XCG CONSULTING LIMITED
T 519 741 5774 F 519 741 5627 | kitchener@xcg.com
820 Trillium Drive, Kitchener, Ontario, Canada N2R 1K4

August 16, 2016 **XCG File No. 5-2705-14-02**

Mr. Chris Leigh **Sent via Email: cleigh@tricar.com**
The Tricar Group
3800 Colonel Talbot Road
London, Ontario N6P 1H5

Re: Phase II Environmental Site Assessment, 71 Wyndham Street South, Guelph, Ontario

Dear Mr. Leigh:

1. INTRODUCTION, PURPOSE, AND USE

As requested by The Tricar Group (Tricar), XCG Consulting Limited (XCG) is providing this report to summarize the findings of the Phase II Environmental Site Assessment (ESA) completed at the property located at 71 Wyndham Street South in Guelph, Ontario (subject property or site). A site location and site layout are provided on Figure 1.

It is XCG's understanding that the Phase II ESA has been requested for due diligence purposes to support the potential purchase of the subject site. XCG also understands that the purpose of the Phase II ESA was to further investigate the potential or actual sources of significant contamination identified in the Phase I ESA completed by XCG in July 2016. The findings of the Phase I ESA were previously documented in a draft report titled "Phase I Environmental Site Assessment, 71 Wyndham Street South, Guelph, Ontario," dated July 12, 2016 (Phase I Report).

Based on the results of the Phase I ESA, the following potential or actual sources of significant contamination were identified to be associated with the subject property:

- Historic use of the subject site as an automotive service garage between 1959 and 1981. The historic operations, including the use of an oil service bay, hydraulic hoist, various pits and sumps, floor trench drain system, and two dirt/grease traps, represent potential sources of impact to the soil and groundwater quality at the subject site.
- Two fuel underground storage tanks (USTs) and associated pump islands were reportedly operated at the subject site as part of a gasoline service station between 1960 and 1970. Releases, if any, from these USTs represent a potential source of previously identified impacts to the soil and ground quality at the subject site.
- Site personnel indicated that impacted soil previously identified to be present on the subject site (with the exception of the soil beneath the existing site building) was excavated and transported for off-site disposal in late 2009/early 2010. No documentation pertaining to the remedial activities regarding the aerial extent or depth of the soil excavation or the quality of the soil left in place was made available for review during the Phase I ESA. As such, the current soil quality at the subject site is unknown.

- Following completion of the remedial excavation, site personnel indicated that fill material was imported to the site; however, the quality of the fill material is currently not known.
- The adjacent property to the east was occupied by a Laundromat between 1964 and 1980. There is a potential that dry cleaning services were offered during this time period in addition to standard, water-based laundering. The historic potential use of halogenated solvents at this up-gradient adjacent property represents a potential source of impact to the soil and groundwater quality at the subject site.

This report was prepared for the sole use by The Tricar Group and may not be relied upon by others without the written concurrence of XCG. Any use or reuse of this document (or the findings and conclusions represented herein), by parties other than The Tricar Group, is at the sole risk of those parties.

2. XCG SCOPE OF THE WORK

In order to further investigate the above-noted areas of potential or actual environmental concern identified during the Phase I ESA, XCG completed the following tasks as part of the Phase II ESA:

- Mobilized and demobilized all personnel and equipment required to complete the work. Prior to the subsurface investigations, public and private utility locates were carried out in all of the areas where subsurface work was conducted.
- Advanced 10 boreholes throughout the subject site to depths ranging from 2.9 metres to 4.0 metres below ground surface (bgs) using a track-mounted drilling rig equipped with hollow-stem augers and split-spoon soil sampling equipment.
- Instrumented four of the 10 boreholes as groundwater monitoring wells.
- Assessed the condition of four existing monitoring wells to determine their suitability for collection of representative groundwater samples.
- Collected and field screened soil samples from boreholes for evidence of impacts, including discolouration, chemical odours, and the presence of total organic vapours (TOVs) as measured with an organic vapour meter.
- Surveyed all existing and newly installed monitoring wells to establish vertical control.
- Measured the depth to groundwater in and existing and newly installed monitoring wells to determine the groundwater elevation and flow direction.
- Developed wells and collected groundwater samples from the four existing and four newly installed groundwater monitoring wells.
- Submitted 10 soil samples and nine groundwater samples [including one duplicate groundwater sample for quality control and quality assurance (QA/QC) purposes] for laboratory analysis for one or more of metals, petroleum hydrocarbons (PHCs) (Fractions F1 to F4), benzene, toluene, ethylbenzene, and xylenes (BTEX), volatile organic compounds (VOCs), and/or polycyclic aromatic hydrocarbons (PAHs).
- Reviewed and assessed field and analytical data.

- Prepared a summary report documenting field activities, summarizing field observations and analytical data, and comparing the analytical results to the respective Ministry of the Environment and Climate Change (MOECC)[1] Standards.

The approximate locations of the sampling locations are shown on Figure 1.

3. XCG FIELD ACTIVITIES

3.1 Methodology

Prior to commencing on-site drilling activities, utility locates were performed by Ontario One Call and OnSite Locates Inc. to clear all proposed drilling locations of any buried utilities and services.

The sampling program was conducted in general accordance with the scope of work provided in a document entitled "Work Plan and Cost Estimate to Complete Phase I and Phase II Environmental Site Assessments at 71 Wyndham Street South, Guelph, Ontario," dated June 15, 2016. The field activities were completed in general accordance with the XCG's Standard Operating Procedures (SOPs), and the Ontario MOECC sampling protocols including QA/QC methods, as described in the MOECC documents titled "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario, December 1996" and "Guide for Completing Phase Two Environmental Site Assessments under Ontario Regulation 153/04," dated June 2011. All chemical analyses were performed in accordance with the Ontario Regulation (O. Reg.) 153/04, and specifically the related document "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act," dated March 2004 (amended as of July 1, 2011).

The analytical results for soil and groundwater samples were compared to the generic site condition standards (SCS) published by the MOECC in the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act," dated April 15, 2011 (MOECC Standards). Given the site setting, proposed future residential property use, and presence of the Speed River, located adjacent to the south of the subject property, the MOECC Standards criteria for residential/parkland/community land use in a potable groundwater setting for properties located within 30 metres of a water body (i.e. the MOECC Standards Table 8 criteria) were selected for comparison purposes. The MOECC Standards Table 2 criteria (potable groundwater, residential land use) are also provided for comparative reference.

3.2 Borehole Drilling and Soil Sampling

All drilling activities were completed by CMT Engineering Inc., of St. Clements, Ontario (CMT) and were observed by XCG personnel. CMT is a MOECC-licensed drilling contractor. On July 8 and 13, 2016, CMT advanced a total of 10 boreholes [XCG-BH1 to XCG-BH6 and XCG-MW1 to XCG-MW4] throughout the subject site, including two monitoring wells inside the site building (XCG-MW3 and XCG-MW4). The boreholes were advanced using a track-mounted drilling rig equipped with split-spoon soil sampling equipment and hollow-stem augers. The boreholes were advanced to depths ranging from 2.9 metres bgs to 4.0 metres bgs. The approximate borehole locations are shown on Figure 1.

[1] Previously also known as the Ministry of the Environment (MOE) and the Ministry of the Environment and Energy (MOEE).

Soil samples were retrieved using a 0.6-metre split barrel sampling spoon advanced at 0.76-metre intervals. Soil samples collected from each borehole were logged for physical characteristics, as well as olfactory and visual evidence of contamination. A portion of select sample intervals from each borehole was placed directly into sample containers complete with methanol preservation for potential future analysis of PHC (F1) and BTEX/VOC compounds to ensure headspace losses were not incurred. The remaining soil samples were collected in sealable plastic bags and those selected for laboratory analysis were split, with half of the sample being placed in laboratory-supplied sample jars. Soil samples from each borehole were screened in the field for visual and olfactory evidence of TOVs using the headspace method using an RKI Eagle gas meter calibrated to hexane operating in methane elimination mode. TOV measurements were taken from the headspace in the sample bags. The TOV readings are provided on the borehole logs located in Attachment A.

Field evidence of impacts (staining, odour, elevated vapour readings) were observed at the two boreholes advanced inside the site building, located in the vicinity of a pit (XCG-MW3) and in the vicinity of the former hydraulic hoist (XCG-MW4). At both locations, black staining, PHC odours and elevated TOV readings were observed from approximately 0.6 metres bgs to the top of the weather bedrock at 2.9 and 3.3 metres bgs, respectively. Minor staining and faint PHC odour were also observed at XCG-BH5, located in the southeast portion of the site, between 2.1 and 2.9 metres bgs. No field evidence of impacts were observed at any of the other boreholes advanced at the subject site.

Based on field observations and sample location, 'worst case' soil samples were selected from each borehole, and submitted for chemical analysis. Selected soil samples were submitted under chain-of-custody protocols to Maxxam Analytics Inc. of Mississauga, Ontario (Maxxam) for select chemical analysis of metals, PHCs (F1 to F4), BTEX, VOCs and/or PAHs.

3.3 Monitoring Well Installation and Groundwater Sampling

Following completion of drilling and soil sampling activities, four of the 10 boreholes were instrumented as groundwater monitoring wells and designated as XCG-MW1 to XCG-MW4. Monitoring wells were constructed using 38-millimetre (1.5-inch) diameter PVC Schedule 40 pipe equipped with a 10 slot, 3.0-metre long screen and pre-packed clean silica sand filter pack. A bentonite seal placed above the filter pack to backfill the remaining borehole annulus. At each location, the monitoring wells were completed with well caps and flush-mounted protective casings set into a concrete collar at grade. Well instrumentation details are provided in the borehole logs in Attachment A.

XCG also evaluated the condition of four existing monitoring wells that were observed on the subject site and were identified as MWA, MWB, MW2-09A, and MW2-09B. These monitoring wells were reportedly associated with previous environmental and/or geotechnical investigations completed at the subject site by others. These wells were found to be in good condition, with intact j-plugs and minimal silt detected when sounding the wells. Based on the observations made by XCG, these wells were determined to be suitable for sampling.

Groundwater levels were measured at the four existing and four newly installed monitoring wells on July 13, 2016. The groundwater levels in the monitoring wells ranged from 1.73 metres bgs at monitoring well XCG-MW4 to 3.39 metres bgs at monitoring well MWB.

The well development activities were conducted on July 11, 2016 at both the existing and newly installed monitoring wells. The well development was completed by purging approximately five times the standing volume of the water column within the well casing or purging the well dry on three separate occasions. Following the well development, the wells were allowed to recover. Based on the quick recovery of six of the eight wells, later that day (July 11), these wells were purged and sampled using a low flow/low volume peristaltic pump. XCG-MW2 and MWB were noted to recover slowly and as such, XCG sampled these wells on July 13, 2016 using a low flow/low volume peristaltic pump.

Prior to sampling, the existing and newly installed wells were purged between 15 and 20 minutes until the field measurements of pH, conductivity, temperature, oxidation-reduction potential (ORP), and dissolved oxygen (DO) had stabilized. Field evidence of PHC-related impacts including a slight sheen and moderate odour was noted in the purge water generated from XCG-MW3 and XCG-MW4. No field evidence of PHC-related impacts was noted during well purging activities at the remaining on-site monitoring wells. The water generated from the well development and purging/sampling activities were contained within a 205-litre capacity drum located adjacent to the southeast corner of the site building.

After the wells had been purged and field parameters had stabilized, groundwater samples were collected and submitted for select chemical analyses of metals, PHCs (F1 to F4), BTEX, VOCs, and/or PAHs. All samples, including the duplicate QA/QC sample, were collected directly into laboratory-supplied containers and submitted under chain-of-custody protocol to Maxxam.

4. RESULTS

4.1 Geology

The shallow geology of the boreholes advanced across the subject site generally consisted of a surficial layer of granular fill or asphalt at ground surface in the paved areas of the subject site underlain by approximately 0.3 metres of granular fill. Sand, with varying degrees of gravel and silt was encountered underlying the granular fill to the completed depth of the boreholes. As noted above, evidence of PHC staining, odours and elevated TOVs readings were observed in the sand at XCG-MW3 and XCG-MW4 extending to the top of the weathered limestone bedrock at depths of 2.9 and 3.3 metres bgs, respectively. Minor staining and faint PHC odours were also noted at XCG-BH5 at a depth of 2.1 metres extending to the top of the weathered limestone bedrock at 2.9 metres. Overall, the weathered limestone bedrock was encountered across the subject site at depths ranging from 2.9 metres bgs in the south portion of the site to 4.0 metres bgs in the north portion of the subject site.

4.2 Hydrogeology

All existing and newly installed monitoring wells were surveyed to an on-site benchmark (right side of door jam of Diyode) to allow for vertical control and determination of relative groundwater elevations. Review of the shallow overburden groundwater elevations determined based on the depth to groundwater measurements conducted by XCG on July 13, 2016, indicated that overburden groundwater elevations ranged from 97.30 metres above site datum (ASD) (2.33 metres bgs) at MWB, located in the southwest portion of the subject site to 98.05 metres ASD (1.84 metres bgs) at XCG-MW4, located inside the woodshop in the central

portion of the site. Based on review of the groundwater elevations, the overall direction of groundwater flow is generally in a south to southwest direction.

Groundwater elevations determined based on the July 13, 2016 water levels are shown on Figure 1 and are summarized in Table 1.

4.3 Summary and Discussion of Soil Analytical Results

The soil sample analytical results are summarized in Tables 2 to 5. The laboratory analytical reports are provided in Attachment B.

Based on a review of the soil sample analytical results, concentrations of analyzed parameters that were above the MOECC Standards Table 8 soil quality criteria were detected in soil samples collected from borehole locations XCG-BH2, XCG-BH5, XCG-BH6, XCG-MW2, XCG-MW5, and XCG-MW6. The soil samples submitted from the remaining four boreholes had concentrations of analyzed parameters either below the laboratory method detection limits (MDLs) or below the respective MOECC Standards Table 8 soil quality criteria. The concentrations of analyzed parameters in the above noted soil samples were also below the MOECC Standards Table 2 soil quality criteria.

At borehole XCG-BH2, located in the northeast portion of the subject site, zinc was detected in the soil sample interval of 3.0 to 3.7 metres bgs at a concentration above the MOECC Standards Tables 8 soil quality criteria. The detected concentration of zinc was also above the MOECC Standards Table 2 soil quality criterion.

At borehole XCG-BH5, located to the southeast of the site building, cadmium, molybdenum, zinc, and PHCs (F2) were detected in the soil sample interval of 2.3 to 2.9 metres bgs at concentrations above the MOECC Standards Table 8 soil quality criteria. The detected concentrations of cadmium, molybdenum, and zinc were also above the MOECC Standards Table 2 soil quality criteria. The concentration of PHC (F2) was below the MOECC Standards Table 2 soil quality criterion.

At borehole XCG-BH6, located to the south of the site building (west of XCG-BH5), cadmium and zinc were detected in the soil sample interval of 2.3 to 2.9 metres bgs at concentrations above the MOECC Standards Table 8 soil quality criteria. The detected concentrations of cadmium and zinc were also above the MOECC Standards Table 2 soil quality criteria.

At borehole XCG-MW2, located adjacent to the east property boundary in the central part of the site, molybdenum was detected in the soil sample interval of 2.3 to 2.9 metres bgs at a concentration above the MOECC Table 8 soil quality criterion. The concentration of molybdenum was below the MOECC Table 2 soil quality criterion.

At borehole XCG-MW3, located in the southeast portion of the site building, near a trench drain and associated sump/pit, zinc, total xylenes, hexane, PHCs (F2, F3 and F4), naphthalene and 1,2-methylnaphthalene were detected in the soil sample interval of 3.0 to 3.7 metres bgs at concentrations above the MOECC Table 8 soil quality criteria. The detected concentrations of zinc, PHCs (F2 and F3) and 1,2-methylnaphthalene were also above the MOECC Standards Table 2 soil quality criteria. The concentrations of total xylenes, hexane and naphthalene were below the MOECC Standards Table 2 soil quality criteria.

At borehole XCG-MW4, located in the west half of the central portion of the site building, near the former hydraulic hoist, zinc, lead, total xylenes, PHCs (F2 and F3), naphthalene and

1,2-methylnaphthalene were detected in the soil sample interval of 1.5 to 2.1 metres bgs at concentrations above the MOECC Table 8 soil quality criteria. The detected concentrations of zinc, lead, PHCs (F3), and 1,2-methylnaphthalene were also above the MOECC Standards Table 2 soil quality criteria. The concentrations of total xylenes and naphthalene were below the MOECC Standards Table 2 soil quality criteria.

Based on review of the analytical data, the soil impacts detected at XCG-MW3 and XCG-MW4 are likely the result of historic site operations (automotive service and gas station) conducted at the subject property. Based on the observation at surrounding boreholes XCG-BH1, XCG-BH4, and XCG-BH6 and XCG's knowledge of previously completed remedial activities throughout the exterior of the subject site, it is anticipated that these soil impacts are limited to the footprint of the site building, which is approximately 415 square metres in area. Based on field observations, the soil impacts extend from approximately 0.6 metres bgs to the top of the bedrock, ranging between to 2.9 metre bgs at XCG-MW4 to 3.4 metres bgs at XCG-MW3. As such, XCG estimated there is approximately 1,330 cubic metres of impacted soil located beneath the on-site building.

The remaining soil impacts detected throughout the exterior of the subject property are likely associated with the fill material that was historically imported onto the subject site as backfill following the remedial activities conducted on-site in 2009. XCG anticipates that these impacts are localized in nature and are not lateral extensive. XCG estimates that approximately 1,100 cubic metres of impacted soil (fill) are present throughout the remainder of the subject site.

4.4 Summary and Discussion of Groundwater Analytical Results

The groundwater sample analytical results are summarized in Tables 6 to 9. The laboratory analytical reports are provided in Attachment B.

Based on review of the groundwater sample analytical results, concentrations of analyzed parameters above the MOECC Standards Tables 8 groundwater quality criteria were detected in groundwater samples collected from monitoring wells XCG-MW2, XCG-MW3 and XCG-MW4. The groundwater samples collected from the remaining five on-site monitoring wells had concentrations of analyzed parameters that were either below the laboratory MDLs or were below the respective MOECC Standards Table 8 groundwater quality criteria. The concentrations of analyzed parameters from the above noted remaining five on-site monitoring wells were also below the MOECC Standards Table 2 groundwater quality criteria.

At XCG-MW2, located adjacent to the east property boundary in the central part of the site, molybdenum was detected in the groundwater sample at a concentration above the MOECC Standards Table 8 groundwater quality criteria. The detected concentration of molybdenum was also above the MOECC Standards Table 2 groundwater quality criterion.

At XCG-MW3, located in the southeast portion of the site building, near a trench drain and associated sump/pit, PHCs (F2 and F3), benzo(a)pyrene and 1,2-methylnaphthalene were detected at concentrations above the MOECC Tables 2 and 8 groundwater quality criteria. The detected concentrations of PHCs (F2 and F3), benzo(a)pyrene and 1,2-methylnaphthalene were also above the MOECC Standards Table 2 groundwater quality criteria.

At borehole XCG-MW4, located in the west half of the central portion of the site building, near the former hydraulic hoist, PHCs (F3), benzo(a)pyrene and 1,2-methylnaphthalene were

detected at concentrations above the MOECC Tables 2 and 8 groundwater quality criteria. The detected concentrations of PHCs F3, benzo(a)pyrene and 1,2-methylnaphthalene were also above the MOECC Standards Table 2 groundwater quality criteria.

Based on review of the analytical data, the groundwater impacts detected at XCG-MW3 and XCG-MW4 are likely the result of historic site operations conducted at the subject property and associated with the soil impacts observed at these locations. Based on the observation at surrounding boreholes XCG-BH1, XCG-BH4, and XCG-BH6 and XCG's knowledge of previously completed remedial activities throughout the exterior of the subject site, it is anticipated that these groundwater impacts are localized beneath and in the vicinity of the site building. It is anticipated that any remedial excavation activities undertaken to address the soil impacts would assist in addressing the associated groundwater impacts through source removal and excavation de-watering.

The remaining groundwater impacts detected at XCG-MW2 are likely associated with the soil impacts identified at this location. XCG anticipates that these groundwater impacts are localized in nature and are not laterally extensive. Similar to the PHC impacts in the vicinity of the site building, the remedial activities undertaken to address the soil impacts in the vicinity of XCG-MW2 would like assist in reduction of groundwater concentrations, through impacted soil removal and excavation dewatering activities.

5. LIMITATIONS AND CONCLUSIONS

5.1 Limitations

The Phase II ESA described herein was intended to investigate the soil and groundwater quality at the subject site.

The findings and conclusions regarding the environmental condition of the subject property provided in this report are based on the extent of the data obtained during XCG's Phase II ESA. The conclusions drawn from this Phase II ESA were based on the information and data generated to date at selected sampling locations. Conditions between and beyond these locations may become apparent during future investigations or on-site work, which could not be detected or anticipated at the time of this investigation. The sampling locations were chosen based information provided by site personnel and site accessibility. As such, XCG cannot be held responsible for environmental conditions at the subject site that were not apparent from the available information.

The scope of this report is limited to the matters expressly covered. This report was prepared for the benefit of The Tricar Group for the purpose of documenting environmental conditions at the specific on-site locations. This report may only be relied upon by The Tricar Group. This report may not be relied upon by others without the written concurrence of XCG. Any use or reuse of this document (or the findings and conclusions represented herein), by parties other than The Tricar Group, is at the sole risk of those parties.

5.2 Conclusions

The overall conclusions of the Phase II ESA are that:

1. The site is generally underlain by granular fill and sand, with varying degrees of silt and gravel to the top of the weathered limestone bedrock, which was encountered at depths

ranging from 2.9 metres in the south portion of the site to 4.0 metres bgs in the north portion of the subject site. Evidence of PHC impacts were noted in the soil samples collected from the boreholes advanced inside the site building.

