			
Toluene	45.1	0.5	ug/L	ND	113	50-140			
1,1,1-Trichloroethane	44.2	0.5	ug/L	ND	110	50-140			
1,1,2-Trichloroethane	44.1	0.5	ug/L	ND	110	50-140			
Trichloroethylene	44.1	0.5	ug/L	ND	110	50-140			
Trichlorofluoromethane	44.3	1.0	ug/L	ND	111	50-140			
Vinyl chloride	37.5	0.5	ug/L	ND	93.8	50-140			
m,p-Xylenes	86.4	0.5	ug/L	ND	108	50-140			
o-Xylene	43.5	0.5	ug/L	ND	108	50-140			

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Client: Landtek Limited

Order Date: 4-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	84.8		ug/L		106	50-140			
Surrogate: Dibromofluoromethane	110		ug/L		138	50-140			
Surrogate: Toluene-d8	82.2		ug/L		103	50-140			

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Order Date: 4-May-2022

Project Description: 22122

Qualifier Notes:

QC Qualifiers :

QM-4X: The spike recovery was outside of QC acceptance limits due to elevated analyte concentration.

Sample Data Revisions:

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Client Name: Landtek
Contact Name: Rachel Hlywka
Address: 205 Nebo Rd. Hamilton
Telephone: _____

Project Ref: 22122
Quote #: _____
PO #: 22122
E-mail: nicole@Landtek.ca
Rachel@Landtek.ca

Page 1 of 1
Turnaround Time
 1 day 3 day
 2 day Regular
Date Required: _____

REG 153/04 REG 406/19
 Table 1 Res/Park Med/Fine REG 558 PWQO
 Table 2 Ind/Comm Coarse CCME MISA
 Table 3 Agri/Other SU - Sani SU - Storm
 Table _____
Mun: _____
For RSC: Yes No
 Other: _____

Matrix Type: S (Soil/Sed.) GW (Ground Water)
SW (Surface Water) SS (Storm/Sanitary Sewer)
P (Paint) A (Air) O (Other)

Required Analysis

Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHC/VOCs	PAH	Metals /CP	CrVI	Hg	B(HWS)	VOCs
				Date	Time							
1 MW2	GW			May 4. 22		X	X	X	X	X	X	
2 MW3	GW					X	X	X	X	X	X	
3 MW4	GW					X	X	X	X	X	X	
4 MW8	GW					X	X	X	X	X	X	
5 MW11	GW					X	X	X	X	X	X	
6 DvPA	GW					X	X	X	X	X	X	
7 Trip Blank	O		1								X	
8												
9												
10												

Comments: _____
Method of Delivery: Walk In
Relinquished By (Sign): Rachel Hlywka
Received By Driver/Depot: _____
Received at Lab: C-PLU
Verified By: C-PLU
Relinquished By (Print): Rachel Hlywka
Date/Time: May 4/22 1:30
Date/Time: May 4/22 13:31
Date/Time: May 4/22 14:22
Temperature: _____ °C
Temperature: 12.4 °C
pH Verified: By: BB

Certificate of Analysis

Landtek Limited

205 Nebo Road, Unit 3
Hamilton, ON L8W 2E1
Attn: Rachel Hlywka

Client PO: 22122

Project: 22122

Custody: 65558

Report Date: 18-May-2022

Order Date: 10-May-2022

Order #: 2220167

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2220167-01	MW9

Approved By:



Milan Ralitsch, PhD

Senior Technical Manager

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Anions	EPA 300.1 - IC	13-May-22	13-May-22
Chromium, hexavalent - water	MOE E3056 - colourimetric	10-May-22	11-May-22
Cyanide, free	MOE E3015 - Auto Colour	13-May-22	13-May-22
Mercury by CVAA	EPA 245.2 - Cold Vapour AA	13-May-22	13-May-22
Metals, ICP-MS	EPA 200.8 - ICP-MS	18-May-22	18-May-22
pH	EPA 150.1 - pH probe @25 °C	16-May-22	16-May-22
PHC F1	CWS Tier 1 - P&T GC-FID	10-May-22	11-May-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	11-May-22	11-May-22
REG 153: PAHs by GC-MS	EPA 625 - GC-MS, extraction	16-May-22	17-May-22
REG 153: VOCs by P&T GC-MS	EPA 624 - P&T GC-MS	11-May-22	11-May-22