2. Groundwater was typically encountered between 1.8 and 2.3 metres bgs throughout the subject site. The general direction of groundwater flow is in a south to southwest direction towards the adjacent Speed Rover. Evidence of PHC impacts including sheen and moderate odours were observed in groundwater removed from monitoring wells located inside the site building.
3. Elevated (exceeding MOECC Standards Table 8 soil quality criteria) concentrations of lead, zinc, total xylenes, hexane, PHCs (F2, F3 and F4), naphthalene, and/or 1,2-methylnaphthalene were found in soil samples collected from XCG-MW3 and XCG-MW4, both located inside the site building, in the vicinity of historic site operations. The soil impacts were interpreted to be limited to the footprint of the existing site building (415 square metres), extending to the top of the bedrock.
4. Elevated (exceeding MOECC Standards Table 8 soil quality criteria) concentrations of cadmium, molybdenum, zinc and/or PHCs F2 were found in soil samples collected from boreholes advanced across the subject site (XCG-MW2, XCG-BH2, XCG-BH5, XCG-BH6). These elevated concentrations were interpreted to be localized in nature and likely associated with the quality of fill historically imported to the site.
5. Based on the limits of localized nature of the above noted soil impacts, XCG estimated that a total of approximately 2,430 cubic metres of impacted (concentrations above MOECC Standards Table 8 criteria) soil and/or fill material is present at the subject site.
6. Review of groundwater data indicated that elevated (exceeding MOECC Standards Table 8 groundwater quality criteria) concentrations PHCs (F2 and/or F3), benzo(a)pyrene and 1,2-methylnaphthalene were found in groundwater samples collected from XCG-MW3 and XCG-MW4. Molybdenum was detected at XCG-MW2 at a concentration above the MOECC Standards Table 8 groundwater quality criteria. The groundwater impacts were interpreted to be associated with the soil impacts found at each respective monitoring well.

6. CLOSURE

We trust this letter meets your current requirements. If you should have any questions or comments related to this report, please contact the undersigned.

Respectfully submitted,

XCG CONSULTING LIMITED

Kristian Peter, B.Sc. (Eng.), P.Eng., QP_{ESA}
Project Manager

Attachments: Tables
Figure
Attachment A - Borehole Logs
Attachment B - Laboratory Analytical Reports

TABLES

Table 1 Groundwater Elevations

Location	Ground Surface Elevation (masd)*	Top of Pipe Elevation (masd)*	Well Depth (mbgs)	Groundwater Depth (mtoc)	Groundwater Depth (mbgs)	Groundwater Elevation (masd)
MWA	100.137	100.930	5.78	3.20	2.41	97.73
MWB	99.634	100.693	4.38	3.39	2.33	97.30
MW2-09A	101.271	101.207	4.40	3.28	3.34	97.93
MW2-09B	101.188	101.228	6.33	3.39	3.35	97.84
XCG-MW1	100.511	100.423	3.68	2.45	2.54	97.97
XCG-MW2	100.231	100.126	2.74	2.26	2.36	97.87
XCG-MW3	99.850	99.768	2.79	1.78	1.86	97.99
XCG-MW4	99.893	99.780	2.70	1.73	1.84	98.05

Notes:

mbgs -metres below ground surface, *masd* -metres above site datum

* Surveyed to the top nut of fire hydrant located at north corner of warehouse building

Table 2 Summary of Analytical Results for Volatile Organic Compounds in Soil

Sample ID	MOECC Table 8 Standards	MOE Table 2 Standards	Reportable Detection Limit	XCG-MW1 SS6	XCG-MW2 SS4	XCG-MW3 SS5	XCG-MW4 SS3	XCG-BH1 SS5	TM-100 Field Dup of XCG-BH1 SS5	XCG-BH2 SS5	XCG-BH3 SS4	XCG-BH4 SS4	XCG-BH5 SS4	XCG-BH6 SS4
Depth of Sample	Residential	Residential		3.66 - 3.96.5 mbgs	2.29 - 2.90 mbgs	3.05 - 3.66 mbgs	1.52 - 2.13 mbgs	3.05 - 3.66 mbgs	3.05 - 3.66 mbgs	3.05 - 3.66 mbgs	2.29 - 2.90 mbgs	2.29 - 2.90 mbgs	2.29 - 2.90 mbgs	2.29 - 2.90 mbgs
Date	µg/g	µg/g		8-Jul-16	8-Jul-16	8-Jul-16	8-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16
Acetone	0.5	16	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	0.02	0.21	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromodichloromethane	0.05	1.5	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromoform	0.05	0.27	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromomethane	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Carbon Tetrachloride	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chlorobenzene	0.05	2.4	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloroform	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dibromochloromethane	0.05	2.3	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichlorobenzene	0.05	1.2	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,3-Dichlorobenzene	0.05	4.8	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,4-Dichlorobenzene	0.05	0.083	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichlorodifluoromethane (Freon 12)	0.05	16	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethane	0.05	0.47	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2- Dichloroethane	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethylene	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
CIS 1,2-Dichloroethylene	0.05	1.9	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
TRANS-1,2-Dichloroethylene	0.05	0.084	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloropropane	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
CIS-1,3-Dichloropropene	0.05	0.05	0.03	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
TRANS-1,3-Dichloropropene			0.04	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Ethylbenzene	0.05	1.1	0.02	<0.020	<0.020	0.043	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylene Dibromide	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Hexane	0.05	2.8	0.05	<0.050	<0.050	**0.075**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methylene Chloride	0.05	0.1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methyl Isobutyl Ketone	0.5	1.7	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Ethyl Ketone	0.5	16	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl tert-butyl Ether	0.05	0.75	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Styrene	0.05	0.7	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,1,2-Tetrachloroethane	0.05	0.058	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2,2- Tetrachloroethane	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Tetrachloroethylene	0.05	0.28	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	0.2	2.3	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
1,1,1-Trichloroethane	0.05	0.38	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2-Trichloroethane	0.05	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Trichloroethylene	0.05	0.061	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Vinyl Chloride	0.02	0.02	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Trichlorofluoromethane (Freon 11)	0.25	4	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
o-Xylene	N/V	N/V	0.02	<0.020	<0.020	0.18	0.13	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
m & p-Xylene	N/V	N/V	0.02	<0.020	<0.020	0.046	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Xylenes (Total)	0.05	3.1	0.02	<0.020	<0.020	**0.23**	**0.13**	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
N/V	No Value
mbgs	metres below ground surface
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

Table 3 Summary of Analytical Results for PHCs and BTEX in Soil

Sample ID	MOECC Table 8 Standards	MOECC Table 2 Standards	Reportable Detection Limit	XCG-MW1 SS6	XCG-MW2 SS4	XCG-MW3 SS5	XCG-MW4 SS3	XCG-BH1 SS5	TM-100 Field Dup of XCG-BH1 SS5	XCG-BH2 SS5	XCG-BH3 SS4	XCG-BH4 SS4	XCG-BH5 SS4	XCG-BH6 SS4
Depth of Sample	**Residential**	**Residential**		**3.66 - 3.96.5 mbgs**	**2.29 - 2.90 mbgs**	**3.05 - 3.66 mbgs**	**1.52 - 2.13 mbgs**	**3.05 - 3.66 mbgs**	**3.05 - 3.66 mbgs**	**3.05 - 3.66 mbgs**	**2.29 - 2.90 mbgs**	**2.29 - 2.90 mbgs**	**2.29 - 2.90 mbgs**	**2.29 - 2.90 mbgs**
Date	**µg/g**	**µg/g**		**8-Jul-16**	**8-Jul-16**	**8-Jul-16**	**8-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**
BTEX and Petroleum Hydrocarbons														
Benzene	0.02	0.21	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Toluene	0.2	2.3	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	0.05	1.1	0.02	<0.020	<0.020	**0.043**	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
o-Xylene	N/V	N/V	0.02	<0.020	<0.020	0.046	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
p+m-Xylene	N/V	N/V	0.02	<0.020	<0.020	0.18	0.13	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Total Xylenes	0.05	3.1	0.02	<0.020	<0.020	**0.23**	**0.13**	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
F1 (C6-C10)	25	55	5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F1 (C6-C10) - BTEX	25	55	5	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
F2 (>C10-C16)	10	98	10	<10	<10	**41**	**120**	<10	<10	<10	<10	<10	**13**	<10
F3 (>C16-C34)	240	300	50	<50	<50	**2,200**	**5,200**	62	61	<50	<50	85	130	<50
F4 (>C34)	120	2,800	50	<50	<50	**500**	**1,200**	<50	<50	<50	<50	<50	<50	<50

Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
N/V	No Value
N/A	Not Analyzed
mbgs	metres below ground surface
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

Table 4 Summary of Analytical Results for PAHs in Soil

Sample ID	MOECC Table 8 Standards	MOECC Table 2 Standards	Reportable Detection Limit	XCG-MW1 SS6	XCG-MW2 SS4	XCG-MW3 SS5	XCG-MW4 SS3	XCG-BH1 SS5	TM-100 Field Dup of XCG-BH1 SS5	XCG-BH2 SS5	XCG-BH3 SS4	XCG-BH4 SS4	XCG-BH5 SS4	XCG-BH6 SS4
Depth of Sample	Residential	Residential		3.66 - 3.96.5 mbgs	2.29 - 2.90 mbgs	3.05 - 3.66 mbgs	1.52 - 2.13 mbgs	3.05 - 3.66 mbgs	3.05 - 3.66 mbgs	3.05 - 3.66 mbgs	2.29 - 2.90 mbgs	2.29 - 2.90 mbgs	2.29 - 2.90 mbgs	2.29 - 2.90 mbgs
Date	µg/g	µg/g		8-Jul-16	8-Jul-16	8-Jul-16	8-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16	13-Jul-16
Acenaphthene	0.072	7.9	0.005	<0.0050	<0.0050	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	0.093	0.15	0.005	<0.0050	<0.0050	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Anthracene	0.22	0.67	0.01	<0.0050	<0.0050	0.058	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.0055	<0.0050	<0.0050
Benzo(a)anthracene	0.36	0.5	0.005	<0.0050	<0.0050	0.068	<0.050	0.0067	0.011	<0.0050	0.0057	0.008	<0.0050	<0.0050
Benzo(a)pyrene	0.3	0.3	0.005	<0.0050	<0.0050	<0.050	<0.050	0.0068	0.01	<0.0050	0.0065	0.0059	<0.0050	<0.0050
Benzo(b/j)fluoranthene	0.47	0.78	0.01	<0.0050	<0.0050	<0.050	<0.050	0.0094	0.014	0.005	0.0085	0.01	<0.0050	<0.0050
Benzo(g,h,i)perylene	0.68	6.6	0.005	<0.0050	<0.0050	<0.050	<0.050	0.0053	0.0065	<0.0050	0.0058	0.0051	<0.0050	<0.0050
Benzo(k)fluoranthene	0.48	0.78	0.01	<0.0050	<0.0050	<0.050	<0.050	<0.0050	0.0052	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chrysene	2.8	7	0.02	<0.0050	0.0066	0.054	<0.050	0.006	0.0088	<0.0050	0.0057	0.0071	0.0056	<0.0050
Dibenzo(a,h)anthracene	0.1	0.1	0.01	<0.0050	<0.0050	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	0.69	0.69	0.01	0.011	<0.0050	0.091	0.071	0.014	0.026	<0.0050	0.013	0.019	<0.0050	<0.0050
Fluorene	0.19	62	0.02	<0.0050	<0.0050	0.069	0.065	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	0.23	0.38	0.005	<0.0050	<0.0050	<0.050	<0.050	0.0051	0.0066	<0.0050	0.0052	<0.0050	<0.0050	<0.0050
1-Methylnaphthalene	0.59	0.99	0.005	<0.0050	<0.0050	**0.6**	**0.58**	<0.0050	<0.0050	<0.0050	<0.0050	0.0055	<0.0050	<0.0050
2-Methylnaphthalene			0.02	<0.0050	0.0052	**0.59**	**0.75**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Naphthalene	0.09	0.6	0.005	<0.0050	<0.0050	**0.32**	**0.37**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Phenanthrene	0.69	6.2	0.005	0.0082	0.0078	0.18	0.17	<0.0050	0.0085	<0.0050	0.0055	0.0094	<0.0050	<0.0050
Pyrene	1	78	0.005	0.0088	<0.0050	0.14	0.15	0.015	0.024	<0.0050	0.012	0.019	0.0053	<0.0050

Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
mbgs	metres below ground surface
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

Table 5 Summary of Analytical Results for Metals in Soil

Sample ID	MOECC Table 8 Standards	MOECC Table 2 Standards	Reportable Detection Limit	XCG-MW1 SS6	XCG-MW2 SS4	XCG-MW3 SS5	XCG-MW4 SS3	XCG-BH1 SS5	XCG-BH2 SS5	XCG-BH3 SS4	TM-200 Field Dup of XCG-BH3 SS4	XCG-BH4 SS4	XCG-BH5 SS4	XCG-BH6 SS4
Depth of Sample	**Residential**	**Residential**		**3.66 - 3.96.5 mbgs**	**2.29 - 2.90 mbgs**	**3.05 - 3.66 mbgs**	**1.52 - 2.13 mbgs**	**3.05 - 3.66 mbgs**	**3.05 - 3.66 mbgs**	**2.29 - 2.90 mbgs**	**2.29 - 2.90 mbgs**	**2.29 - 2.90 mbgs**	**2.29 - 2.90 mbgs**	**2.29 - 2.90 mbgs**
Date	**µg/g**	**µg/g**		**8-Jul-16**	**8-Jul-16**	**8-Jul-16**	**8-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**	**13-Jul-16**
Metals														
Chromium, Hexavalent	0.66	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Boron (Hot Water Extractable)	1.5	1.5	0.1	0.07	0.14	0.15	0.3	0.15	0.26	0.18	0.18	0.12	0.097	0.085
Antimony	1.3	7.5	1	<0.20	<0.20	<0.20	<0.20	<0.20	0.37	<0.20	<0.20	<0.20	0.34	<0.20
Arsenic	18	18	1	1.6	3.6	2.9	2.4	1	4.6	1.9	1.5	1.3	11	8.6
Barium	220	390	1	13	15	25	33	8.9	25	12	12	13	22	23
Beryllium	2.5	4	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.2
Boron (total)	36	120	5	7.6	8.4	7.5	6	<5.0	<5.0	<5.0	5	<5.0	5.9	<5.0
Cadmium	1.2	1.2	0.5	0.19	0.4	0.84	0.77	<0.10	0.59	0.35	0.15	0.37	**1.3**	**1.3**
Chromium	70	160	1	6.6	7.1	7.9	8.4	5.8	9.6	5.6	6	4.6	10	9.6
Cobalt	22	22	1	1.7	2.5	2.6	2.6	1.3	3.6	1.6	1.7	1.6	5.8	3.9
Copper	92	140	1	7.7	17	16	13	6.7	16	7.6	6.6	6.1	37	31
Lead	120	120	1	14	50	75	**410**	6.8	120	10	8.8	15	71	60
Molybdenum	2	6.9	1	0.66	**2.7**	0.75	0.58	0.64	1.1	0.55	0.53	<0.50	**7.7**	0.82
Nickel	82	100	1	4.1	7.6	8.1	8.2	3.2	11	4.3	4	3.6	16	11
Selenium	1.5	2.4	1	<0.50	<0.50	<0.50	<0.50	<0.50	0.52	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	0.5	20	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	1.0	1.0	0.5	0.052	0.078	0.13	0.16	<0.050	0.11	<0.050	<0.050	<0.050	0.12	0.2
Uranium	2.5	23	1	0.39	1	0.77	0.61	0.33	0.73	0.5	0.37	0.41	1.1	0.72
Vanadium	86	86	1	9.6	9.6	12	12	6	13	7.9	7.2	8.6	16	15
Zinc	290	340	5	140	280	**560**	**780**	43	**350**	190	100	170	**1400**	**650**
Mercury	0.27	0.27	0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
N/A	Not Analyzed
mbgs	metres below ground surface
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

Table 6 Summary of Analytical Results for VOCs in Groundwater

Sample ID	MOECC Table 8 Standards	MOECC Table 2 Standards	Reportable Detection Limit	MWA	TM-100 Field Dup of MWA	MWB	MW2-09A	MW2-09B	XCG-MW1	XCG-MW2	XCG-MW3	XCG-MW4
Units	**µg/L**	**µg/L**		**11-Jul-16**	**11-Jul-16**	**13-Jul-16**	**11-Jul-16**	**11-Jul-16**	**11-Jul-16**	**13-Jul-16**	**11-Jul-16**	**11-Jul-16**
Acetone	2,700	2,700	10	<10	<10	<10	<10	<10	<10	21	<10	<10
Benzene	5	5	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	0.35	<0.20	0.48	0.21
Bromodichloromethane	16	16	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	25	25	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	0.89	0.89	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	0.79	0.79	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	30	30	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	2.4	2.4	0.2	<0.20	<0.20	<0.20	0.29	0.29	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	25	25	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	3	3	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	59	59	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	1	1	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichlorodifluoromethane (FREON 12)	590	590	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	5	5	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2 - Dichloroethane	1.6	1.6	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1 Dichloroethylene	1.6	1.6	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis- 1,2-Dichloroethylene	1.6	1.6	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans- 1,2-dichloroethylene	1.6	1.6	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	5	5	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	0.5	0.5	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene	0.5	0.5	0.4	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Ethylbenzene	2.4	2.4	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.96
Ethylene Dibromide	0.2	0.2	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Hexane	51	51	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methylene Chloride	50	50	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	640	640	10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methyl Ethyl Ketone	1,800	1,800	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl tert-butyl ether	15	15	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	5.4	5.4	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	1.1	1.1	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	1	1	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	1.6	1.6	0.2	<0.20	<0.20	<0.20	<0.20	0.29	<0.20	<0.20	<0.20	<0.20
Toluene	22	24	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	0.41	<0.20	0.35	0.38
1,1,1-Trichloroethane	200	200	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	4.7	4.7	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	1.6	1.6	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	0.5	0.5	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane (FREON 11)	150	150	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	N/V	N/V	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	2	10
m & p-Xylene	N/V	N/V	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.59	2
Xylenes (Total)	300	300	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	2.6	12

Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
N/V	No Value
N/A	Not Analyzed
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

Table 7 Summary of Analytical Results for BTEX and PHCs in Groundwater

Sample ID	MOECC Table 8 Standards	MOECC Table 2 Standards	Reportable Detection Limit	MWA	TM-100 Field Dup of MWA	MWB	MW2-09A	MW2-09B	XCG-MW1	XCG-MW2	XCG-MW3	XCG-MW4
Units	µg/L	µg/L		11-Jul-16	11-Jul-16	13-Jul-16	11-Jul-16	11-Jul-16	11-Jul-16	13-Jul-16	11-Jul-16	11-Jul-16
BTEX and Petroleum Hydrocarbons												
Benzene	5	5	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	0.35	<0.20	0.48	0.21
Toluene	22	24	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	0.41	<0.20	0.35	0.38
Ethylbenzene	2.4	2.4	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.96
o-Xylene	N/V	N/V	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.59	2
p+m-Xylene	N/V	N/V	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	2	10
Total Xylenes	300	300	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	2.6	12
F1 (C6-C10)	420	750	25	<25	<25	<25	<25	<25	<25	<25	37	77
F1 (C6-C10) - BTEX	420	750	25	<25	<25	<25	<25	<25	<25	<25	33	63
F2 (>C10-C16)	150	150	100	<100	<100	<100	<100	<100	<100	<100	**250**	150
F3 (>C16-C34)	500	500	200	<200	<200	<200	<200	<200	<200	<200	**2,300**	**1,200**
F4 (>C34)	500	500	200	<200	<200	<200	<200	<200	<200	<200	490	220

Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
N/V	No Value
N/A	Not Analyzed
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

Table 8 Summary of Analytical Results for PAHs in Groundwater

Sample ID	MOECC Table 8 Standards	MOECC Table 2 Standards	Reportable Detection Limit	MWA	TM-100 Field Dup of MWA	MWB	MW2-09A	MW2-09B	XCG-MW1	XCG-MW2	XCG-MW3	XCG-MW4
Units	µg/L	µg/L		11-Jul-16	11-Jul-16	13-Jul-16	11-Jul-16	11-Jul-16	11-Jul-16	13-Jul-16	11-Jul-16	11-Jul-16
Acenaphthene	4.1	4.1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.14	0.056
Acenaphthylene	1	1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.16	0.06
Anthracene	1	2.4	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.15	0.066
Benzo(a)anthracene	1	1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.076	<0.050
Benzo(a)pyrene	0.01	0.01	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.03**	**0.015**
Benzo(b/j)fluoranthene	0.1	0.1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Benzo(g,h,i)perylene	0.2	0.2	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Benzo(k)fluoranthene	0.1	0.1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chrysene	0.1	0.1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.055	<0.050
Dibenzo(a,h)anthracene	0.2	0.2	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Fluoranthene	0.41	0.41	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.16	0.082
Fluorene	120	120	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.46	0.2
Indeno(1,2,3-cd)pyrene	0.2	0.2	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1-Methylnaphthalene	3.2	3.2	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**5.9**	**5.2**
2-Methylnaphthalene			0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**4**	**5.9**
Naphthalene	11	11	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	7.9	7.1
Phenanthrene	1	1	0.03	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.03	0.45	0.32
Pyrene	4.1	4.1	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.27	0.13

Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
N/V	No Value
N/A	Not Analyzed
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

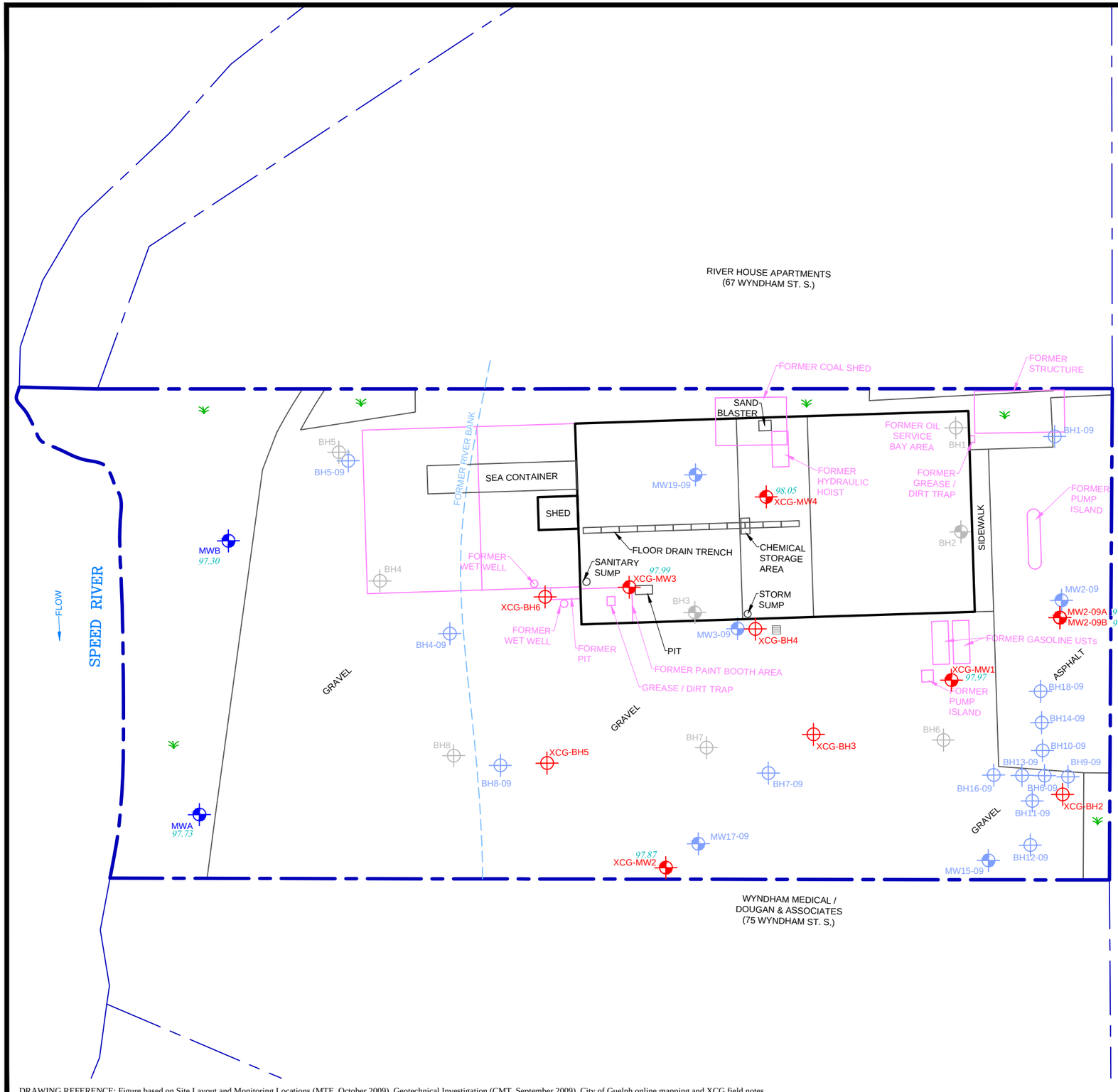
Table 9 Summary of Analytical Results for Metals in Groundwater

Sample ID	MOECC Table 8 Standards	MOECC Table 2 Standards	Reportable Detection Limit	MWA	TM-100 Field Dup of MWA	MWB	MW2-09A	MW2-09B	XCG-MW1	XCG-MW2	XCG-MW3	XCG-MW4
Units	µg/L	µg/L		11-Jul-16	11-Jul-16	13-Jul-16	11-Jul-16	11-Jul-16	11-Jul-16	13-Jul-16	11-Jul-16	11-Jul-16
Chromium VI	25	25	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	<0.50	<0.50
Antimony	6	6	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.9	<0.50	<0.50
Arsenic	25	25	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12	1.9	1.8
Barium	1,000	1,000	2	100	100	84	120	38	69	69	130	170
Beryllium	4	4	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Boron	5,000	5,000	10	120	120	92	110	34	74	83	93	89
Cadmium	2.1	2.7	0.1	0.16	0.14	<0.10	0.12	0.22	<0.10	<0.10	<0.10	<0.10
Chromium	50	50	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cobalt	3.8	3.8	0.5	3.4	3.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.7
Copper	69	87	1	2.5	2.4	<1.0	1.9	1.9	1.9	9.7	<1.0	<1.0
Lead	10	10	0.5	<0.50	<0.50	<0.50	<0.50	0.96	<0.50	<0.50	<0.50	1.4
Mercury	0.29	0.29	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	70	70	0.5	0.67	0.66	2.2	0.99	1.6	1.4	**110**	1.9	2.8
Nickel	100	100	1	1.6	1.7	<1.0	1.1	1.3	1.5	3	<1.0	1.9
Selenium	10	10	2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Silver	1.2	1.5	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sodium	490,000	490,000	100	160,000	160,000	220,000	200,000	160,000	150,000	320,000	230,000	240,000
Thallium	2	2	0.05	<0.050	<0.050	<0.050	<0.050	0.081	<0.050	<0.050	<0.050	<0.050
Uranium	20	20	0.1	0.31	0.31	0.59	1.2	1.2	1.6	2.8	0.16	0.98
Vanadium	6.2	6.2	0.5	0.56	0.55	<0.50	<0.50	<0.50	<0.50	2.1	0.63	<0.50
Zinc	890	1,100	5	45	46	<5.0	40	88	19	5.7	22	51

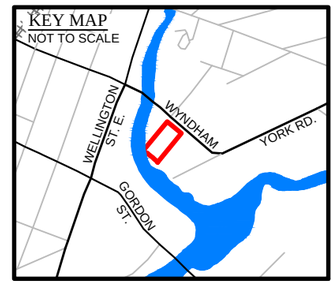
Notes:

<	Below laboratory RDL (Reportable Detection Limit)
Bold	Parameter concentration exceeds MOECC Table 8 Standards for Industrial/Commercial Use
Bold	Parameter concentration exceeds MOECC Table 2 Standards for Industrial/Commercial Use
N/V	No Value
N/A	Not Analyzed
MOECC Table 2 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for coarse textured soil.
MOECC Table 8 Standards	Ontario Ministry of the Environment and Climate Change's (MOECC) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), Full Depth Generic Site Condition Standards for Use within 30 metres of a Water Body in a Potable Groundwater Condition.

FIGURE



KEY MAP
NOT TO SCALE



LEGEND:

- APPROXIMATE SUBJECT PROPERTY BOUNDARIES
- APPROXIMATE PROPERTY BOUNDARIES
- FORMER FEATURES
- CATCH BASIN
- GRASSED AREA
- APPROXIMATE MONITORING WELL LOCATION (MTE, 2009)
- APPROXIMATE MONITORING WELL LOCATION (MTE, 2009) (NOT OBSERVED)
- APPROXIMATE BOREHOLE LOCATION (MTE, 2009) (NOT OBSERVED)
- APPROXIMATE MONITORING WELL LOCATION (CMT, 2009) (NOT OBSERVED)
- APPROXIMATE BOREHOLE LOCATION (CMT, 2009) (NOT OBSERVED)
- MONITORING WELL LOCATION (XCG, JULY 2016)
- BOREHOLE LOCATION (XCG, JULY 2016)
- 97.84 GROUNDWATER ELEVATION (JULY 2016)

NOTE:
MWA AND MWB WERE ONLY WELLS OBSERVED DURING SITE INSPECTION.

TRUE NORTH
SITE NORTH

0 10 20m

PHASE II ESA
SITE PLAN

71 WYNDHAM STREET

GUELPH, ONTARIO

XCG
Environmental Engineers & Scientists

DATE	JOB NO.	FIGURE NO.
JUNE 2016	5-2705-14-02	1

DRAWING REFERENCE: Figure based on Site Layout and Monitoring Locations (MTE, October 2009), Geotechnical Investigation (CMT, September 2009), City of Guelph online mapping and XCG field notes.
NOTE: Location of building, underground utilities, etc. are for reference only and should not be relied upon for detailed design, renovation, or construction purposes. Property boundary and building locations shown may not represent actual surveyed boundaries.

SHEET: R527051402001FIG01.pdf
FILE: R527051402001.dwg

ATTACHMENT A
BOREHOLE LOGS

XCG Environmental Engineers & Scientists

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF BOREHOLE: XCG-BH1

Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 13, 2016
Completed: July 13, 2016

Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
						Ground Surface	0.00
0 / 0	1	40	80	0		***ASPHALT***	
1						***SAND AND GRAVEL FILL*** Grey/brown sand and gravel, dry.	
2						Grey cobble. Some brown coarse sand and gravel, dry.	
3 / 1	2	52	60	0		Brown sand and gravel, moist at 0.76 metres bgs.	
4							
5	3	47	10	0			
6 / 2							
7	4	16	80	0			
8							
9							
10 / 3	*5	50	80	0		Moist yellow and light grey silt at 3.05 metres bgs.	
11							
12	6	-	10	0		Refusal at 3.96 metres bgs. Limestone bedrock.	-3.96
13 / 4						End of Borehole	
14						*Note: Sample submitted to an accredited laboratory for chemical analysis.	
15							

Ground Surface Elevation: N/A

Screening Tool: RKI Eagle

XCG Environmental Engineers & Scientists

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF BOREHOLE: XCG-BH2

Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 13, 2016
Completed: July 13, 2016

Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
						Ground Surface	0.00
0 / 0	1	35	75	0		***SAND AND GRAVEL FILL*** Crushed grey gravel at surface underlain by brown sand and gravel fill, dry.	
2							-0.76
3 / 1	2	9	80	0		***SAND*** Brown sand, trace gravel, moist.	
5							
6 / 2	3	16	10	0			
7							
8	4	17	60	0			
9						Dark brown/grey, very moist to wet.	
10 / 3						Saturated at 3.05 metres bgs.	
	*5	65	30	5		Refusal at 3.30 metres bgs. Limestone bedrock.	-3.30
11						End of Borehole	
12						*Note: Sample submitted to an accredited laboratory for chemical analysis.	

Ground Surface Elevation: N/A

Screening Tool: RKI Eagle

XCG Environmental Engineers & Scientists

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF BOREHOLE: XCG-BH3

Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 13, 2016
Completed: July 13, 2016

Checked By: KP
Logged By: TM

Depth (ft)	Depth (m)	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
							Ground Surface	0.00
0	0						***SAND AND GRAVEL FILL***	
1		1	55	70	0		Brown sand and gravel fill, dry, dense.	
2								
3	1	2	-	60	0		Large cobble at 0.91 metres bgs.	
4								
5		3	98	10	0			
6	2							
7								-2.29
8		*4	-	100	5		***SILTY SAND*** Light grey sand with silt, moist.	
9							Dark brown, trace organics, trace gravel.	
10	3	5	75	10	0		Refusal at 3.35 metres bgs. Fractured bedrock, saturated, some sand infill.	-3.35
11							End of Borehole	
12							*Note: Sample submitted to an accredited laboratory for chemical analysis.	
13								

Ground Surface Elevation: N/A

Screening Tool: RKI Eagle

XCG Environmental Engineers & Scientists

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF BOREHOLE: XCG-BH4

Driller: CMT Drilling
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 centimetres
Start Date: July 13, 2016
Completed: July 13, 2016
Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
						Ground Surface	0.00
0 / 0	1	23	70	0		***SAND AND GRAVEL FILL*** Grey sand and gravel fill, dry, trace silt. Large cobble.	
3 / 1	2	40	50	0			
6 / 2	3	33	30	0		Very moist, some cobbles and sand at 1.98 metres bgs. Coarse sand and gravel, moist.	
9 / 3	*4	21	40	0		Brown fractured limestone, some sand, saturated at 3.05 metres bgs. Refusal at 3.20 metres bgs.	
10	5	70	20	0			-3.20
11 / 12						End of Borehole *Note: Sample submited to an accredited laboratory for chemical analysis.	

Ground Surface Elevation: N/A

Screening Tool: RKI Eagle

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF BOREHOLE: XCG-BH5

Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 13, 2016
Completed: July 13m 2016

Checked By: KP
Logged By: TM

Depth (ft)	Depth (m)	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
							Ground Surface	0.00
0	0						***SAND AND GRAVEL FILL*** Brown sand and gravel, moist.	
1		1	41	70	0			
2								
3	1	2	14	70	0		Dark brown, compact sand a gravel, some silt, trace organics.	
4								
5		3	51	50	15			
6	2						Dark brown, hydrocarbon odour at 2.06 metres bgs.	
7								
8		*4	38	50	25		Dark brown/dark grey sand and gravel, trace silt and clay, hydrocarbon odour, dense, wet at 2.59 metres bgs.	
9							Refusal at 2.90 metres bgs. Limestone bedrock.	-2.90
10	3						End of Borehole	
11							*Note: Sample submitted to an accredited laboratory for chemical analysis.	

Ground Surface Elevation: N/A

Screening Tool: RKI Eagle

XCG Environmental Engineers & Scientists

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF BOREHOLE: XCG-BH6

Driller: CMT Engineering Inc.
Drill Method: 7822 DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 13, 2016
Completed: July 13, 2016

Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
						Ground Surface	0.00
0 / 0	1	19	80	5		***SAND AND GRAVEL FILL*** Brown sand and gravel, trace silt, dense, dry.	
1							
2							
3 / 1	2	25	80	5			
4							
5							-1.52
6 / 2	3	2	5	0		***SANDY SILT*** Brown/grey sandy silt, some clay, trace gravel.	
7							
8	*4	17	60	10			
9							
10 / 3	5	60	100	5		Weathered bedrock, saturated at 3.04 metres bgs.	-3.28
11						End of Borehole	
12						*Note: Sample submitted to an accredited laboratory for chemical analysis.	

Ground Surface Elevation: N/A

Screening Tool: RKI eagle

For Environmental Purposes Only

XCG Environmental Engineers & Scientists

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

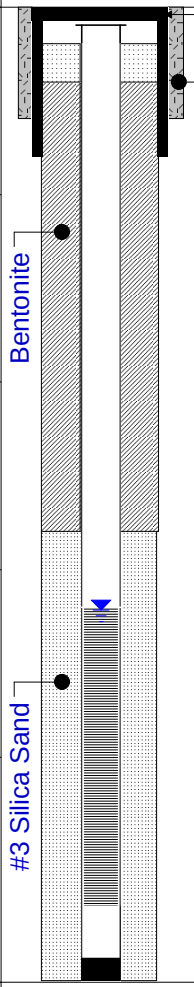
Privileged and Confidential
LOG OF WELL: XCG-MW1

Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 8, 2016
Completed: July 8, 2016

Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery (%)	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
						Ground Surface	0.0
0 / 0	1	66	50	5		***SAND AND GRAVEL FILL*** Brown sand and gravel, some silt, dry.	-0.8
2	2	30	75	5		***SILTY SAND*** Light brown silty sand, trace gravel, dry. 5 cm thick clay seam at 1.22 metres below ground surface (bgs)	-1.5
4 / 2	3	40	75	10		***SAND AND GRAVEL*** Brown sand with gravel, some cobbles, dense.	-2.3
6	4	75	40	15		***SAND*** Brown medium to coarse grained sand, moist. Large cobble	-3.0
8 / 10	5	91	30	25		***SAND AND GRAVEL*** Brown sand and gravel, trace silt, moist to wet. Weathered bedrock at 3.35 metres bgs.	
12	*6	-	30	35		Refusal at 3.96 metres bgs.	-4.0
14 / 4						End of Borehole *Note: Sample submitted to an accredited laboratory for chemical analysis.	



Well Details: Flush Mount Steel Casing

Groundwater Elevation: 97.97 m.a.s.d. (July 13, 2016)
T.O.P Elevation: 100.423 m.a.s.d.
Ground Surface Elevation: 100.511 m.a.s.d.

Screening Tool: RKI Eagle

Monitoring Well Log

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF WELL: XCG-MW2

Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 8, 2016
Completed: July 8, 2016

Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery (%)	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
						Ground Surface	0.0
0 / 0	1	21	50	5		***SAND AND GRAVEL FILL*** Crushed gravel at surface underlain by grey/brown sand and gravel, some silt, moist.	
2							-0.8
	2	2	50	5		***SANDY SILT*** Dark brown sandy silt, decomposed wood and plant material.	
4							
	3	1	50	0			
6 / 2							-2.3
	*4	54	75	5		***SAND AND GRAVEL*** Grey sand and gravel to sandy gravel, trace silt, moist.	
8							
							-3.0
10						End of Borehole	
12						*Note: Sample submitted to an accredited laboratory for chemical analysis.	

Well Completion: Concrete; Flush Mount Steel Casing; Bentonite; #3 Silica Sand; 5cm Dia. 10 Slot PVC Screen

Groundwater Elevation: 97.87 m.a.s.d. (July 13, 2016)
T.O.P Elevation: 100.126 m.a.s.d.
Ground Surface Elevation: 100.231 m.a.s.d.

Screening Tool: RKI Eagle

Monitoring Well Log

XCG Environmental Engineers & Scientists

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF WELL: XCG-MW3

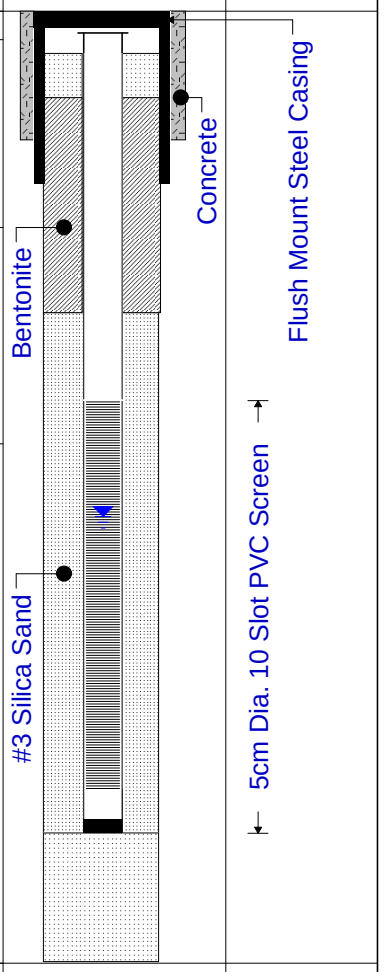
Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 8, 2016
Completed: July 8, 2016

Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery (%)	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 / 0						Ground Surface	0.0
	1	21	75	5		***CONCRETE***	-0.1
2						***SAND AND GRAVEL FILL*** Brown sand and gravel, dark brown/black staining, hydrocarbon odour.	-0.8
	2	19	25	0		***SAND*** Sand with topsoil, black staining, hydrocarbon odour. Large cobble.	-1.5
4							
6 / 2	3	10	20	20		***SAND AND GRAVEL*** Brown/grey, large cobbles, some sand, moist to wet rocks, hydrocarbon odour.	
						Gravel infilled with sand, saturated, strong hydrocarbon odour, oily sheen on water in split spoon.	
8	*4	12	25	190		Grey coarse grained sand and gravel, hydrocarbon odour.	
						Refusal at 3.35 metres bgs. Limestone bedrock.	
10	5	64	25	25			-3.4
12						End of Borehole	

*Note: Sample submitted to an accredited laboratory for chemical analysis.



Groundwater Elevation: 97.99 m.a.s.d. (July 13, 2016)
T.O.P Elevation: 99.768 m.a.s.d.
Ground Surface Elevation: 99.850 m.a.s.d.

Screening Tool: RKI Eagle

Monitoring Well Log

Project #: 5-2705-14-02

Project: Phase II ESA
Client: The Tricar Group
Location: 71 Wyndham Street South, Guelph

Privileged and Confidential
LOG OF WELL: XCG-MW4

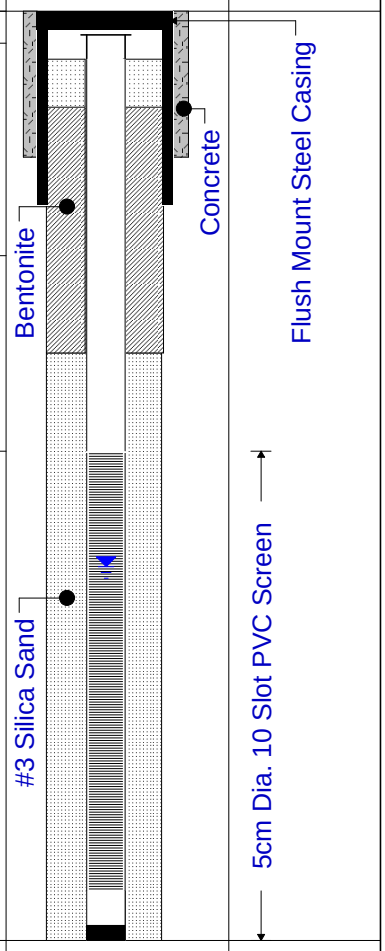
Driller: CMT Engineering Inc.
Drill Method: 7822DT Geoprobe
Sample Method: SPT/MC5 Continuous

Borehole Diameter: 7.62 cm
Start Date: July 8, 2016
Completed: July 8, 2016

Checked By: KP
Logged By: TM

Depth (ft / m)	Sample No.	N-Value	Recovery (%)	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
						Ground Surface	0.0
0 / 0						***CONCRETE***	-0.1
	1	4	50	0		***SAND AND GRAVEL FILL*** Brown sand and gravel, dry.	
2							-0.8
	2	3	20	10		***SAND FILL*** Black/brown stained sand, some gravel, hydrocarbon odour.	
4							-1.4
	*3	4	30	140		***SAND AND GRAVEL*** Black sand and gravel fill, traces of wood, strong hydrocarbon odour, moist to wet.	
6 / 2							
	4	11	40	80		Grey weathered bedrock at 2.74 metres bgs. Coarse grey sand and gravel, underlain by competent bedrock.	-2.9
8							
10						End of Borehole *Note: Sample submitted to an accredited laboratory for chemical anlaysis.	