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T1 Groundwater	-
MW9	Trichloroethylene	0.5 ug/L	1.7	0.5 ug/L	-

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9	-	-	-	Criteria:
Sample Date:	10-May-22 09:00	-	-	-	Reg 153/04 -T1
Sample ID:	2220167-01	-	-	-	Groundwater
Matrix:	Ground Water	-	-	-	-
MDL/Units					

General Inorganics

Cyanide, free	2 ug/L	<2	-	-	-	5 ug/L	-
pH	0.1 pH Units	7.7	-	-	-	5.00 - 9.00 pH Units	-

Anions

Chloride	1.0 mg/L	63.2	-	-	-	790000 ug/L	-
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Metals

Mercury	0.1 ug/L	<0.1	-	-	-	0.1 ug/L	-
Antimony	0.5 ug/L	1.5	-	-	-	1.5 ug/L	-
Arsenic	1 ug/L	<1	-	-	-	13 ug/L	-
Barium	1 ug/L	100	-	-	-	610 ug/L	-
Beryllium	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Boron	10 ug/L	241	-	-	-	1700 ug/L	-
Cadmium	0.1 ug/L	<0.1	-	-	-	0.5 ug/L	-
Chromium	1 ug/L	<1	-	-	-	11 ug/L	-
Chromium (VI)	10 ug/L	<10	-	-	-	25 ug/L	-
Cobalt	0.5 ug/L	<0.5	-	-	-	3.8 ug/L	-
Copper	0.5 ug/L	1.0	-	-	-	5 ug/L	-
Lead	0.1 ug/L	<0.1	-	-	-	1.9 ug/L	-
Molybdenum	0.5 ug/L	18.9	-	-	-	23 ug/L	-
Nickel	1 ug/L	<1	-	-	-	14 ug/L	-
Selenium	1 ug/L	<1	-	-	-	5 ug/L	-
Silver	0.1 ug/L	0.2	-	-	-	0.3 ug/L	-
Sodium	200 ug/L	39200	-	-	-	490000 ug/L	-
Thallium	0.1 ug/L	<0.1	-	-	-	0.5 ug/L	-
Uranium	0.1 ug/L	2.3	-	-	-	8.9 ug/L	-
Vanadium	0.5 ug/L	0.9	-	-	-	3.9 ug/L	-

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9	-	-	-	Criteria: Reg 153/04 -T1 Groundwater
Sample Date:	10-May-22 09:00	-	-	-	
Sample ID:	2220167-01	-	-	-	
Matrix:	Ground Water	-	-	-	
MDL/Units					

Metals

Zinc	5 ug/L	<5	-	-	-	160 ug/L	-
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Volatiles