Well Completion / Well Details



Groundwater Elevation: 98.05 m.a.s.d. (July 13, 2016)
T.O.P Elevation: 99.780 m.a.s.d.
Ground Surface Elevation: 99.893 m.a.s.d.

Screening Tool: RKI Eagle

Monitoring Well Log

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

Your Project #: 5-2705-14-02
Your C.O.C. #: 569052-01-01

Attention:Kristian Peter

XCG Consulting Limited
820 Trillium Dr
Kitchener, ON
N2R 1K4

Report Date: 2016/07/15
Report #: R4066374
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B6E2939
Received: 2016/07/11, 08:57

Sample Matrix: Soil
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	2	N/A	2016/07/14	CAM SOP-00301	EPA 8270D m
Methylnaphthalene Sum	2	N/A	2016/07/15	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	4	2016/07/14	2016/07/14	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	4	N/A	2016/07/15		EPA 8260C m
Hexavalent Chromium in Soil by IC (1)	4	2016/07/13	2016/07/14	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	4	2016/07/14	2016/07/15	CAM SOP-00316	CCME CWS m
Strong Acid Leachable Metals by ICPMS	3	2016/07/13	2016/07/14	CAM SOP-00447	EPA 6020A m
Strong Acid Leachable Metals by ICPMS	1	2016/07/14	2016/07/14	CAM SOP-00447	EPA 6020A m
Moisture	4	N/A	2016/07/13	CAM SOP-00445	Carter 2nd ed 51.2 m
Moisture	1	N/A	2016/07/14	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM)	2	2016/07/12	2016/07/13	CAM SOP-00318	EPA 8270D m
PAH Compounds in Soil by GC/MS (SIM)	2	2016/07/12	2016/07/14	CAM SOP-00318	EPA 8270D m
Volatile Organic Compounds and F1 PHCs	4	N/A	2016/07/14	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics has performed all analytical testing herein in accordance with ISO 17025 and the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. All methodologies comply with this document and are validated for use in the laboratory. The methods and techniques employed in this analysis conform to the performance criteria (detection limits, accuracy and precision) as outlined in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act.

Maxxam Analytics is accredited for all specific parameters as required by Ontario Regulation 153/04. Maxxam Analytics is limited in liability to the actual cost of analysis unless otherwise agreed in writing. There is no other warranty expressed or implied. Samples will be retained at Maxxam Analytics for three weeks from receipt of data or as per contract.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Soils are reported on a dry weight basis unless otherwise specified.
(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Your Project #: 5-2705-14-02
Your C.O.C. #: 569052-01-01

Attention:Kristian Peter

XCG Consulting Limited
820 Trillium Dr
Kitchener, ON
N2R 1K4

Report Date: 2016/07/15
Report #: R4066374
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B6E2939
Received: 2016/07/11, 08:57

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marijane Cruz, Senior Project Manager
Email: MCruz@maxxam.ca
Phone# (905)817-5756
==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B6E2939
Report Date: 2016/07/15

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 METALS PACKAGE (SOIL)

Maxxam ID		CRL334		CRL335	CRL335	CRL336		
Sampling Date		2016/07/08 10:55		2016/07/08 13:30	2016/07/08 13:30	2016/07/08 14:30		
COC Number		569052-01-01		569052-01-01	569052-01-01	569052-01-01		
	UNITS	XCG-MW3-SS5	QC Batch	XCG-MW4-SS3	XCG-MW4-SS3 Lab-Dup	XCG-MW2-SS4	RDL	QC Batch
Inorganics								
Moisture	%	11	4576196	18	N/A	13	1.0	4576304
Chromium (VI)	ug/g	<0.2	4576163	<0.2	N/A	<0.2	0.2	4576163
Metals								
Hot Water Ext. Boron (B)	ug/g	0.15	4577882	0.30	0.30	0.14	0.050	4578255
Acid Extractable Antimony (Sb)	ug/g	<0.20	4577993	<0.20	N/A	<0.20	0.20	4576805
Acid Extractable Arsenic (As)	ug/g	2.9	4577993	2.4	N/A	3.6	1.0	4576805
Acid Extractable Barium (Ba)	ug/g	25	4577993	33	N/A	15	0.50	4576805
Acid Extractable Beryllium (Be)	ug/g	<0.20	4577993	<0.20	N/A	<0.20	0.20	4576805
Acid Extractable Boron (B)	ug/g	7.5	4577993	6.0	N/A	8.4	5.0	4576805
Acid Extractable Cadmium (Cd)	ug/g	0.84	4577993	0.77	N/A	0.40	0.10	4576805
Acid Extractable Chromium (Cr)	ug/g	7.9	4577993	8.4	N/A	7.1	1.0	4576805
Acid Extractable Cobalt (Co)	ug/g	2.6	4577993	2.6	N/A	2.5	0.10	4576805
Acid Extractable Copper (Cu)	ug/g	16	4577993	13	N/A	17	0.50	4576805
Acid Extractable Lead (Pb)	ug/g	75	4577993	410	N/A	50	1.0	4576805
Acid Extractable Molybdenum (Mo)	ug/g	0.75	4577993	0.58	N/A	2.7	0.50	4576805
Acid Extractable Nickel (Ni)	ug/g	8.1	4577993	8.2	N/A	7.6	0.50	4576805
Acid Extractable Selenium (Se)	ug/g	<0.50	4577993	<0.50	N/A	<0.50	0.50	4576805
Acid Extractable Silver (Ag)	ug/g	<0.20	4577993	<0.20	N/A	<0.20	0.20	4576805
Acid Extractable Thallium (Tl)	ug/g	0.13	4577993	0.16	N/A	0.078	0.050	4576805
Acid Extractable Uranium (U)	ug/g	0.77	4577993	0.61	N/A	1.0	0.050	4576805
Acid Extractable Vanadium (V)	ug/g	12	4577993	12	N/A	9.6	5.0	4576805
Acid Extractable Zinc (Zn)	ug/g	560	4577993	780	N/A	280	5.0	4576805
Acid Extractable Mercury (Hg)	ug/g	<0.050	4577993	<0.050	N/A	<0.050	0.050	4576805

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B6E2939
Report Date: 2016/07/15

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 METALS PACKAGE (SOIL)

Maxxam ID		CRL337		
Sampling Date		2016/07/08 16:00		
COC Number		569052-01-01		
	UNITS	XCG-MW1-SS6	RDL	QC Batch
Inorganics				
Moisture	%	11	1.0	4576304
Chromium (VI)	ug/g	<0.2	0.2	4576163
Metals				
Hot Water Ext. Boron (B)	ug/g	0.070	0.050	4578255
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	4576805
Acid Extractable Arsenic (As)	ug/g	1.6	1.0	4576805
Acid Extractable Barium (Ba)	ug/g	13	0.50	4576805
Acid Extractable Beryllium (Be)	ug/g	<0.20	0.20	4576805
Acid Extractable Boron (B)	ug/g	7.6	5.0	4576805
Acid Extractable Cadmium (Cd)	ug/g	0.19	0.10	4576805
Acid Extractable Chromium (Cr)	ug/g	6.6	1.0	4576805
Acid Extractable Cobalt (Co)	ug/g	1.7	0.10	4576805
Acid Extractable Copper (Cu)	ug/g	7.7	0.50	4576805
Acid Extractable Lead (Pb)	ug/g	14	1.0	4576805
Acid Extractable Molybdenum (Mo)	ug/g	0.66	0.50	4576805
Acid Extractable Nickel (Ni)	ug/g	4.1	0.50	4576805
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	4576805
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	4576805
Acid Extractable Thallium (Tl)	ug/g	0.052	0.050	4576805
Acid Extractable Uranium (U)	ug/g	0.39	0.050	4576805
Acid Extractable Vanadium (V)	ug/g	9.6	5.0	4576805
Acid Extractable Zinc (Zn)	ug/g	140	5.0	4576805
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	4576805

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B6E2939
Report Date: 2016/07/15

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 PAHS (SOIL)

Maxxam ID		CRL333	CRL335		CRL336	CRL337		
Sampling Date		2016/07/08 10:50	2016/07/08 13:30		2016/07/08 14:30	2016/07/08 16:00		
COC Number		569052-01-01	569052-01-01		569052-01-01	569052-01-01		
	UNITS	XCG-MW3-SS4	XCG-MW4-SS3	RDL	XCG-MW2-SS4	XCG-MW1-SS6	RDL	QC Batch
Inorganics								
Moisture	%	17	N/A	1.0	N/A	N/A	1.0	4578610
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	1.2	1.3	0.071	<0.0071	<0.0071	0.0071	4573871
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Acenaphthylene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Anthracene	ug/g	0.058	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Benzo(a)anthracene	ug/g	0.068	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Benzo(a)pyrene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Benzo(b/j)fluoranthene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Benzo(g,h,i)perylene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Benzo(k)fluoranthene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Chrysene	ug/g	0.054	<0.050	0.050	0.0066	<0.0050	0.0050	4575723
Dibenz(a,h)anthracene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
Fluoranthene	ug/g	0.091	0.071	0.050	<0.0050	0.011	0.0050	4575723
Fluorene	ug/g	0.069	0.065	0.050	<0.0050	<0.0050	0.0050	4575723
Indeno(1,2,3-cd)pyrene	ug/g	<0.050	<0.050	0.050	<0.0050	<0.0050	0.0050	4575723
1-Methylnaphthalene	ug/g	0.60	0.58	0.050	<0.0050	<0.0050	0.0050	4575723
2-Methylnaphthalene	ug/g	0.59	0.75	0.050	0.0052	<0.0050	0.0050	4575723
Naphthalene	ug/g	0.32	0.37	0.050	<0.0050	<0.0050	0.0050	4575723
Phenanthrene	ug/g	0.18	0.17	0.050	0.0078	0.0082	0.0050	4575723
Pyrene	ug/g	0.14	0.15	0.050	<0.0050	0.0088	0.0050	4575723
Surrogate Recovery (%)								
D10-Anthracene	%	97	100	N/A	85	85	N/A	4575723
D14-Terphenyl (FS)	%	70	94	N/A	78	78	N/A	4575723
D8-Acenaphthylene	%	93	89	N/A	93	94	N/A	4575723

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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O.REG 153 VOCS & F1-F4 (SOIL)

Maxxam ID		CRL333	CRL335	CRL336	CRL337		
Sampling Date		2016/07/08 10:50	2016/07/08 13:30	2016/07/08 14:30	2016/07/08 16:00		
COC Number		569052-01-01	569052-01-01	569052-01-01	569052-01-01		
	UNITS	XCG-MW3-SS4	XCG-MW4-SS3	XCG-MW2-SS4	XCG-MW1-SS6	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4573549
Volatile Organics							
Acetone (2-Propanone)	ug/g	<0.50	<0.50	<0.50	<0.50	0.50	4576650
Benzene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	4576650
Bromodichloromethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Bromoform	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Bromomethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Carbon Tetrachloride	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Chlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Chloroform	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Dibromochloromethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,2-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,3-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,4-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Dichlorodifluoromethane (FREON 12)	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,1-Dichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,2-Dichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,1-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
cis-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
trans-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,2-Dichloropropane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	<0.030	0.030	4576650
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	4576650
Ethylbenzene	ug/g	0.043	<0.020	<0.020	<0.020	0.020	4576650
Ethylene Dibromide	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Hexane	ug/g	0.075	<0.050	<0.050	<0.050	0.050	4576650
Methylene Chloride(Dichloromethane)	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.50	<0.50	<0.50	<0.50	0.50	4576650
Methyl Isobutyl Ketone	ug/g	<0.50	<0.50	<0.50	<0.50	0.50	4576650
Methyl t-butyl ether (MTBE)	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Styrene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,1,1,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,1,2,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Tetrachloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	4576650

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B6E2939
Report Date: 2016/07/15

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 VOCS & F1-F4 (SOIL)

Maxxam ID		CRL333	CRL335	CRL336	CRL337		
Sampling Date		2016/07/08 10:50	2016/07/08 13:30	2016/07/08 14:30	2016/07/08 16:00		
COC Number		569052-01-01	569052-01-01	569052-01-01	569052-01-01		
	UNITS	XCG-MW3-SS4	XCG-MW4-SS3	XCG-MW2-SS4	XCG-MW1-SS6	RDL	QC Batch
1,1,1-Trichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
1,1,2-Trichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Trichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Trichlorofluoromethane (FREON 11)	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	4576650
Vinyl Chloride	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	4576650
p+m-Xylene	ug/g	0.18	0.13	<0.020	<0.020	0.020	4576650
o-Xylene	ug/g	0.046	<0.020	<0.020	<0.020	0.020	4576650
Total Xylenes	ug/g	0.23	0.13	<0.020	<0.020	0.020	4576650
F1 (C6-C10)	ug/g	<10	<10	<10	<10	10	4576650
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	10	4576650
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	41	120	<10	<10	10	4578803
F3 (C16-C34 Hydrocarbons)	ug/g	2200	5200	<50	<50	50	4578803
F4 (C34-C50 Hydrocarbons)	ug/g	500	1200	<50	<50	50	4578803
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	N/A	4578803
Surrogate Recovery (%)							
o-Terphenyl	%	99	99	98	96	N/A	4578803
4-Bromofluorobenzene	%	94	94	94	93	N/A	4576650
D10-o-Xylene	%	95	100	93	94	N/A	4576650
D4-1,2-Dichloroethane	%	103	103	103	103	N/A	4576650
D8-Toluene	%	98	98	97	98	N/A	4576650

RDL = Reportable Detection Limit
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N/A = Not Applicable

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Maxxam Job #: B6E2939
Report Date: 2016/07/15

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CRL333 **Collected:** 2016/07/08
Sample ID: XCG-MW3-SS4 **Shipped:**
Matrix: Soil **Received:** 2016/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4573871	N/A	2016/07/15	Automated Statchk
1,3-Dichloropropene Sum	CALC	4573549	N/A	2016/07/15	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4578803	2016/07/14	2016/07/15	Barbara Wowk
Moisture	BAL	4578610	N/A	2016/07/14	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4575723	2016/07/12	2016/07/14	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4576650	N/A	2016/07/14	Denis Reid

Maxxam ID: CRL334 **Collected:** 2016/07/08
Sample ID: XCG-MW3-SS5 **Shipped:**
Matrix: Soil **Received:** 2016/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	4577882	2016/07/14	2016/07/14	Jolly John
Hexavalent Chromium in Soil by IC	IC/SPEC	4576163	2016/07/13	2016/07/14	Sally Coughlin
Strong Acid Leachable Metals by ICPMS	ICP/MS	4577993	2016/07/14	2016/07/14	Viviana Canzonieri
Moisture	BAL	4576196	N/A	2016/07/13	Valentina Kaftani

Maxxam ID: CRL335 **Collected:** 2016/07/08
Sample ID: XCG-MW4-SS3 **Shipped:**
Matrix: Soil **Received:** 2016/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4573871	N/A	2016/07/15	Automated Statchk
Hot Water Extractable Boron	ICP	4578255	2016/07/14	2016/07/14	Jolly John
1,3-Dichloropropene Sum	CALC	4573549	N/A	2016/07/15	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4576163	2016/07/13	2016/07/14	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4578803	2016/07/14	2016/07/15	Barbara Wowk
Strong Acid Leachable Metals by ICPMS	ICP/MS	4576805	2016/07/13	2016/07/14	Viviana Canzonieri
Moisture	BAL	4576304	N/A	2016/07/13	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4575723	2016/07/12	2016/07/14	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4576650	N/A	2016/07/14	Denis Reid

Maxxam ID: CRL335 Dup **Collected:** 2016/07/08
Sample ID: XCG-MW4-SS3 **Shipped:**
Matrix: Soil **Received:** 2016/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	4578255	2016/07/14	2016/07/14	Jolly John

Maxxam ID: CRL336 **Collected:** 2016/07/08
Sample ID: XCG-MW2-SS4 **Shipped:**
Matrix: Soil **Received:** 2016/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4573871	N/A	2016/07/14	Automated Statchk
Hot Water Extractable Boron	ICP	4578255	2016/07/14	2016/07/14	Jolly John

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Maxxam Job #: B6E2939
Report Date: 2016/07/15

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CRL336
Sample ID: XCG-MW2-SS4
Matrix: Soil

Collected: 2016/07/08
Shipped:
Received: 2016/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	4573549	N/A	2016/07/15	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4576163	2016/07/13	2016/07/14	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4578803	2016/07/14	2016/07/15	Barbara Wowk
Strong Acid Leachable Metals by ICPMS	ICP/MS	4576805	2016/07/13	2016/07/14	Viviana Canzonieri
Moisture	BAL	4576304	N/A	2016/07/13	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4575723	2016/07/12	2016/07/13	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4576650	N/A	2016/07/14	Denis Reid

Maxxam ID: CRL337
Sample ID: XCG-MW1-SS6
Matrix: Soil

Collected: 2016/07/08
Shipped:
Received: 2016/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4573871	N/A	2016/07/14	Automated Statchk
Hot Water Extractable Boron	ICP	4578255	2016/07/14	2016/07/14	Jolly John
1,3-Dichloropropene Sum	CALC	4573549	N/A	2016/07/15	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4576163	2016/07/13	2016/07/14	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4578803	2016/07/14	2016/07/15	Barbara Wowk
Strong Acid Leachable Metals by ICPMS	ICP/MS	4576805	2016/07/13	2016/07/14	Viviana Canzonieri
Moisture	BAL	4576304	N/A	2016/07/13	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4575723	2016/07/12	2016/07/13	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4576650	N/A	2016/07/14	Denis Reid

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	-0.3°C

Sample CRL333-01 : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

VOCF1 Analysis: Greater than 10g of soil was submitted in the field preserved vial. This significantly exceeds the protocol specification of approximately 5g. Additional methanol was added to the vial to ensure extraction efficiency.

Sample CRL335-01 : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

VOCF1 Analysis: Greater than 10g of soil was submitted in the field preserved vial. This significantly exceeds the protocol specification of approximately 5g. Additional methanol was added to the vial to ensure extraction efficiency.

Sample CRL337-01 : VOCF1 Analysis: Greater than 10g of soil was submitted in the field preserved vial. This significantly exceeds the protocol specification of approximately 5g. Additional methanol was added to the vial to ensure extraction efficiency.

Results relate only to the items tested.

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Maxxam Job #: B6E2939
Report Date: 2016/07/15

QUALITY ASSURANCE REPORT

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4575723	D10-Anthracene	2016/07/13	82	50 - 130	82	50 - 130	79	%		
4575723	D14-Terphenyl (FS)	2016/07/13	85	50 - 130	86	50 - 130	81	%		
4575723	D8-Acenaphthylene	2016/07/13	83	50 - 130	81	50 - 130	78	%		
4576650	4-Bromofluorobenzene	2016/07/14	100	60 - 140	99	60 - 140	95	%		
4576650	D10-o-Xylene	2016/07/14	100	60 - 130	101	60 - 130	96	%		
4576650	D4-1,2-Dichloroethane	2016/07/14	101	60 - 140	100	60 - 140	100	%		
4576650	D8-Toluene	2016/07/14	104	60 - 140	103	60 - 140	97	%		
4578803	o-Terphenyl	2016/07/14	95	60 - 130	92	60 - 130	93	%		
4575723	1-Methylnaphthalene	2016/07/13	74	50 - 130	68	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	2-Methylnaphthalene	2016/07/13	72	50 - 130	70	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Acenaphthene	2016/07/13	81	50 - 130	86	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Acenaphthylene	2016/07/13	80	50 - 130	79	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Anthracene	2016/07/13	76	50 - 130	75	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Benzo(a)anthracene	2016/07/13	85	50 - 130	87	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Benzo(a)pyrene	2016/07/13	89	50 - 130	91	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Benzo(b/j)fluoranthene	2016/07/13	88	50 - 130	95	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Benzo(g,h,i)perylene	2016/07/13	74	50 - 130	78	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Benzo(k)fluoranthene	2016/07/13	76	50 - 130	92	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Chrysene	2016/07/13	85	50 - 130	86	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Dibenz(a,h)anthracene	2016/07/13	77	50 - 130	77	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Fluoranthene	2016/07/13	85	50 - 130	88	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Fluorene	2016/07/13	79	50 - 130	79	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Indeno(1,2,3-cd)pyrene	2016/07/13	89	50 - 130	90	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Naphthalene	2016/07/13	74	50 - 130	74	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Phenanthrene	2016/07/13	79	50 - 130	81	50 - 130	<0.0050	ug/g	NC (1)	40
4575723	Pyrene	2016/07/13	86	50 - 130	87	50 - 130	<0.0050	ug/g	NC (1)	40
4576163	Chromium (VI)	2016/07/14	42 (2)	75 - 125	90	80 - 120	<0.2	ug/g	NC (1)	35
4576196	Moisture	2016/07/13							NC (1)	20
4576304	Moisture	2016/07/13							1.8 (1)	20
4576650	1,1,1,2-Tetrachloroethane	2016/07/14	102	60 - 140	100	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,1,1-Trichloroethane	2016/07/14	101	60 - 140	99	60 - 130	<0.050	ug/g	NC (1)	50

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4576650	1,1,2,2-Tetrachloroethane	2016/07/14	103	60 - 140	101	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,1,2-Trichloroethane	2016/07/14	102	60 - 140	99	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,1-Dichloroethane	2016/07/14	102	60 - 140	100	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,1-Dichloroethylene	2016/07/14	109	60 - 140	106	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,2-Dichlorobenzene	2016/07/14	104	60 - 140	102	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,2-Dichloroethane	2016/07/14	99	60 - 140	98	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,2-Dichloropropane	2016/07/14	101	60 - 140	100	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,3-Dichlorobenzene	2016/07/14	103	60 - 140	101	60 - 130	<0.050	ug/g	NC (1)	50
4576650	1,4-Dichlorobenzene	2016/07/14	103	60 - 140	101	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Acetone (2-Propanone)	2016/07/14	103	60 - 140	102	60 - 140	<0.50	ug/g	NC (1)	50
4576650	Benzene	2016/07/14	101	60 - 140	99	60 - 130	<0.020	ug/g	NC (1)	50
4576650	Bromodichloromethane	2016/07/14	101	60 - 140	100	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Bromoform	2016/07/14	100	60 - 140	99	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Bromomethane	2016/07/14	95	60 - 140	91	60 - 140	<0.050	ug/g	NC (1)	50
4576650	Carbon Tetrachloride	2016/07/14	105	60 - 140	103	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Chlorobenzene	2016/07/14	103	60 - 140	102	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Chloroform	2016/07/14	103	60 - 140	100	60 - 130	<0.050	ug/g	NC (1)	50
4576650	cis-1,2-Dichloroethylene	2016/07/14	103	60 - 140	101	60 - 130	<0.050	ug/g	NC (1)	50
4576650	cis-1,3-Dichloropropene	2016/07/14	100	60 - 140	97	60 - 130	<0.030	ug/g	NC (1)	50
4576650	Dibromochloromethane	2016/07/14	102	60 - 140	101	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Dichlorodifluoromethane (FREON 12)	2016/07/14	125	60 - 140	122	60 - 140	<0.050	ug/g	NC (1)	50
4576650	Ethylbenzene	2016/07/14	101	60 - 140	100	60 - 130	<0.020	ug/g	NC (1)	50
4576650	Ethylene Dibromide	2016/07/14	101	60 - 140	101	60 - 130	<0.050	ug/g	NC (1)	50
4576650	F1 (C6-C10) - BTEX	2016/07/14					<10	ug/g	NC (1)	30
4576650	F1 (C6-C10)	2016/07/14	90	60 - 140	102	80 - 120	<10	ug/g	NC (1)	30
4576650	Hexane	2016/07/14	105	60 - 140	103	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Methyl Ethyl Ketone (2-Butanone)	2016/07/14	99	60 - 140	98	60 - 140	<0.50	ug/g	NC (1)	50
4576650	Methyl Isobutyl Ketone	2016/07/14	101	60 - 140	100	60 - 130	<0.50	ug/g	NC (1)	50
4576650	Methyl t-butyl ether (MTBE)	2016/07/14	103	60 - 140	102	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Methylene Chloride(Dichloromethane)	2016/07/14	97	60 - 140	95	60 - 130	<0.050	ug/g	NC (1)	50
4576650	o-Xylene	2016/07/14	103	60 - 140	102	60 - 130	<0.020	ug/g	NC (1)	50

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4576650	p+m-Xylene	2016/07/14	97	60 - 140	96	60 - 130	<0.020	ug/g	NC (1)	50
4576650	Styrene	2016/07/14	101	60 - 140	99	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Tetrachloroethylene	2016/07/14	103	60 - 140	101	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Toluene	2016/07/14	98	60 - 140	96	60 - 130	<0.020	ug/g	NC (1)	50
4576650	Total Xylenes	2016/07/14					<0.020	ug/g	NC (1)	50
4576650	trans-1,2-Dichloroethylene	2016/07/14	102	60 - 140	99	60 - 130	<0.050	ug/g	NC (1)	50
4576650	trans-1,3-Dichloropropene	2016/07/14	101	60 - 140	95	60 - 130	<0.040	ug/g	NC (1)	50
4576650	Trichloroethylene	2016/07/14	101	60 - 140	99	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Trichlorofluoromethane (FREON 11)	2016/07/14	109	60 - 140	106	60 - 130	<0.050	ug/g	NC (1)	50
4576650	Vinyl Chloride	2016/07/14	112	60 - 140	109	60 - 130	<0.020	ug/g	NC (1)	50
4576805	Acid Extractable Antimony (Sb)	2016/07/14	99	75 - 125	111	80 - 120	<0.20	ug/g	NC (1)	30
4576805	Acid Extractable Arsenic (As)	2016/07/14	96	75 - 125	103	80 - 120	<1.0	ug/g	NC (1)	30
4576805	Acid Extractable Barium (Ba)	2016/07/14	NC	75 - 125	100	80 - 120	<0.50	ug/g	9.9 (1)	30
4576805	Acid Extractable Beryllium (Be)	2016/07/14	98	75 - 125	98	80 - 120	<0.20	ug/g	NC (1)	30
4576805	Acid Extractable Boron (B)	2016/07/14	92	75 - 125	100	80 - 120	<5.0	ug/g		
4576805	Acid Extractable Cadmium (Cd)	2016/07/14	98	75 - 125	109	80 - 120	<0.10	ug/g	NC (1)	30
4576805	Acid Extractable Chromium (Cr)	2016/07/14	93	75 - 125	102	80 - 120	<1.0	ug/g	9.6 (1)	30
4576805	Acid Extractable Cobalt (Co)	2016/07/14	90	75 - 125	101	80 - 120	<0.10	ug/g	12 (1)	30
4576805	Acid Extractable Copper (Cu)	2016/07/14	90	75 - 125	101	80 - 120	<0.50	ug/g	8.3 (1)	30
4576805	Acid Extractable Lead (Pb)	2016/07/14	94	75 - 125	101	80 - 120	<1.0	ug/g	8.4 (1)	30
4576805	Acid Extractable Mercury (Hg)	2016/07/14	96	75 - 125	103	80 - 120	<0.050	ug/g	NC (1)	30
4576805	Acid Extractable Molybdenum (Mo)	2016/07/14	100	75 - 125	104	80 - 120	<0.50	ug/g	NC (1)	30
4576805	Acid Extractable Nickel (Ni)	2016/07/14	93	75 - 125	99	80 - 120	<0.50	ug/g	7.5 (1)	30
4576805	Acid Extractable Selenium (Se)	2016/07/14	99	75 - 125	100	80 - 120	<0.50	ug/g	NC (1)	30
4576805	Acid Extractable Silver (Ag)	2016/07/14	94	75 - 125	98	80 - 120	<0.20	ug/g	NC (1)	30
4576805	Acid Extractable Thallium (Tl)	2016/07/14	93	75 - 125	99	80 - 120	<0.050	ug/g	NC (1)	30
4576805	Acid Extractable Uranium (U)	2016/07/14	93	75 - 125	99	80 - 120	<0.050	ug/g	6.1 (1)	30
4576805	Acid Extractable Vanadium (V)	2016/07/14	NC	75 - 125	99	80 - 120	<5.0	ug/g	NC (1)	30
4576805	Acid Extractable Zinc (Zn)	2016/07/14	NC	75 - 125	97	80 - 120	<5.0	ug/g	NC (1)	30
4577882	Hot Water Ext. Boron (B)	2016/07/14	100	75 - 125	103	75 - 125	<0.050	ug/g	9.4 (1)	40
4577993	Acid Extractable Antimony (Sb)	2016/07/14	102	75 - 125	105	80 - 120	<0.20	ug/g	NC (1)	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4577993	Acid Extractable Arsenic (As)	2016/07/14	96	75 - 125	102	80 - 120	<1.0	ug/g	NC (1)	30
4577993	Acid Extractable Barium (Ba)	2016/07/14	NC	75 - 125	98	80 - 120	<0.50	ug/g	1.5 (1)	30
4577993	Acid Extractable Beryllium (Be)	2016/07/14	101	75 - 125	95	80 - 120	<0.20	ug/g	NC (1)	30
4577993	Acid Extractable Boron (B)	2016/07/14	99	75 - 125	100	80 - 120	<5.0	ug/g	NC (1)	30
4577993	Acid Extractable Cadmium (Cd)	2016/07/14	103	75 - 125	104	80 - 120	<0.10	ug/g	NC (1)	30
4577993	Acid Extractable Chromium (Cr)	2016/07/14	98	75 - 125	100	80 - 120	<1.0	ug/g	5.5 (1)	30
4577993	Acid Extractable Cobalt (Co)	2016/07/14	96	75 - 125	100	80 - 120	<0.10	ug/g	0.36 (1)	30
4577993	Acid Extractable Copper (Cu)	2016/07/14	100	75 - 125	100	80 - 120	<0.50	ug/g	4.1 (1)	30
4577993	Acid Extractable Lead (Pb)	2016/07/14	99	75 - 125	100	80 - 120	<1.0	ug/g	NC (1)	30
4577993	Acid Extractable Mercury (Hg)	2016/07/14	101	75 - 125	98	80 - 120	<0.050	ug/g		
4577993	Acid Extractable Molybdenum (Mo)	2016/07/14	103	75 - 125	104	80 - 120	<0.50	ug/g	NC (1)	30
4577993	Acid Extractable Nickel (Ni)	2016/07/14	99	75 - 125	100	80 - 120	<0.50	ug/g	6.2 (1)	30
4577993	Acid Extractable Selenium (Se)	2016/07/14	99	75 - 125	100	80 - 120	<0.50	ug/g	NC (1)	30
4577993	Acid Extractable Silver (Ag)	2016/07/14	99	75 - 125	99	80 - 120	<0.20	ug/g	NC (1)	30
4577993	Acid Extractable Thallium (Tl)	2016/07/14	97	75 - 125	97	80 - 120	<0.050	ug/g	NC (1)	30
4577993	Acid Extractable Uranium (U)	2016/07/14	97	75 - 125	98	80 - 120	<0.050	ug/g	1.6 (1)	30
4577993	Acid Extractable Vanadium (V)	2016/07/14	NC	75 - 125	98	80 - 120	<5.0	ug/g	NC (1)	30
4577993	Acid Extractable Zinc (Zn)	2016/07/14	NC	75 - 125	104	80 - 120	<5.0	ug/g	NC (1)	30
4578255	Hot Water Ext. Boron (B)	2016/07/14	103 (3)	75 - 125	98	75 - 125	<0.050	ug/g	0.91 (4)	40
4578610	Moisture	2016/07/14							1.3 (1)	20
4578803	F2 (C10-C16 Hydrocarbons)	2016/07/14	108	50 - 130	100	80 - 120	<10	ug/g	NC (1)	30
4578803	F3 (C16-C34 Hydrocarbons)	2016/07/14	106	50 - 130	98	80 - 120	<50	ug/g	NC (1)	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4578803	F4 (C34-C50 Hydrocarbons)	2016/07/14	105	50 - 130	98	80 - 120	<50	ug/g	NC (1)	30

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Duplicate Parent ID

(2) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The matrix spike was reanalyzed to confirm result.

(3) Matrix Spike Parent ID [CRL335-01]

(4) Duplicate Parent ID [CRL335-01]

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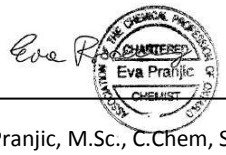
Maxxam Job #: B6E2939
Report Date: 2016/07/15

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Analytics International Corporation o/a Maxxam Analytics
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel (905) 817-5700 Toll-free 800-563-6266 Fax (905) 817-5777 www.maxxam.ca

CHAIN OF CUSTODY RECORD

Page 1 of 1

INVOICE TO:
Company Name: #1200 XCG Consulting Limited
Attention: Accounts Payable
Address: 820 Trillium Dr, Kitchener ON N2R 1K4
Tel: (519) 741-5774 Fax: (519) 741-5627
Email: accounting@xcg.com

REPORT TO:
Company Name:
Attention: Kristian Peter
Address:
Tel: (519) 741-5774 x291 Fax:
Email: kristian.peter@xcg.com, Tyler.Mahn@XCG.com

PROJECT INFORMATION:
Quotation #: B30503
P.O. #:
Project: 5-2705-14-02
Project Name:
Site #:
Sampled By: TM

Laboratory Use Only:
Maxxam Job #:
Bottle Order #: 569052
COC #: C#569052-01-01
Project Manager: Marijane Cruz

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)
☐ Table 1 ☐ Res/Park ☐ Medium/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/Other ☐ For RSC
☒ Table 8

Other Regulations
☐ CCME ☐ Sanitary Sewer Bylaw
☐ Reg 558 ☐ Storm Sewer Bylaw
☐ MISA Municipality
☐ PWQO
☐ Other

Special Instructions

Include Criteria on Certificate of Analysis (Y/N)? N

ANALYSIS REQUESTED (PLEASE BE SPECIFIC):

Field Filtered (please circle): Metals / Hg / Cr VI

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	O Reg 153 Petroleum Hydrocarbons (Soil)	O Reg 153 Volatile Organics (Soil)	O Reg 153 PAHs (Soil)	O Reg 153 Metals Package (Soil)	O Reg 153 Petroleum Hydrocarbons (Water)	O Reg 153 Volatile Organics (Water)	O Reg 153 PAHs (Water)	O Reg 153 Metals Package (Water)	# of Bottles	Comments
1		XCG-MW3-SS4	July 8, 2016	10:50	SO:1	X	X	X						6	*Limited SO:1 Volume in 120 mL jar
2		XCG-MW3-SS5		10:55					X					1	*Limited SO:1 Volume in 250mL jar
3		XCG-MW4-SS3		1:30		X	X	X	X					7	
4		XCG-MW2-SS4		2:30		X	X	X	X					7	
5		XCG-MW1-SS6		4:00		X	X	X	X					7	
6															
7															
8															
9															
10															

11-Jul-16 08:57
Marijane Cruz
B6E2939
MK3 ENV-841

REC'D IN WATERLOO

Turnaround Time (TAT) Required:
Please provide advance notice for rush projects
Regular (Standard) TAT: ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: (call lab for #)

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Tyler Mahn	16/07/08	7:00pm	Amber Campbell AMBER CAMPBELL	2016/07/11	0857	
			Rajmeet Kaur	2016/07/11	16:06	

Laboratory Use Only
Time Sensitive
Temperature (°C) on Receipt: 00-1°C ice 8/8/5

Custody Seal	Yes	No
Present	✓	
Intact	✓	

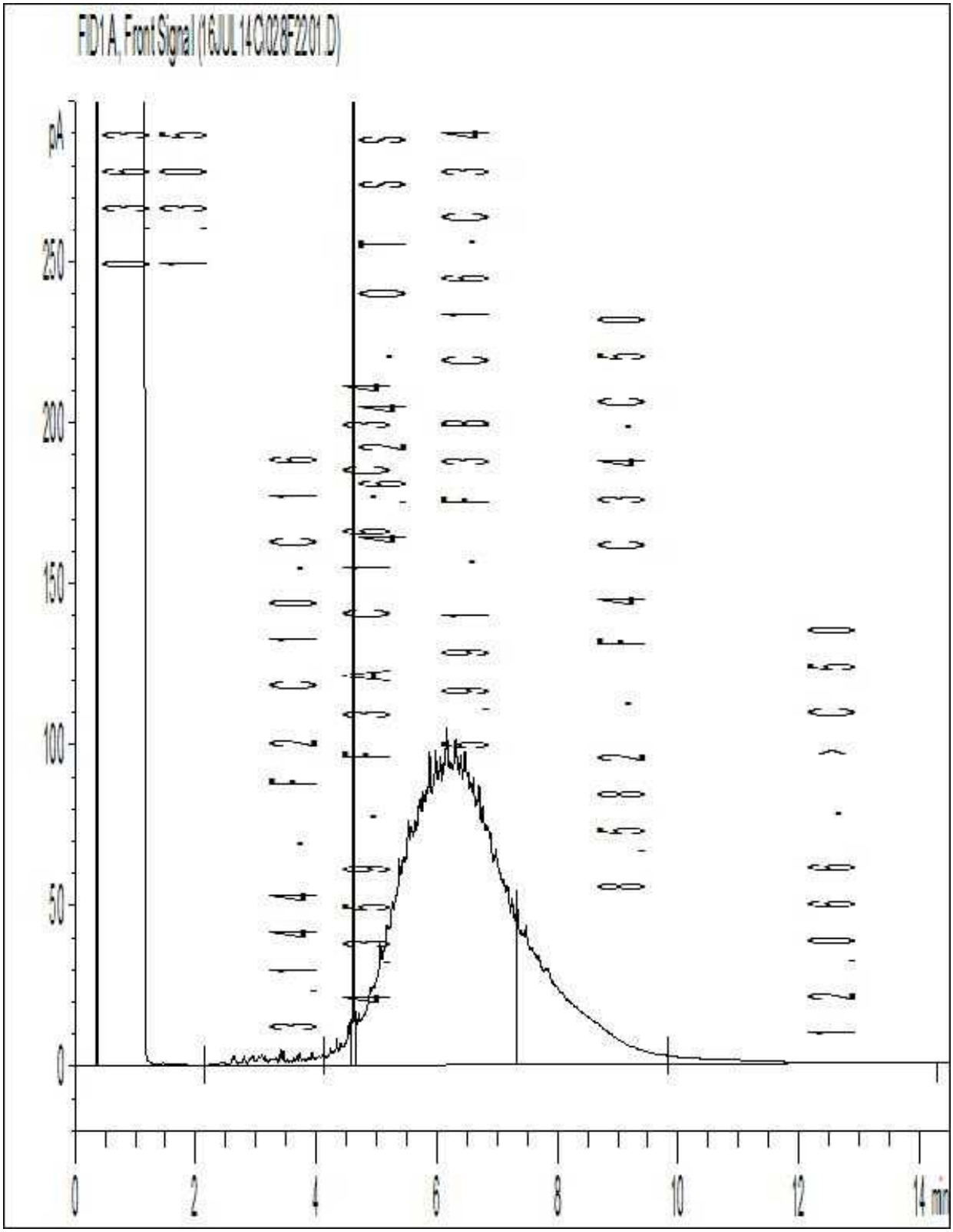
White: Maxxam Yellow: Client

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

Maxxam Analytics International Corporation o/a Maxxam Analytics

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

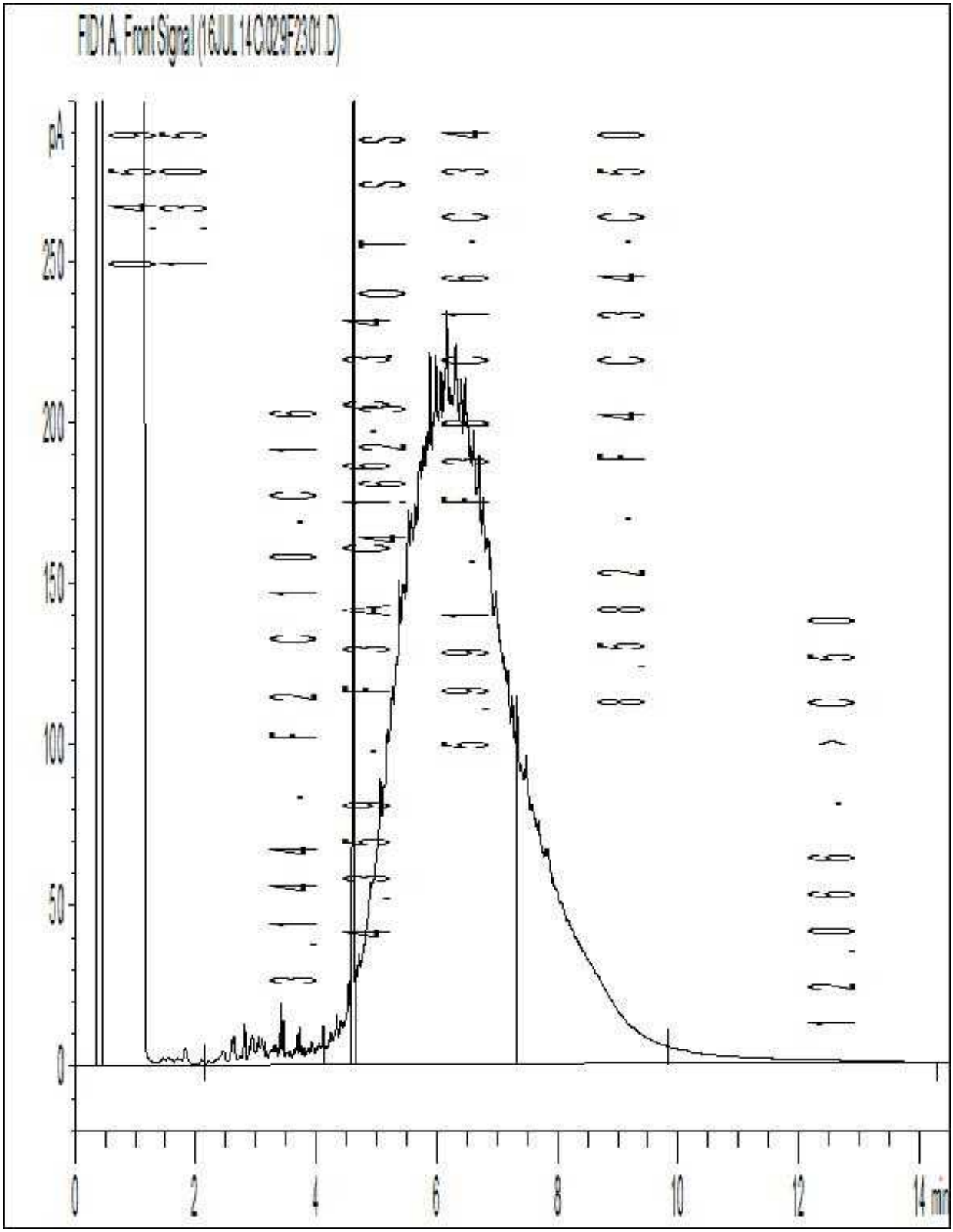


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6E2939
Report Date: 2016/07/15
Maxxam Sample: CRL335