Acetone	5.0 ug/L	<5.0	-	-	-	2700 ug/L	-
Benzene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Bromodichloromethane	0.5 ug/L	<0.5	-	-	-	2 ug/L	-
Bromoform	0.5 ug/L	<0.5	-	-	-	5 ug/L	-
Bromomethane	0.5 ug/L	<0.5	-	-	-	0.89 ug/L	-
Carbon Tetrachloride	0.2 ug/L	<0.2	-	-	-	0.2 ug/L	-
Chlorobenzene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Chloroform	0.5 ug/L	<0.5	-	-	-	2 ug/L	-
Dibromochloromethane	0.5 ug/L	<0.5	-	-	-	2 ug/L	-
Dichlorodifluoromethane	1.0 ug/L	<1.0	-	-	-	590 ug/L	-
1,2-Dichlorobenzene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
1,3-Dichlorobenzene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
1,4-Dichlorobenzene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
1,1-Dichloroethane	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
1,2-Dichloroethane	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
cis-1,2-Dichloroethylene	0.5 ug/L	<0.5	-	-	-	1.6 ug/L	-
trans-1,2-Dichloroethylene	0.5 ug/L	<0.5	-	-	-	1.6 ug/L	-
1,2-Dichloropropane	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
cis-1,3-Dichloropropylene	0.5 ug/L	<0.5	-	-	-	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	-	-	-	-	-
1,3-Dichloropropene, total	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Ethylene dibromide (dibromoethane,	0.2 ug/L	<0.2	-	-	-	0.2 ug/L	-

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9	-	-	-	Criteria:
Sample Date:	10-May-22 09:00	-	-	-	Reg 153/04 -T1
Sample ID:	2220167-01	-	-	-	Groundwater
Matrix:	Ground Water	-	-	-	-
MDL/Units					

Volatiles

Ethylbenzene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Hexane	1.0 ug/L	<1.0	-	-	-	5 ug/L	-
Methyl Ethyl Ketone (2-Butanone)	5.0 ug/L	<5.0	-	-	-	400 ug/L	-
Methyl Isobutyl Ketone	5.0 ug/L	<5.0	-	-	-	640 ug/L	-
Methyl tert-butyl ether	2.0 ug/L	<2.0	-	-	-	15 ug/L	-
Methylene Chloride	5.0 ug/L	<5.0	-	-	-	5 ug/L	-
Styrene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	-	-	-	1.1 ug/L	-
1,1,2,2-Tetrachloroethane	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Tetrachloroethylene	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Toluene	0.5 ug/L	<0.5	-	-	-	0.8 ug/L	-
1,1,1-Trichloroethane	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
1,1,2-Trichloroethane	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
Trichloroethylene	0.5 ug/L	1.7	-	-	-	0.5 ug/L	-
Trichlorofluoromethane	1.0 ug/L	<1.0	-	-	-	150 ug/L	-
Vinyl chloride	0.5 ug/L	<0.5	-	-	-	0.5 ug/L	-
m,p-Xylenes	0.5 ug/L	<0.5	-	-	-	-	-
o-Xylene	0.5 ug/L	<0.5	-	-	-	-	-
Xylenes, total	0.5 ug/L	<0.5	-	-	-	72 ug/L	-
Toluene-d8	Surrogate	116%	-	-	-	-	-
Dibromofluoromethane	Surrogate	65.4%	-	-	-	-	-
4-Bromofluorobenzene	Surrogate	101%	-	-	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	25 ug/L	<25	-	-	-	420 ug/L	-
F2 PHCs (C10-C16)	100 ug/L	<100	-	-	-	150 ug/L	-

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Client ID:	MW9	-	-	-	Criteria:
Sample Date:	10-May-22 09:00	-	-	-	Reg 153/04 -T1
Sample ID:	2220167-01	-	-	-	Groundwater
Matrix:	Ground Water	-	-	-	-
MDL/Units					

Hydrocarbons

F3 PHCs (C16-C34)	100 ug/L	<100	-	-	-	500 ug/L	-
F4 PHCs (C34-C50)	100 ug/L	<100	-	-	-	500 ug/L	-