XCG Consulting Limited
Client Project #: 5-2705-14-02
Client ID: XCG-MW4-SS3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

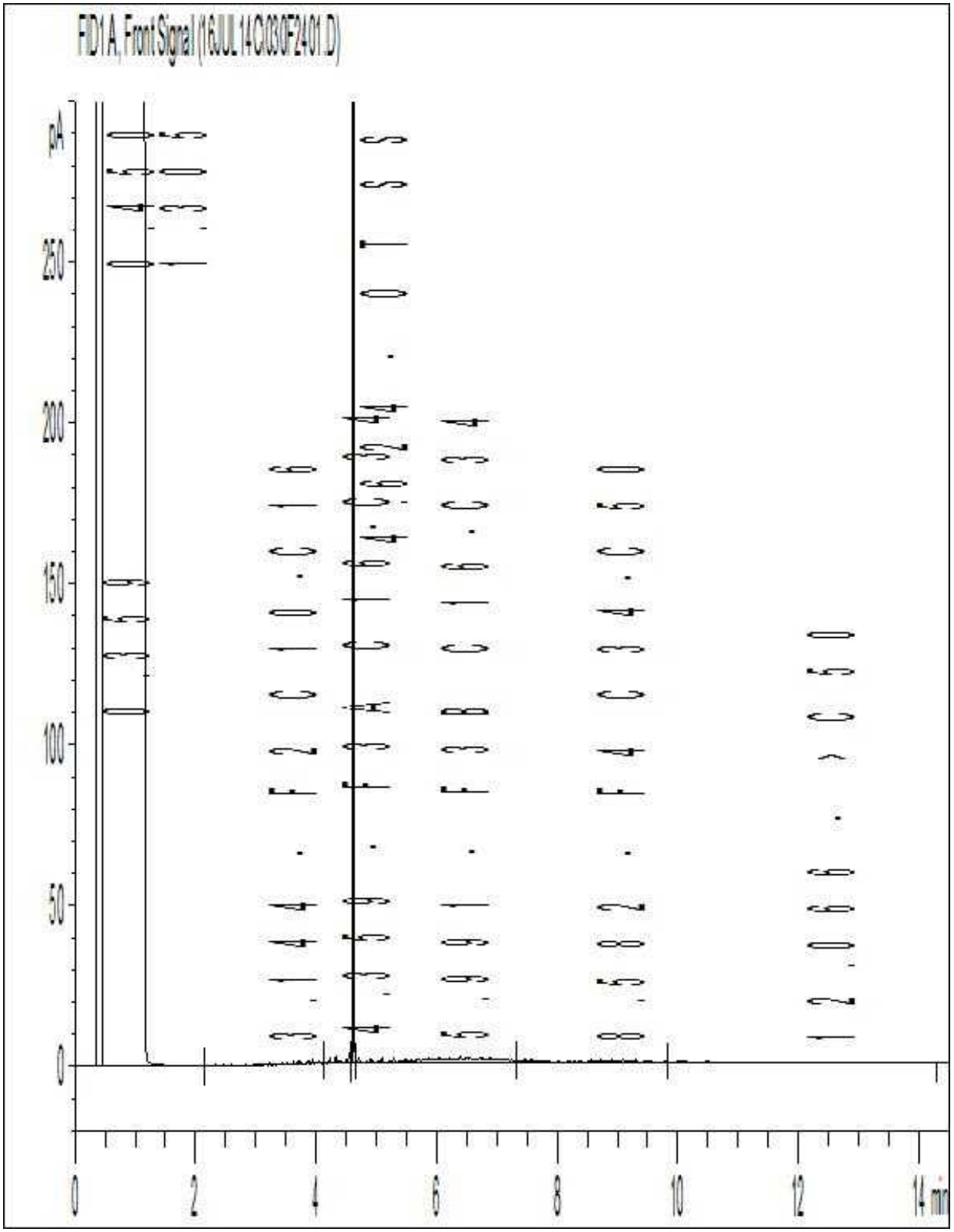


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6E2939
Report Date: 2016/07/15
Maxxam Sample: CRL336

XCG Consulting Limited
Client Project #: 5-2705-14-02
Client ID: XCG-MW2-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

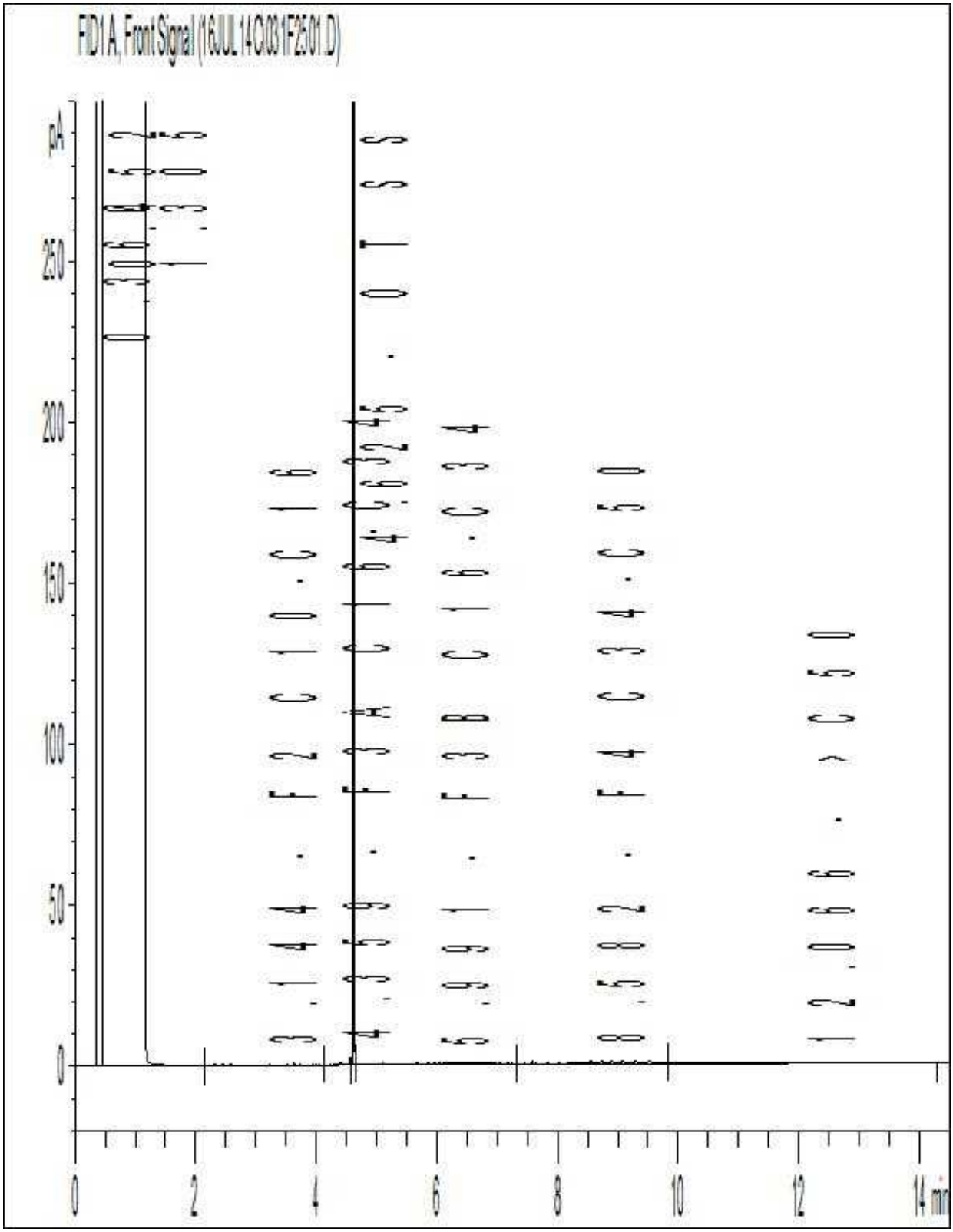


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6E2939
Report Date: 2016/07/15
Maxxam Sample: CRL337

XCG Consulting Limited
Client Project #: 5-2705-14-02
Client ID: XCG-MW1-SS6

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 5-2705-14-02
Your C.O.C. #: 569052-05-01

Attention:Kristian Peter

XCG Consulting Limited
820 Trillium Dr
Kitchener, ON
N2R 1K4

Report Date: 2016/07/19
Report #: R4071773
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B6E4125
Received: 2016/07/12, 09:35

Sample Matrix: Water
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	7	N/A	2016/07/18	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	7	N/A	2016/07/18		EPA 8260C m
Chromium (VI) in Water	7	N/A	2016/07/18	CAM SOP-00436	EPA 7199 m
Petroleum Hydrocarbons F2-F4 in Water (1)	7	2016/07/15	2016/07/16	CAM SOP-00316	CCME PHC-CWS m
Mercury	7	2016/07/18	2016/07/18	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	7	N/A	2016/07/18	CAM SOP-00447	EPA 6020A m
PAH Compounds in Water by GC/MS (SIM)	7	2016/07/15	2016/07/16	CAM SOP-00318	EPA 8270D m
Volatile Organic Compounds and F1 PHCs	7	N/A	2016/07/16	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics has performed all analytical testing herein in accordance with ISO 17025 and the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. All methodologies comply with this document and are validated for use in the laboratory. The methods and techniques employed in this analysis conform to the performance criteria (detection limits, accuracy and precision) as outlined in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act.

Maxxam Analytics is accredited for all specific parameters as required by Ontario Regulation 153/04. Maxxam Analytics is limited in liability to the actual cost of analysis unless otherwise agreed in writing. There is no other warranty expressed or implied. Samples will be retained at Maxxam Analytics for three weeks from receipt of data or as per contract.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Your Project #: 5-2705-14-02
Your C.O.C. #: 569052-05-01

Attention:Kristian Peter

XCG Consulting Limited
820 Trillium Dr
Kitchener, ON
N2R 1K4

Report Date: 2016/07/19
Report #: R4071773
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B6E4125
Received: 2016/07/12, 09:35

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marijane Cruz, Senior Project Manager
Email: MCruz@maxxam.ca
Phone# (905)817-5756

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 METALS PACKAGE (WATER)

Maxxam ID		CRQ649	CRQ650	CRQ651	CRQ652	CRQ653	CRQ654		
Sampling Date		2016/07/11 12:00	2016/07/11 14:00	2016/07/11 13:00	2016/07/11 14:20	2016/07/11 15:15	2016/07/11 15:00		
COC Number		569052-05-01	569052-05-01	569052-05-01	569052-05-01	569052-05-01	569052-05-01		
	UNITS	MWA	MW2-09A	MW2-09B	XCG-MW1	XCG-MW4	XCG-MW3	RDL	QC Batch
Metals									
Chromium (VI)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4582072
Mercury (Hg)	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4581809
Dissolved Antimony (Sb)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4581919
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	<1.0	<1.0	1.8	1.9	1.0	4581919
Dissolved Barium (Ba)	ug/L	100	120	38	69	170	130	2.0	4581919
Dissolved Beryllium (Be)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4581919
Dissolved Boron (B)	ug/L	120	110	34	74	89	93	10	4581919
Dissolved Cadmium (Cd)	ug/L	0.16	0.12	0.22	<0.10	<0.10	<0.10	0.10	4581919
Dissolved Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	4581919
Dissolved Cobalt (Co)	ug/L	3.4	<0.50	<0.50	<0.50	1.7	<0.50	0.50	4581919
Dissolved Copper (Cu)	ug/L	2.5	1.9	1.9	1.9	<1.0	<1.0	1.0	4581919
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.96	<0.50	1.4	<0.50	0.50	4581919
Dissolved Molybdenum (Mo)	ug/L	0.67	0.99	1.6	1.4	2.8	1.9	0.50	4581919
Dissolved Nickel (Ni)	ug/L	1.6	1.1	1.3	1.5	1.9	<1.0	1.0	4581919
Dissolved Selenium (Se)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	4581919
Dissolved Silver (Ag)	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	4581919
Dissolved Sodium (Na)	ug/L	160000	200000	160000	150000	240000	230000	100	4581919
Dissolved Thallium (Tl)	ug/L	<0.050	<0.050	0.081	<0.050	<0.050	<0.050	0.050	4581919
Dissolved Uranium (U)	ug/L	0.31	1.2	1.2	1.6	0.98	0.16	0.10	4581919
Dissolved Vanadium (V)	ug/L	0.56	<0.50	<0.50	<0.50	<0.50	0.63	0.50	4581919
Dissolved Zinc (Zn)	ug/L	45	40	88	19	51	22	5.0	4581919

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 METALS PACKAGE (WATER)

Maxxam ID		CRQ655		
Sampling Date		2016/07/11 12:00		
COC Number		569052-05-01		
	UNITS	TM100	RDL	QC Batch
Metals				
Chromium (VI)	ug/L	<0.50	0.50	4582072
Mercury (Hg)	ug/L	<0.1	0.1	4581809
Dissolved Antimony (Sb)	ug/L	<0.50	0.50	4581919
Dissolved Arsenic (As)	ug/L	<1.0	1.0	4581919
Dissolved Barium (Ba)	ug/L	100	2.0	4581919
Dissolved Beryllium (Be)	ug/L	<0.50	0.50	4581919
Dissolved Boron (B)	ug/L	120	10	4581919
Dissolved Cadmium (Cd)	ug/L	0.14	0.10	4581919
Dissolved Chromium (Cr)	ug/L	<5.0	5.0	4581919
Dissolved Cobalt (Co)	ug/L	3.3	0.50	4581919
Dissolved Copper (Cu)	ug/L	2.4	1.0	4581919
Dissolved Lead (Pb)	ug/L	<0.50	0.50	4581919
Dissolved Molybdenum (Mo)	ug/L	0.66	0.50	4581919
Dissolved Nickel (Ni)	ug/L	1.7	1.0	4581919
Dissolved Selenium (Se)	ug/L	<2.0	2.0	4581919
Dissolved Silver (Ag)	ug/L	<0.10	0.10	4581919
Dissolved Sodium (Na)	ug/L	160000	100	4581919
Dissolved Thallium (Tl)	ug/L	<0.050	0.050	4581919
Dissolved Uranium (U)	ug/L	0.31	0.10	4581919
Dissolved Vanadium (V)	ug/L	0.55	0.50	4581919
Dissolved Zinc (Zn)	ug/L	46	5.0	4581919

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 PAHS (WATER)

Maxxam ID		CRQ649	CRQ650	CRQ651	CRQ652	CRQ653	CRQ654		
Sampling Date		2016/07/11 12:00	2016/07/11 14:00	2016/07/11 13:00	2016/07/11 14:20	2016/07/11 15:15	2016/07/11 15:00		
COC Number		569052-05-01	569052-05-01	569052-05-01	569052-05-01	569052-05-01	569052-05-01		
	UNITS	MWA	MW2-09A	MW2-09B	XCG-MW1	XCG-MW4	XCG-MW3	RDL	QC Batch
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/L	<0.071	<0.071	<0.071	<0.071	11	9.8	0.071	4576140
Polyaromatic Hydrocarbons									
Acenaphthene	ug/L	<0.050	<0.050	<0.050	<0.050	0.056	0.14	0.050	4580844
Acenaphthylene	ug/L	<0.050	<0.050	<0.050	<0.050	0.060	0.16	0.050	4580844
Anthracene	ug/L	<0.050	<0.050	<0.050	<0.050	0.066	0.15	0.050	4580844
Benzo(a)anthracene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.076	0.050	4580844
Benzo(a)pyrene	ug/L	<0.010	<0.010	<0.010	<0.010	0.015	0.030	0.010	4580844
Benzo(b/j)fluoranthene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4580844
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4580844
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4580844
Chrysene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.055	0.050	4580844
Dibenz(a,h)anthracene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4580844
Fluoranthene	ug/L	<0.050	<0.050	<0.050	<0.050	0.082	0.16	0.050	4580844
Fluorene	ug/L	<0.050	<0.050	<0.050	<0.050	0.20	0.46	0.050	4580844
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4580844
1-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	5.2	5.9	0.050	4580844
2-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	5.9	4.0	0.050	4580844
Naphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	7.1	7.9	0.050	4580844
Phenanthrene	ug/L	<0.030	<0.030	<0.030	<0.030	0.32	0.45	0.030	4580844
Pyrene	ug/L	<0.050	<0.050	<0.050	<0.050	0.13	0.27	0.050	4580844
Surrogate Recovery (%)									
D10-Anthracene	%	96	101	93	101	96	102	N/A	4580844
D14-Terphenyl (FS)	%	85	92	82	90	82	85	N/A	4580844
D8-Acenaphthylene	%	105	109	105	109	108	114	N/A	4580844

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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O.REG 153 PAHS (WATER)

Maxxam ID		CRQ655		
Sampling Date		2016/07/11 12:00		
COC Number		569052-05-01		
	UNITS	TM100	RDL	QC Batch
Calculated Parameters				
Methylnaphthalene, 2-(1-)	ug/L	<0.071	0.071	4576140
Polyaromatic Hydrocarbons				
Acenaphthene	ug/L	<0.050	0.050	4580844
Acenaphthylene	ug/L	<0.050	0.050	4580844
Anthracene	ug/L	<0.050	0.050	4580844
Benzo(a)anthracene	ug/L	<0.050	0.050	4580844
Benzo(a)pyrene	ug/L	<0.010	0.010	4580844
Benzo(b/j)fluoranthene	ug/L	<0.050	0.050	4580844
Benzo(g,h,i)perylene	ug/L	<0.050	0.050	4580844
Benzo(k)fluoranthene	ug/L	<0.050	0.050	4580844
Chrysene	ug/L	<0.050	0.050	4580844
Dibenz(a,h)anthracene	ug/L	<0.050	0.050	4580844
Fluoranthene	ug/L	<0.050	0.050	4580844
Fluorene	ug/L	<0.050	0.050	4580844
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	0.050	4580844
1-Methylnaphthalene	ug/L	<0.050	0.050	4580844
2-Methylnaphthalene	ug/L	<0.050	0.050	4580844
Naphthalene	ug/L	<0.050	0.050	4580844
Phenanthrene	ug/L	<0.030	0.030	4580844
Pyrene	ug/L	<0.050	0.050	4580844
Surrogate Recovery (%)				
D10-Anthracene	%	100	N/A	4580844
D14-Terphenyl (FS)	%	83	N/A	4580844
D8-Acenaphthylene	%	110	N/A	4580844

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 VOCS & F1-F4 (WATER)

Maxxam ID		CRQ649	CRQ650	CRQ650	CRQ651	CRQ652		
Sampling Date		2016/07/11 12:00	2016/07/11 14:00	2016/07/11 14:00	2016/07/11 13:00	2016/07/11 14:20		
COC Number		569052-05-01	569052-05-01	569052-05-01	569052-05-01	569052-05-01		
	UNITS	MWA	MW2-09A	MW2-09A Lab-Dup	MW2-09B	XCG-MW1	RDL	QC Batch
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	N/A	<0.50	<0.50	0.50	4576243
Volatile Organics								
Acetone (2-Propanone)	ug/L	<10	<10	<10	<10	<10	10	4578001
Benzene	ug/L	<0.20	<0.20	<0.20	<0.20	0.35	0.20	4578001
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4578001
Bromomethane	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
Chloroform	ug/L	<0.20	0.29	0.30	0.29	<0.20	0.20	4578001
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4578001
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	<0.30	<0.30	0.30	4578001
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	4578001
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
Hexane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	4578001
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	4578001
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	<10	<10	10	4578001
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	4578001
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
Styrene	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 VOCS & F1-F4 (WATER)

Maxxam ID		CRQ649	CRQ650	CRQ650	CRQ651	CRQ652		
Sampling Date		2016/07/11 12:00	2016/07/11 14:00	2016/07/11 14:00	2016/07/11 13:00	2016/07/11 14:20		
COC Number		569052-05-01	569052-05-01	569052-05-01	569052-05-01	569052-05-01		
	UNITS	MWA	MW2-09A	MW2-09A Lab-Dup	MW2-09B	XCG-MW1	RDL	QC Batch
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.29	<0.20	0.20	4578001
Toluene	ug/L	<0.20	<0.20	<0.20	<0.20	0.41	0.20	4578001
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4578001
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
o-Xylene	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
Total Xylenes	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4578001
F1 (C6-C10)	ug/L	<25	<25	<25	<25	<25	25	4578001
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	<25	<25	25	4578001
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	N/A	<100	<100	100	4580567
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	N/A	<200	<200	200	4580567
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	N/A	<200	<200	200	4580567
Reached Baseline at C50	ug/L	Yes	Yes	N/A	Yes	Yes	N/A	4580567
Surrogate Recovery (%)								
o-Terphenyl	%	109	107	N/A	108	108	N/A	4580567
4-Bromofluorobenzene	%	90	90	91	90	91	N/A	4578001
D4-1,2-Dichloroethane	%	97	107	107	105	104	N/A	4578001
D8-Toluene	%	103	100	100	100	102	N/A	4578001

RDL = Reportable Detection Limit
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Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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O.REG 153 VOCS & F1-F4 (WATER)

Maxxam ID		CRQ653	CRQ654	CRQ655		
Sampling Date		2016/07/11 15:15	2016/07/11 15:00	2016/07/11 12:00		
COC Number		569052-05-01	569052-05-01	569052-05-01		
	UNITS	XCG-MW4	XCG-MW3	TM100	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	4576243
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	4578001
Benzene	ug/L	0.21	0.48	<0.20	0.20	4578001
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4578001
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	4578001
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	4578001
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	4578001
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	4578001
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	4578001
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	4578001
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4578001
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4578001
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	4578001
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	4578001
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4578001
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4578001
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4578001
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4578001
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	4578001
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	4578001
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	4578001
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	4578001
Ethylbenzene	ug/L	0.96	<0.20	<0.20	0.20	4578001
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	4578001
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	4578001
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	4578001
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	4578001
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	4578001
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	4578001
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	4578001
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4578001
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4578001
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4578001
Toluene	ug/L	0.38	0.35	<0.20	0.20	4578001

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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O.REG 153 VOCS & F1-F4 (WATER)

Maxxam ID		CRQ653	CRQ654	CRQ655		
Sampling Date		2016/07/11 15:15	2016/07/11 15:00	2016/07/11 12:00		
COC Number		569052-05-01	569052-05-01	569052-05-01		
	UNITS	XCG-MW4	XCG-MW3	TM100	RDL	QC Batch
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	4578001
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	4578001
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	4578001
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	4578001
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	4578001
p+m-Xylene	ug/L	10	2.0	<0.20	0.20	4578001
o-Xylene	ug/L	2.0	0.59	<0.20	0.20	4578001
Total Xylenes	ug/L	12	2.6	<0.20	0.20	4578001
F1 (C6-C10)	ug/L	77	37	<25	25	4578001
F1 (C6-C10) - BTEX	ug/L	63	33	<25	25	4578001
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	150	250	<100	100	4580567
F3 (C16-C34 Hydrocarbons)	ug/L	1200	2300	<200	200	4580567
F4 (C34-C50 Hydrocarbons)	ug/L	220	490	<200	200	4580567
Reached Baseline at C50	ug/L	Yes	Yes	Yes	N/A	4580567
Surrogate Recovery (%)						
o-Terphenyl	%	110	110	108	N/A	4580567
4-Bromofluorobenzene	%	92	91	89	N/A	4578001
D4-1,2-Dichloroethane	%	105	107	105	N/A	4578001
D8-Toluene	%	101	101	101	N/A	4578001

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CRQ649
Sample ID: MWA
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4576140	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4576243	N/A	2016/07/18	Automated Statchk
Chromium (VI) in Water	IC	4582072	N/A	2016/07/18	Manoj Gera
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4580567	2016/07/15	2016/07/16	Zhiyue (Frank) Zhu
Mercury	CV/AA	4581809	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4581919	N/A	2016/07/18	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

Maxxam ID: CRQ650
Sample ID: MW2-09A
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4576140	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4576243	N/A	2016/07/18	Automated Statchk
Chromium (VI) in Water	IC	4582072	N/A	2016/07/18	Manoj Gera
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4580567	2016/07/15	2016/07/16	Zhiyue (Frank) Zhu
Mercury	CV/AA	4581809	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4581919	N/A	2016/07/18	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

Maxxam ID: CRQ650 Dup
Sample ID: MW2-09A
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

Maxxam ID: CRQ651
Sample ID: MW2-09B
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4576140	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4576243	N/A	2016/07/18	Automated Statchk
Chromium (VI) in Water	IC	4582072	N/A	2016/07/18	Manoj Gera
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4580567	2016/07/15	2016/07/16	Zhiyue (Frank) Zhu
Mercury	CV/AA	4581809	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4581919	N/A	2016/07/18	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CRQ652
Sample ID: XCG-MW1
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4576140	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4576243	N/A	2016/07/18	Automated Statchk
Chromium (VI) in Water	IC	4582072	N/A	2016/07/18	Manoj Gera
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4580567	2016/07/15	2016/07/16	Zhiyue (Frank) Zhu
Mercury	CV/AA	4581809	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4581919	N/A	2016/07/18	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

Maxxam ID: CRQ653
Sample ID: XCG-MW4
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4576140	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4576243	N/A	2016/07/18	Automated Statchk
Chromium (VI) in Water	IC	4582072	N/A	2016/07/18	Manoj Gera
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4580567	2016/07/15	2016/07/16	Zhiyue (Frank) Zhu
Mercury	CV/AA	4581809	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4581919	N/A	2016/07/18	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

Maxxam ID: CRQ654
Sample ID: XCG-MW3
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4576140	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4576243	N/A	2016/07/18	Automated Statchk
Chromium (VI) in Water	IC	4582072	N/A	2016/07/18	Manoj Gera
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4580567	2016/07/15	2016/07/16	Zhiyue (Frank) Zhu
Mercury	CV/AA	4581809	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4581919	N/A	2016/07/18	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

Maxxam ID: CRQ655
Sample ID: TM100
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4576140	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4576243	N/A	2016/07/18	Automated Statchk
Chromium (VI) in Water	IC	4582072	N/A	2016/07/18	Manoj Gera
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4580567	2016/07/15	2016/07/16	Zhiyue (Frank) Zhu

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CRQ655
Sample ID: TM100
Matrix: Water

Collected: 2016/07/11
Shipped:
Received: 2016/07/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	4581809	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4581919	N/A	2016/07/18	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4578001	N/A	2016/07/16	John Wu

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.0°C
Package 2	4.3°C

Cooler custody seal was present and intact.

Results relate only to the items tested.

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Maxxam Job #: B6E4125
Report Date: 2016/07/19

QUALITY ASSURANCE REPORT

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4578001	4-Bromofluorobenzene	2016/07/15	95 (1)	70 - 130	94	70 - 130	90	%		
4578001	D4-1,2-Dichloroethane	2016/07/15	105 (1)	70 - 130	106	70 - 130	104	%		
4578001	D8-Toluene	2016/07/15	105 (1)	70 - 130	107	70 - 130	101	%		
4580567	o-Terphenyl	2016/07/15	116	60 - 130	111	60 - 130	111	%		
4580844	D10-Anthracene	2016/07/15	99	50 - 130	97	50 - 130	97	%		
4580844	D14-Terphenyl (FS)	2016/07/15	85	50 - 130	92	50 - 130	92	%		
4580844	D8-Acenaphthylene	2016/07/15	109	50 - 130	102	50 - 130	103	%		
4578001	1,1,1,2-Tetrachloroethane	2016/07/16	98 (1)	70 - 130	98	70 - 130	<0.50	ug/L	NC (2)	30
4578001	1,1,1-Trichloroethane	2016/07/16	93 (1)	70 - 130	95	70 - 130	<0.20	ug/L	NC (2)	30
4578001	1,1,2,2-Tetrachloroethane	2016/07/16	103 (1)	70 - 130	103	70 - 130	<0.50	ug/L	NC (2)	30
4578001	1,1,2-Trichloroethane	2016/07/16	102 (1)	70 - 130	102	70 - 130	<0.50	ug/L	NC (2)	30
4578001	1,1-Dichloroethane	2016/07/16	97 (1)	70 - 130	98	70 - 130	<0.20	ug/L	NC (2)	30
4578001	1,1-Dichloroethylene	2016/07/16	98 (1)	70 - 130	99	70 - 130	<0.20	ug/L	NC (2)	30
4578001	1,2-Dichlorobenzene	2016/07/16	96 (1)	70 - 130	96	70 - 130	<0.50	ug/L	NC (2)	30
4578001	1,2-Dichloroethane	2016/07/16	94 (1)	70 - 130	95	70 - 130	<0.50	ug/L	NC (2)	30
4578001	1,2-Dichloropropane	2016/07/16	92 (1)	70 - 130	93	70 - 130	<0.20	ug/L	NC (2)	30
4578001	1,3-Dichlorobenzene	2016/07/16	92 (1)	70 - 130	92	70 - 130	<0.50	ug/L	NC (2)	30
4578001	1,4-Dichlorobenzene	2016/07/16	90 (1)	70 - 130	90	70 - 130	<0.50	ug/L	NC (2)	30
4578001	Acetone (2-Propanone)	2016/07/16	98 (1)	60 - 140	99	60 - 140	<10	ug/L	NC (2)	30
4578001	Benzene	2016/07/16	93 (1)	70 - 130	94	70 - 130	<0.20	ug/L	NC (2)	30
4578001	Bromodichloromethane	2016/07/16	94 (1)	70 - 130	95	70 - 130	<0.50	ug/L	NC (2)	30
4578001	Bromoform	2016/07/16	92 (1)	70 - 130	92	70 - 130	<1.0	ug/L	NC (2)	30
4578001	Bromomethane	2016/07/16	95 (1)	60 - 140	93	60 - 140	<0.50	ug/L	NC (2)	30
4578001	Carbon Tetrachloride	2016/07/16	95 (1)	70 - 130	96	70 - 130	<0.20	ug/L	NC (2)	30
4578001	Chlorobenzene	2016/07/16	93 (1)	70 - 130	94	70 - 130	<0.20	ug/L	NC (2)	30
4578001	Chloroform	2016/07/16	97 (1)	70 - 130	98	70 - 130	<0.20	ug/L	NC (2)	30
4578001	cis-1,2-Dichloroethylene	2016/07/16	96 (1)	70 - 130	97	70 - 130	<0.50	ug/L	NC (2)	30
4578001	cis-1,3-Dichloropropene	2016/07/16	94 (1)	70 - 130	91	70 - 130	<0.30	ug/L	NC (2)	30
4578001	Dibromochloromethane	2016/07/16	97 (1)	70 - 130	97	70 - 130	<0.50	ug/L	NC (2)	30
4578001	Dichlorodifluoromethane (FREON 12)	2016/07/16	103 (1)	60 - 140	106	60 - 140	<1.0	ug/L	NC (2)	30
4578001	Ethylbenzene	2016/07/16	87 (1)	70 - 130	88	70 - 130	<0.20	ug/L	NC (2)	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4578001	Ethylene Dibromide	2016/07/16	94 (1)	70 - 130	95	70 - 130	<0.20	ug/L	NC (2)	30
4578001	F1 (C6-C10) - BTEX	2016/07/16					<25	ug/L	NC (2)	30
4578001	F1 (C6-C10)	2016/07/16	101 (1)	60 - 140	96	60 - 140	<25	ug/L	NC (2)	30
4578001	Hexane	2016/07/16	94 (1)	70 - 130	96	70 - 130	<1.0	ug/L	NC (2)	30
4578001	Methyl Ethyl Ketone (2-Butanone)	2016/07/16	86 (1)	60 - 140	87	60 - 140	<10	ug/L	NC (2)	30
4578001	Methyl Isobutyl Ketone	2016/07/16	85 (1)	70 - 130	85	70 - 130	<5.0	ug/L	NC (2)	30
4578001	Methyl t-butyl ether (MTBE)	2016/07/16	85 (1)	70 - 130	86	70 - 130	<0.50	ug/L	NC (2)	30
4578001	Methylene Chloride(Dichloromethane)	2016/07/16	101 (1)	70 - 130	103	70 - 130	<2.0	ug/L	NC (2)	30
4578001	o-Xylene	2016/07/16	87 (1)	70 - 130	88	70 - 130	<0.20	ug/L	NC (2)	30
4578001	p+m-Xylene	2016/07/16	79 (1)	70 - 130	80	70 - 130	<0.20	ug/L	NC (2)	30
4578001	Styrene	2016/07/16	81 (1)	70 - 130	83	70 - 130	<0.50	ug/L	NC (2)	30
4578001	Tetrachloroethylene	2016/07/16	97 (1)	70 - 130	98	70 - 130	<0.20	ug/L	NC (2)	30
4578001	Toluene	2016/07/16	90 (1)	70 - 130	91	70 - 130	<0.20	ug/L	NC (2)	30
4578001	Total Xylenes	2016/07/16					<0.20	ug/L	NC (2)	30
4578001	trans-1,2-Dichloroethylene	2016/07/16	91 (1)	70 - 130	92	70 - 130	<0.50	ug/L	NC (2)	30
4578001	trans-1,3-Dichloropropene	2016/07/16	102 (1)	70 - 130	97	70 - 130	<0.40	ug/L	NC (2)	30
4578001	Trichloroethylene	2016/07/16	91 (1)	70 - 130	92	70 - 130	<0.20	ug/L	NC (2)	30
4578001	Trichlorofluoromethane (FREON 11)	2016/07/16	103 (1)	70 - 130	104	70 - 130	<0.50	ug/L	NC (2)	30
4578001	Vinyl Chloride	2016/07/16	101 (1)	70 - 130	102	70 - 130	<0.20	ug/L	NC (2)	30
4580567	F2 (C10-C16 Hydrocarbons)	2016/07/16	116	50 - 130	100	60 - 130	<100	ug/L	NC (3)	30
4580567	F3 (C16-C34 Hydrocarbons)	2016/07/16	109	50 - 130	104	60 - 130	<200	ug/L	NC (3)	30
4580567	F4 (C34-C50 Hydrocarbons)	2016/07/16	109	50 - 130	102	60 - 130	<200	ug/L	NC (3)	30
4580844	1-Methylnaphthalene	2016/07/15	102	50 - 130	100	50 - 130	<0.050	ug/L	NC (3)	30
4580844	2-Methylnaphthalene	2016/07/15	101	50 - 130	99	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Acenaphthene	2016/07/15	103	50 - 130	103	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Acenaphthylene	2016/07/15	107	50 - 130	103	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Anthracene	2016/07/15	85	50 - 130	90	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Benzo(a)anthracene	2016/07/15	72	50 - 130	96	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Benzo(a)pyrene	2016/07/15	66	50 - 130	94	50 - 130	<0.010	ug/L	NC (3)	30
4580844	Benzo(b/j)fluoranthene	2016/07/15	72	50 - 130	107	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Benzo(g,h,i)perylene	2016/07/15	58	50 - 130	81	50 - 130	<0.050	ug/L	NC (3)	30

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4580844	Benzo(k)fluoranthene	2016/07/15	73	50 - 130	104	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Chrysene	2016/07/15	71	50 - 130	98	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Dibenz(a,h)anthracene	2016/07/15	62	50 - 130	86	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Fluoranthene	2016/07/15	99	50 - 130	110	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Fluorene	2016/07/15	104	50 - 130	105	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Indeno(1,2,3-cd)pyrene	2016/07/15	64	50 - 130	90	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Naphthalene	2016/07/15	98	50 - 130	96	50 - 130	<0.050	ug/L	NC (3)	30
4580844	Phenanthrene	2016/07/15	102	50 - 130	103	50 - 130	<0.030	ug/L	NC (3)	30
4580844	Pyrene	2016/07/15	91	50 - 130	105	50 - 130	<0.050	ug/L	NC (3)	30
4581809	Mercury (Hg)	2016/07/18	107	75 - 125	100	80 - 120	<0.1	ug/L	NC (3)	20
4581919	Dissolved Antimony (Sb)	2016/07/18	110	80 - 120	103	80 - 120	<0.50	ug/L		
4581919	Dissolved Arsenic (As)	2016/07/18	102	80 - 120	100	80 - 120	<1.0	ug/L		
4581919	Dissolved Barium (Ba)	2016/07/18	107	80 - 120	100	80 - 120	<2.0	ug/L		
4581919	Dissolved Beryllium (Be)	2016/07/18	108	80 - 120	104	80 - 120	<0.50	ug/L		
4581919	Dissolved Boron (B)	2016/07/18	107	80 - 120	100	80 - 120	<10	ug/L		
4581919	Dissolved Cadmium (Cd)	2016/07/18	104	80 - 120	99	80 - 120	<0.10	ug/L		
4581919	Dissolved Chromium (Cr)	2016/07/18	102	80 - 120	100	80 - 120	<5.0	ug/L		
4581919	Dissolved Cobalt (Co)	2016/07/18	99	80 - 120	96	80 - 120	<0.50	ug/L		
4581919	Dissolved Copper (Cu)	2016/07/18	106	80 - 120	101	80 - 120	<1.0	ug/L		
4581919	Dissolved Lead (Pb)	2016/07/18	97	80 - 120	96	80 - 120	<0.50	ug/L	NC (3)	20
4581919	Dissolved Molybdenum (Mo)	2016/07/18	110	80 - 120	100	80 - 120	<0.50	ug/L		
4581919	Dissolved Nickel (Ni)	2016/07/18	96	80 - 120	94	80 - 120	<1.0	ug/L		
4581919	Dissolved Selenium (Se)	2016/07/18	101	80 - 120	97	80 - 120	<2.0	ug/L		
4581919	Dissolved Silver (Ag)	2016/07/18	97	80 - 120	98	80 - 120	<0.10	ug/L		
4581919	Dissolved Sodium (Na)	2016/07/18	NC	80 - 120	100	80 - 120	<100	ug/L		
4581919	Dissolved Thallium (Tl)	2016/07/18	99	80 - 120	97	80 - 120	<0.050	ug/L		
4581919	Dissolved Uranium (U)	2016/07/18	98	80 - 120	95	80 - 120	<0.10	ug/L		
4581919	Dissolved Vanadium (V)	2016/07/18	97	80 - 120	94	80 - 120	<0.50	ug/L		
4581919	Dissolved Zinc (Zn)	2016/07/18	98	80 - 120	98	80 - 120	<5.0	ug/L		

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4582072	Chromium (VI)	2016/07/18	88	80 - 120	95	80 - 120	<0.50	ug/L	NC (3)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Matrix Spike Parent ID [CRQ649-03]

(2) Duplicate Parent ID [CRQ650-03]

(3) Duplicate Parent ID

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B6E4125
Report Date: 2016/07/19

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Cristina Carriere

Cristina Carriere, Scientific Services

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Analytics International Corporation o/a Maxxam Analytics
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel:(905) 817-5700 Toll-free:800-563-6266 Fax:(905) 817-5777 www.maxxam.ca

12-Jul-16 09:35
Marijane Cruz
B6E4125
JFU ENV-1186

Page 1 of 1

INVOICE TO:
Company Name: #1200 XCG Consulting Limited
Attention: Accounts Payable
Address: 820 Trillium Dr, Kitchener ON N2R 1K4
Tel: (519) 741-5774 Fax: (519) 741-5627
Email: accounting@xcg.com

REPORT TO:
Company Name:
Attention: Kristian Peter
Address:
Tel: (519) 741-5774 x291 Fax:
Email: kristian.peter@xcg.com, Tyler.Mahon@xcg.com

PROJECT INFORMATION:
Quotation #: B30503
P.O. #:
Project: 5-2705-14-02
Project Name:
Site #:
Sampled By: TM

Bottle Order #: 569052
COC #: C#569052-05-01
Project Manager: Marijane Cruz

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011): ☐ Table 1 ☐ Res/Park ☐ Medium/Fine ☐ Table 2 ☒ Ind/Comm ☐ Coarse ☐ Table 3 ☐ Agri/Other ☐ For RSC ☒ Table 8
Other Regulations: ☐ CCME ☐ Sanitary Sewer Bylaw ☐ Reg 558 ☐ Storm Sewer Bylaw ☐ MISA Municipality ☐ PWQO ☐ Other
Special Instructions:
Include Criteria on Certificate of Analysis (Y/N)? N

Field Filtered (please circle): Metals / Hg / Cr VI

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	O.Reg 153 Petroleum Hydrocarbons (Soil)	O.Reg 153 Volatile Organics (Soil)	O.Reg 153 PAHs (Soil)	O.Reg 153 Metals Package (Soil)	O.Reg 153 Petroleum Hydrocarbons (Water)	O.Reg 153 Volatile Organics (Water)	O.Reg 153 PAHs (Water)	O.Reg 153 Metals Package (Water)	# of Bottles	Comments
1		MWA	July 11/16	12:00	GW					X	X	X	X		
2		MW2-09A	"	2:00	"					X	X	X	X		
3		MW2-09B	"	1:00	"					X	X	X	X		
4		XCG-MW1	"	2:20	"					X	X	X	X		
5		XCG-MW3	"	3:15	"					X	X	X	X		*May have high PHC concentrations
6		XCG-MW4	"	3:00	"					X	X	X	X		
7		~~XXXXX~~ TM100	"	12:00	"					X	X	X	X		
8															REC'D IN WATERLOO
9															
10															

Turnaround Time (TAT) Required:
Please provide advance notice for rush projects
Regular (Standard) TAT: X
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: (call lab for #)

CAUTION
Reason: May have high PHC Concentrations

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Tyler Mahon	16/07/11	5:25	[illegible]	2016/07/12	09:55	
			Rajneet Kaur	2016/07/12	16:12	