Semi-Volatiles

Acenaphthene	0.05 ug/L	<0.05	-	-	-	4.1 ug/L	-
Acenaphthylene	0.05 ug/L	<0.05	-	-	-	1 ug/L	-
Anthracene	0.01 ug/L	<0.01	-	-	-	0.1 ug/L	-
Benzo [a] anthracene	0.01 ug/L	<0.01	-	-	-	0.2 ug/L	-
Benzo [a] pyrene	0.01 ug/L	<0.01	-	-	-	0.01 ug/L	-
Benzo [b] fluoranthene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Benzo [g,h,i] perylene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
Benzo [k] fluoranthene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Chrysene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Dibenzo [a,h] anthracene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
Fluoranthene	0.01 ug/L	<0.01	-	-	-	0.4 ug/L	-
Fluorene	0.05 ug/L	<0.05	-	-	-	120 ug/L	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
1-Methylnaphthalene	0.05 ug/L	<0.05	-	-	-	2 ug/L	-
2-Methylnaphthalene	0.05 ug/L	<0.05	-	-	-	2 ug/L	-
Methylnaphthalene (1&2)	0.10 ug/L	<0.10	-	-	-	2 ug/L	-
Naphthalene	0.05 ug/L	0.48	-	-	-	7 ug/L	-
Phenanthrene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Pyrene	0.01 ug/L	<0.01	-	-	-	0.2 ug/L	-
2-Fluorobiphenyl	Surrogate	111%	-	-	-	-	-
Terphenyl-d14	Surrogate	107%	-	-	-	-	-

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions								
Chloride	ND	1.0	mg/L					
General Inorganics								
Cyanide, free	ND	2	ug/L					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	25	ug/L					
F2 PHCs (C10-C16)	ND	100	ug/L					
F3 PHCs (C16-C34)	ND	100	ug/L					
F4 PHCs (C34-C50)	ND	100	ug/L					
Metals								
Mercury	ND	0.1	ug/L					
Antimony	ND	0.5	ug/L					
Arsenic	ND	1	ug/L					
Barium	ND	1	ug/L					
Beryllium	ND	0.5	ug/L					
Boron	ND	10	ug/L					
Cadmium	ND	0.1	ug/L					
Chromium (VI)	ND	10	ug/L					
Chromium	ND	1	ug/L					
Cobalt	ND	0.5	ug/L					
Copper	ND	0.5	ug/L					
Lead	ND	0.1	ug/L					
Molybdenum	ND	0.5	ug/L					
Nickel	ND	1	ug/L					
Selenium	ND	1	ug/L					
Silver	ND	0.1	ug/L					
Sodium	ND	200	ug/L					
Thallium	ND	0.1	ug/L					
Uranium	ND	0.1	ug/L					
Vanadium	ND	0.5	ug/L					
Zinc	ND	5	ug/L					
Semi-Volatiles								
Acenaphthene	ND	0.05	ug/L					

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthylene	ND	0.05	ug/L					
Anthracene	ND	0.01	ug/L					
Benzo [a] anthracene	ND	0.01	ug/L					
Benzo [a] pyrene	ND	0.01	ug/L					
Benzo [b] fluoranthene	ND	0.05	ug/L					
Benzo [g,h,i] perylene	ND	0.05	ug/L					
Benzo [k] fluoranthene	ND	0.05	ug/L					
Chrysene	ND	0.05	ug/L					
Dibenzo [a,h] anthracene	ND	0.05	ug/L					
Fluoranthene	ND	0.01	ug/L					
Fluorene	ND	0.05	ug/L					
Indeno [1,2,3-cd] pyrene	ND	0.05	ug/L					
1-Methylnaphthalene	ND	0.05	ug/L					
2-Methylnaphthalene	ND	0.05	ug/L					
Methylnaphthalene (1&2)	ND	0.10	ug/L					
Naphthalene	ND	0.05	ug/L					
Phenanthrene	ND	0.05	ug/L					
Pyrene	ND	0.01	ug/L					
Surrogate: 2-Fluorobiphenyl	10.3		ug/L	103	50-140			
Surrogate: Terphenyl-d14	10.2		ug/L	102	50-140			
Volatiles								
Acetone	ND	5.0	ug/L					
Benzene	ND	0.5	ug/L					
Bromodichloromethane	ND	0.5	ug/L					
Bromoform	ND	0.5	ug/L					
Bromomethane	ND	0.5	ug/L					
Carbon Tetrachloride	ND	0.2	ug/L					
Chlorobenzene	ND	0.5	ug/L					
Chloroform	ND	0.5	ug/L					
Dibromochloromethane	ND	0.5	ug/L					
Dichlorodifluoromethane	ND	1.0	ug/L					
1,2-Dichlorobenzene	ND	0.5	ug/L					

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
1,3-Dichlorobenzene	ND	0.5	ug/L					
1,4-Dichlorobenzene	ND	0.5	ug/L					
1,1-Dichloroethane	ND	0.5	ug/L					
1,2-Dichloroethane	ND	0.5	ug/L					
1,1-Dichloroethylene	ND	0.5	ug/L					
cis-1,2-Dichloroethylene	ND	0.5	ug/L					
trans-1,2-Dichloroethylene	ND	0.5	ug/L					
1,2-Dichloropropane	ND	0.5	ug/L					
cis-1,3-Dichloropropylene	ND	0.5	ug/L					
trans-1,3-Dichloropropylene	ND	0.5	ug/L					
1,3-Dichloropropene, total	ND	0.5	ug/L					
Ethylbenzene	ND	0.5	ug/L					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.2	ug/L					
Hexane	ND	1.0	ug/L					
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L					
Methyl Isobutyl Ketone	ND	5.0	ug/L					
Methyl tert-butyl ether	ND	2.0	ug/L					
Methylene Chloride	ND	5.0	ug/L					
Styrene	ND	0.5	ug/L					
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L					
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L					
Tetrachloroethylene	ND	0.5	ug/L					
Toluene	ND	0.5	ug/L					
1,1,1-Trichloroethane	ND	0.5	ug/L					
1,1,2-Trichloroethane	ND	0.5	ug/L					
Trichloroethylene	ND	0.5	ug/L					
Trichlorofluoromethane	ND	1.0	ug/L					
Vinyl chloride	ND	0.5	ug/L					
m,p-Xylenes	ND	0.5	ug/L					
o-Xylene	ND	0.5	ug/L					
Xylenes, total	ND	0.5	ug/L					
Surrogate: 4-Bromofluorobenzene	78.8		ug/L	98.5	50-140			

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	53.3		ug/L	66.6	50-140			
Surrogate: Toluene-d8	91.5		ug/L	114	50-140			

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	63.1	1.0	mg/L	63.2			0.2	10	
General Inorganics									
Cyanide, free	ND	2	ug/L	ND			NC	20	
pH	7.7	0.1	pH Units	7.7			0.3	10	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	25	ug/L	ND			NC	30	
Metals									
Mercury	ND	0.1	ug/L	ND			NC	20	
Antimony	0.53	0.5	ug/L				200.0	20	
Arsenic	ND	1	ug/L	ND			NC	20	
Barium	101	1	ug/L	99.9			0.9	20	
Beryllium	ND	0.5	ug/L				NC	20	
Boron	245	10	ug/L	241			1.5	20	
Cadmium	ND	0.1	ug/L				NC	20	
Chromium (VI)	ND	10	ug/L	ND			NC	20	
Chromium	ND	1	ug/L				NC	20	
Cobalt	ND	0.5	ug/L	ND			NC	20	
Copper	5.74	0.5	ug/L				200.0	20	
Lead	ND	0.1	ug/L				NC	20	
Molybdenum	17.8	0.5	ug/L	18.9			6.0	20	
Nickel	ND	1	ug/L	ND			NC	20	
Selenium	ND	1	ug/L				NC	20	
Silver	ND	0.1	ug/L				NC	20	
Sodium	38000	200	ug/L	39200			3.1	20	
Thallium	ND	0.1	ug/L	ND			NC	20	
Uranium	2.1	0.1	ug/L	2.3			6.2	20	
Vanadium	ND	0.5	ug/L				NC	20	
Zinc	6	5	ug/L				200.0	20	
Volatiles									
Acetone	ND	5.0	ug/L	11.1			NC	30	

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzene	ND	0.5	ug/L	ND			NC	30	
Bromodichloromethane	ND	0.5	ug/L	ND			NC	30	
Bromoform	ND	0.5	ug/L	ND			NC	30	
Bromomethane	ND	0.5	ug/L	ND			NC	30	
Carbon Tetrachloride	ND	0.2	ug/L	ND			NC	30	
Chlorobenzene	ND	0.5	ug/L	ND			NC	30	
Chloroform	1.48	0.5	ug/L	1.19			21.7	30	
Dibromochloromethane	ND	0.5	ug/L	ND			NC	30	
Dichlorodifluoromethane	ND	1.0	ug/L	ND			NC	30	
1,2-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,3-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,4-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
cis-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
trans-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloropropane	ND	0.5	ug/L	ND			NC	30	
cis-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
Ethylbenzene	ND	0.5	ug/L	ND			NC	30	
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.2	ug/L	ND			NC	30	
Hexane	ND	1.0	ug/L	ND			NC	30	
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	ND			NC	30	
Methyl Isobutyl Ketone	ND	5.0	ug/L	ND			NC	30	
Methyl tert-butyl ether	ND	2.0	ug/L	ND			NC	30	
Methylene Chloride	ND	5.0	ug/L	ND			NC	30	
Styrene	ND	0.5	ug/L	ND			NC	30	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
Tetrachloroethylene	ND	0.5	ug/L	ND			NC	30	

Certificate of Analysis

Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Toluene	ND	0.5	ug/L	ND			NC	30	
1,1,1-Trichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2-Trichloroethane	ND	0.5	ug/L	ND			NC	30	
Trichloroethylene	ND	0.5	ug/L	ND			NC	30	
Trichlorofluoromethane	ND	1.0	ug/L	ND			NC	30	
Vinyl chloride	ND	0.5	ug/L	ND			NC	30	
m,p-Xylenes	ND	0.5	ug/L	ND			NC	30	
o-Xylene	ND	0.5	ug/L	ND			NC	30	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>84.9</i>		<i>ug/L</i>		<i>106</i>	<i>50-140</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>66.0</i>		<i>ug/L</i>		<i>82.5</i>	<i>50-140</i>			
<i>Surrogate: Toluene-d8</i>	<i>91.4</i>		<i>ug/L</i>		<i>114</i>	<i>50-140</i>			

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Report Date: 18-May-2022

Client: Landtek Limited

Order Date: 10-May-2022

Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	69.8	1.0	mg/L	63.2	65.8	77-123			QM-07
General Inorganics									
Cyanide, free	27.5	2	ug/L	ND	122	70-130			
Hydrocarbons									
F1 PHCs (C6-C10)	628	25	ug/L	ND	88.8	68-117			
F2 PHCs (C10-C16)	1570	100	ug/L	ND	94.9	60-140			
F3 PHCs (C16-C34)	3590	100	ug/L	ND	96.8	60-140			
F4 PHCs (C34-C50)	2500	100	ug/L	ND	93.5	60-140			
Metals									
Mercury	3.49	0.1	ug/L	ND	116	70-130			
Antimony	38.2	0.5	ug/L	ND	76.3	80-120			
Arsenic	49.5	1	ug/L	ND	97.2	80-120			
Barium	204	1	ug/L	ND	407	80-120			
Beryllium	44.0	0.5	ug/L	ND	88.0	80-120			
Boron	54	10	ug/L	ND	107	80-120			
Cadmium	41.1	0.1	ug/L	ND	82.2	80-120			
Chromium (VI)	209	10	ug/L	ND	104	70-130			
Chromium	49.6	1	ug/L	ND	98.2	80-120			
Cobalt	47.0	0.5	ug/L	ND	94.0	80-120			
Copper	44.8	0.5	ug/L	1.05	87.5	80-120			
Lead	42.3	0.1	ug/L	ND	84.5	80-120			
Molybdenum	63.3	0.5	ug/L	18.9	88.9	80-120			
Nickel	45.9	1	ug/L	ND	91.3	80-120			
Selenium	44.4	1	ug/L	ND	87.7	80-120			
Silver	39.5	0.1	ug/L	ND	79.0	80-120			
Sodium	31300	200	ug/L	ND	313	80-120			
Thallium	41.0	0.1	ug/L	ND	82.0	80-120			
Uranium	48.3	0.1	ug/L	2.3	92.1	80-120			
Vanadium	50.7	0.5	ug/L	0.92	99.5	80-120			
Zinc	45	5	ug/L	ND	84.1	80-120			

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Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Semi-Volatiles									
Acenaphthene	10.4	0.05	ug/L	ND	104	50-140			
Acenaphthylene	9.13	0.05	ug/L	ND	91.3	50-140			
Anthracene	9.67	0.01	ug/L	ND	96.7	50-140			
Benzo [a] anthracene	9.79	0.01	ug/L	ND	97.9	50-140			
Benzo [a] pyrene	9.42	0.01	ug/L	ND	94.2	50-140			
Benzo [b] fluoranthene	8.83	0.05	ug/L	ND	88.3	50-140			
Benzo [g,h,i] perylene	8.27	0.05	ug/L	ND	82.7	50-140			
Benzo [k] fluoranthene	8.86	0.05	ug/L	ND	88.6	50-140			
Chrysene	10.4	0.05	ug/L	ND	104	50-140			
Dibenzo [a,h] anthracene	8.97	0.05	ug/L	ND	89.7	50-140			
Fluoranthene	10.5	0.01	ug/L	ND	105	50-140			
Fluorene	10.3	0.05	ug/L	ND	103	50-140			
Indeno [1,2,3-cd] pyrene	9.99	0.05	ug/L	ND	99.9	50-140			
1-Methylnaphthalene	9.69	0.05	ug/L	ND	96.9	50-140			
2-Methylnaphthalene	10.0	0.05	ug/L	ND	100	50-140			
Naphthalene	11.0	0.05	ug/L	ND	110	50-140			
Phenanthrene	10.6	0.05	ug/L	ND	106	50-140			
Pyrene	9.59	0.01	ug/L	ND	95.9	50-140			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>10.4</i>		<i>ug/L</i>		<i>104</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>9.67</i>		<i>ug/L</i>		<i>96.7</i>	<i>50-140</i>			
Volatiles									
Acetone	119	5.0	ug/L	ND	119	50-140			
Benzene	43.7	0.5	ug/L	ND	109	50-140			
Bromodichloromethane	41.6	0.5	ug/L	ND	104	50-140			
Bromoform	40.5	0.5	ug/L	ND	101	50-140			
Bromomethane	47.3	0.5	ug/L	ND	118	50-140			
Carbon Tetrachloride	40.7	0.2	ug/L	ND	102	50-140			
Chlorobenzene	41.4	0.5	ug/L	ND	103	50-140			
Chloroform	46.2	0.5	ug/L	ND	115	50-140			
Dibromochloromethane	40.2	0.5	ug/L	ND	101	50-140			

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Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Dichlorodifluoromethane	32.6	1.0	ug/L	ND	81.4	50-140			
1,2-Dichlorobenzene	39.6	0.5	ug/L	ND	99.0	50-140			
1,3-Dichlorobenzene	39.4	0.5	ug/L	ND	98.4	50-140			
1,4-Dichlorobenzene	39.0	0.5	ug/L	ND	97.1	50-140			
1,1-Dichloroethane	44.1	0.5	ug/L	ND	110	50-140			
1,2-Dichloroethane	44.4	0.5	ug/L	ND	110	50-140			
1,1-Dichloroethylene	41.1	0.5	ug/L	ND	103	50-140			
cis-1,2-Dichloroethylene	43.2	0.5	ug/L	ND	107	50-140			
trans-1,2-Dichloroethylene	43.1	0.5	ug/L	ND	107	50-140			
1,2-Dichloropropane	43.6	0.5	ug/L	ND	109	50-140			
cis-1,3-Dichloropropylene	41.8	0.5	ug/L	ND	105	50-140			
trans-1,3-Dichloropropylene	42.2	0.5	ug/L	ND	105	50-140			
Ethylbenzene	40.1	0.5	ug/L	ND	99.7	50-140			
Ethylene dibromide (dibromoethane, 1,2-)	41.3	0.2	ug/L	ND	103	50-140			
Hexane	35.6	1.0	ug/L	ND	89.1	50-140			
Methyl Ethyl Ketone (2-Butanone)	118	5.0	ug/L	ND	118	50-140			
Methyl Isobutyl Ketone	133	5.0	ug/L	ND	133	50-140			
Methyl tert-butyl ether	112	2.0	ug/L	ND	112	50-140			
Methylene Chloride	41.7	5.0	ug/L	ND	104	50-140			
Styrene	42.0	0.5	ug/L	ND	104	50-140			
1,1,1,2-Tetrachloroethane	41.8	0.5	ug/L	ND	105	50-140			
1,1,1,2,2-Tetrachloroethane	43.2	0.5	ug/L	ND	107	50-140			
Tetrachloroethylene	40.1	0.5	ug/L	ND	99.8	50-140			
Toluene	41.8	0.5	ug/L	ND	105	50-140			
1,1,1-Trichloroethane	41.9	0.5	ug/L	ND	105	50-140			
1,1,2-Trichloroethane	44.3	0.5	ug/L	ND	110	50-140			
Trichloroethylene	43.9	0.5	ug/L	ND	109	50-140			
Trichlorofluoromethane	42.0	1.0	ug/L	ND	105	50-140			
Vinyl chloride	36.2	0.5	ug/L	ND	90.5	50-140			
m,p-Xylenes	80.8	0.5	ug/L	ND	101	50-140			
o-Xylene	41.2	0.5	ug/L	ND	102	50-140			

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Client PO: 22122

Project Description: 22122

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	84.2		ug/L		105	50-140			
Surrogate: Dibromofluoromethane	106		ug/L		133	50-140			
Surrogate: Toluene-d8	79.9		ug/L		99.9	50-140			

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Client: Landtek Limited

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Order Date: 10-May-2022

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Qualifier Notes:

QC Qualifiers :

QM-07: The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on other acceptable QC.

S-GC: Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Sample Data Revisions:

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Client Name: Landtek	Project Ref: 22122	Page <u>1</u> of <u>1</u>
Contact Name: Rachel Hlywka	Quote #:	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 205 Nebo Rd. Hamilton	PO #: 22122	
Telephone:	E-mail: nicole@Landtek.ca Rachel@Landtek.ca	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19 Other Regulation <input checked="" type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input checked="" type="checkbox"/> Med/Fine <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> Table 2 <input checked="" type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm <input type="checkbox"/> Table _____ For RSC: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other: _____ Mun: _____		Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis																	
Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHC/NOC	PAH	m/i	CrVI	Hg	BCHWS									
1 mw9	GW			Date	Time	X	X	X	X	X	X									
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Comments:		Method of Delivery: Walk In	
Relinquished By (Sign): Rachel Hlywka	Received By Driver/Depot:	Received at Lab: C-Plus	Verified By: C-Plus
Relinquished By (Print): Rachel Hlywka	Date/Time:	Date/Time: May 10/22 13:05	Date/Time: May 10/22 13:33
Date/Time: May 10-22 12:45	Temperature: _____ °C	Temperature: 16.9 °C	pH Verified: <input checked="" type="checkbox"/> By: CP