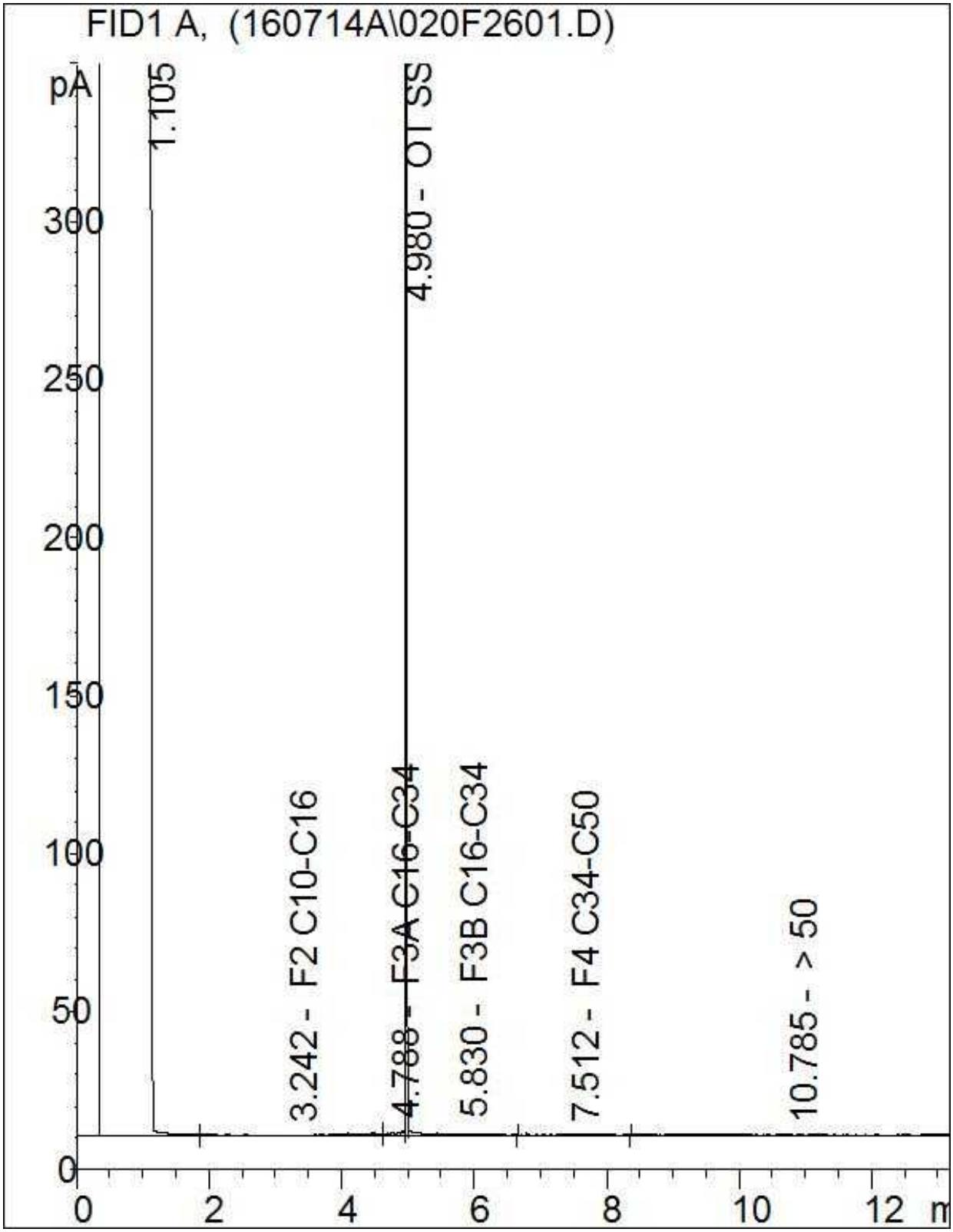
Laboratory Use Only
Time Sensitive
Temperature (°C) on Receipt: 11.9°C ice, 3.8°C
Custody Seal: Present ✓, Intact ✓ — Yes / No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM
White: Maxxam Yellow: Client

Maxxam Analytics International Corporation o/a Maxxam Analytics

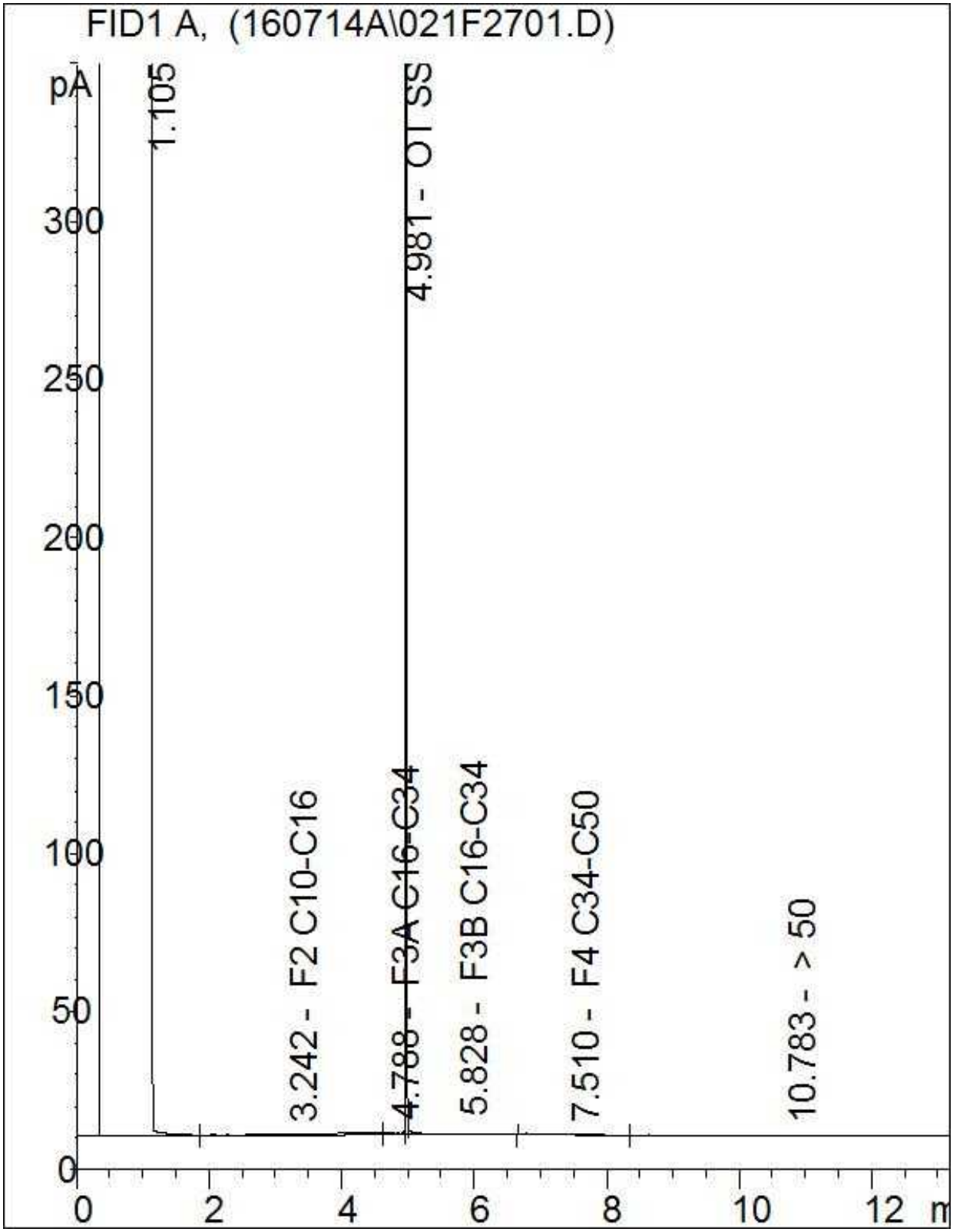
MW# 347 513 4/3/5 1/0/2

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



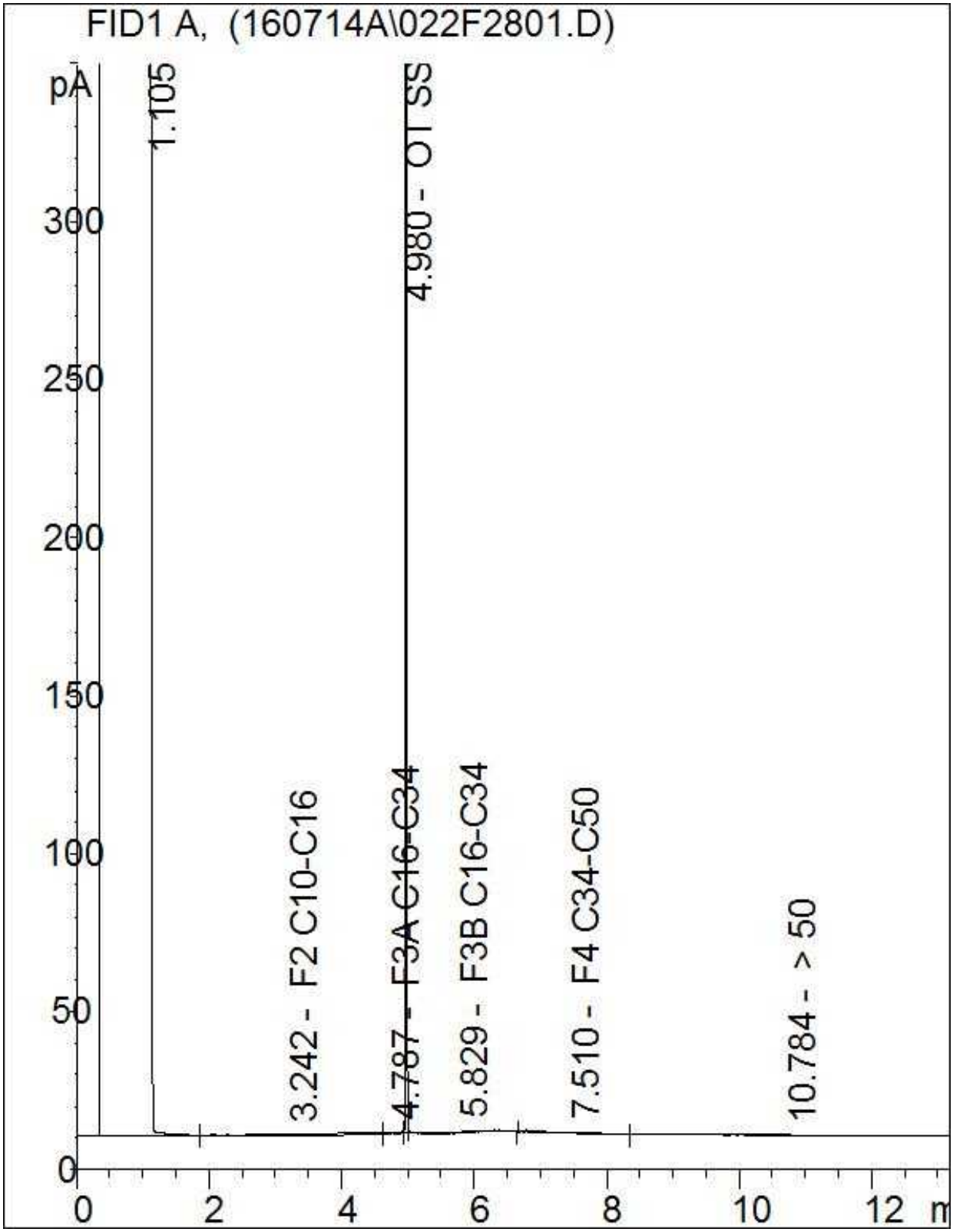
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



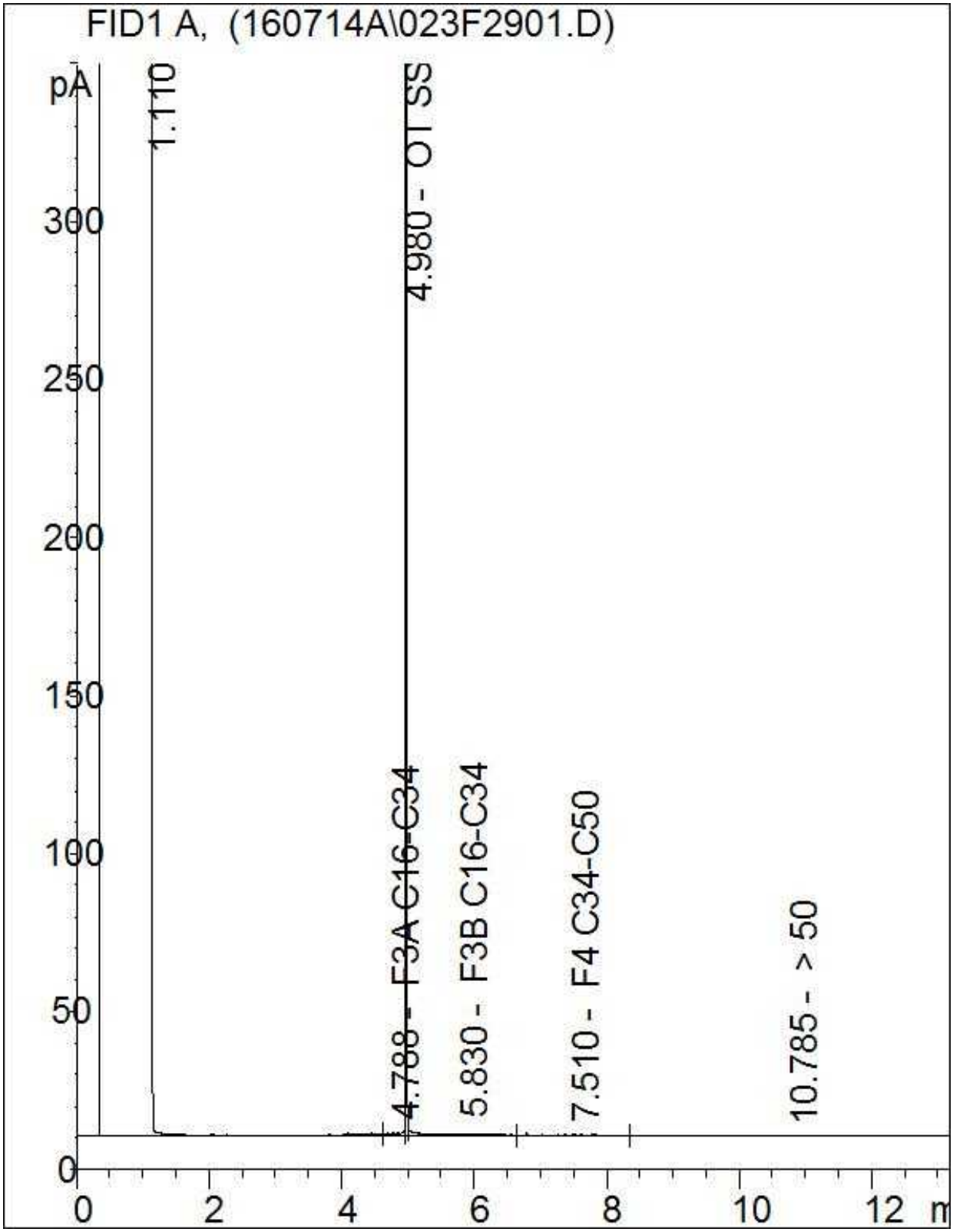
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



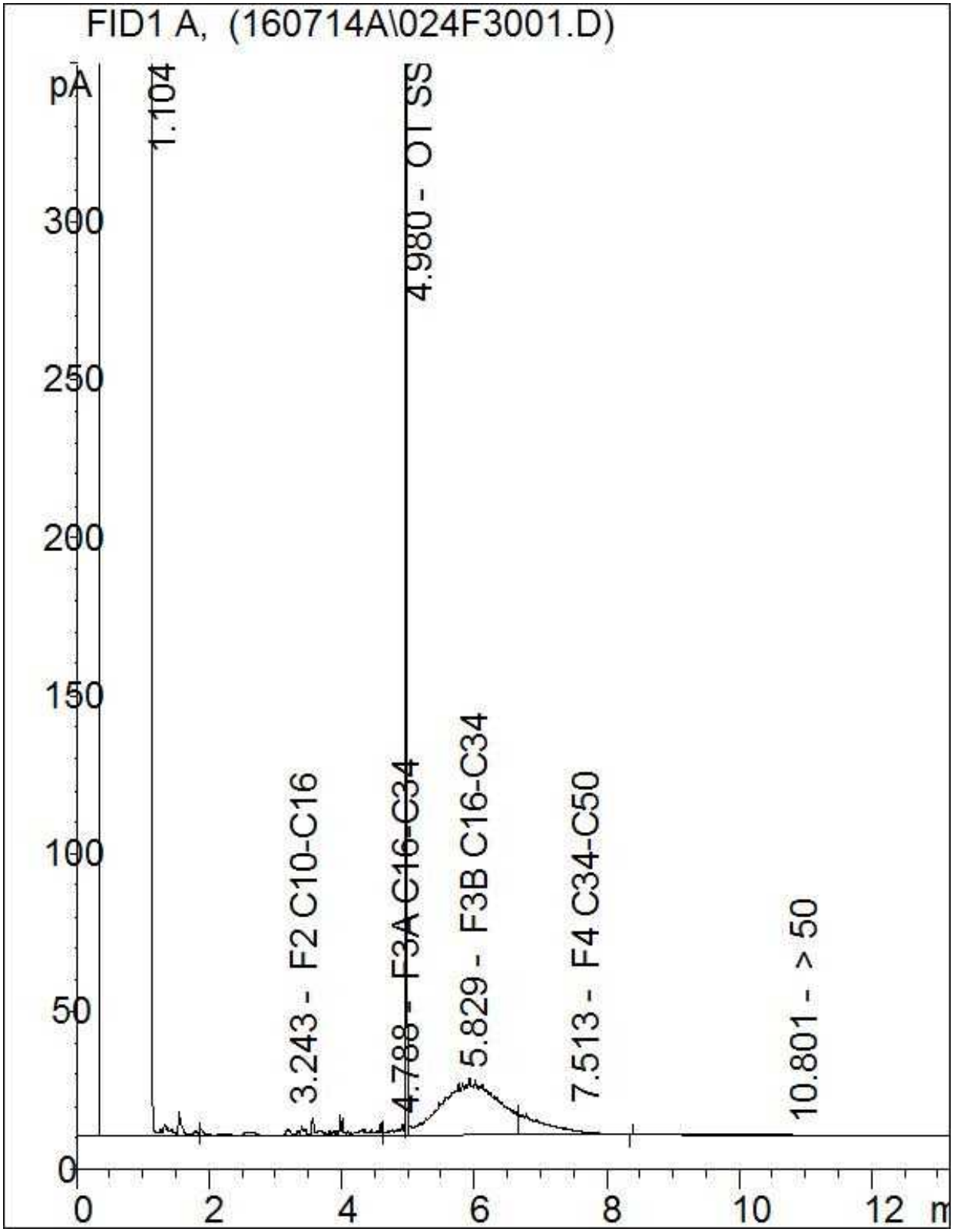
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



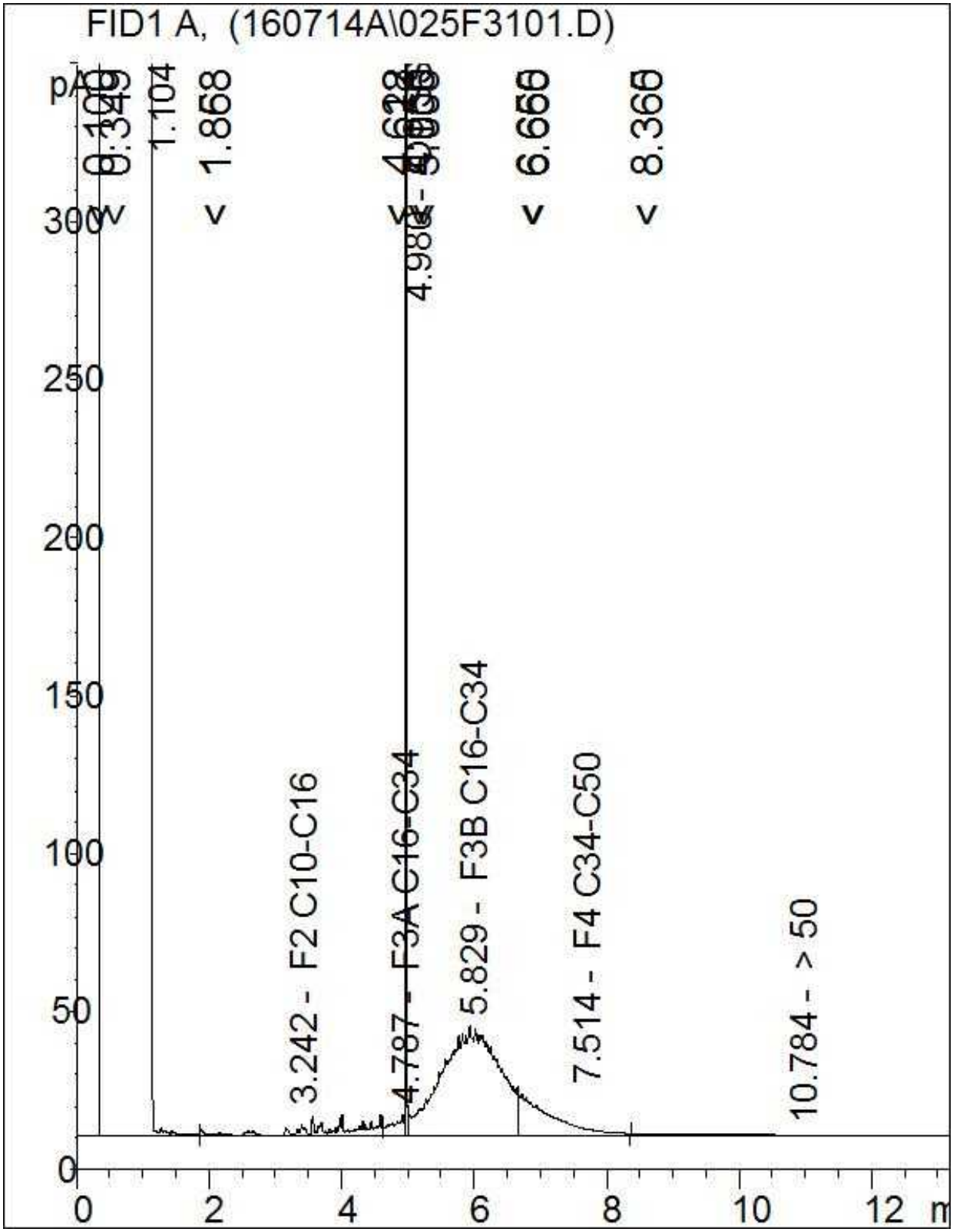
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



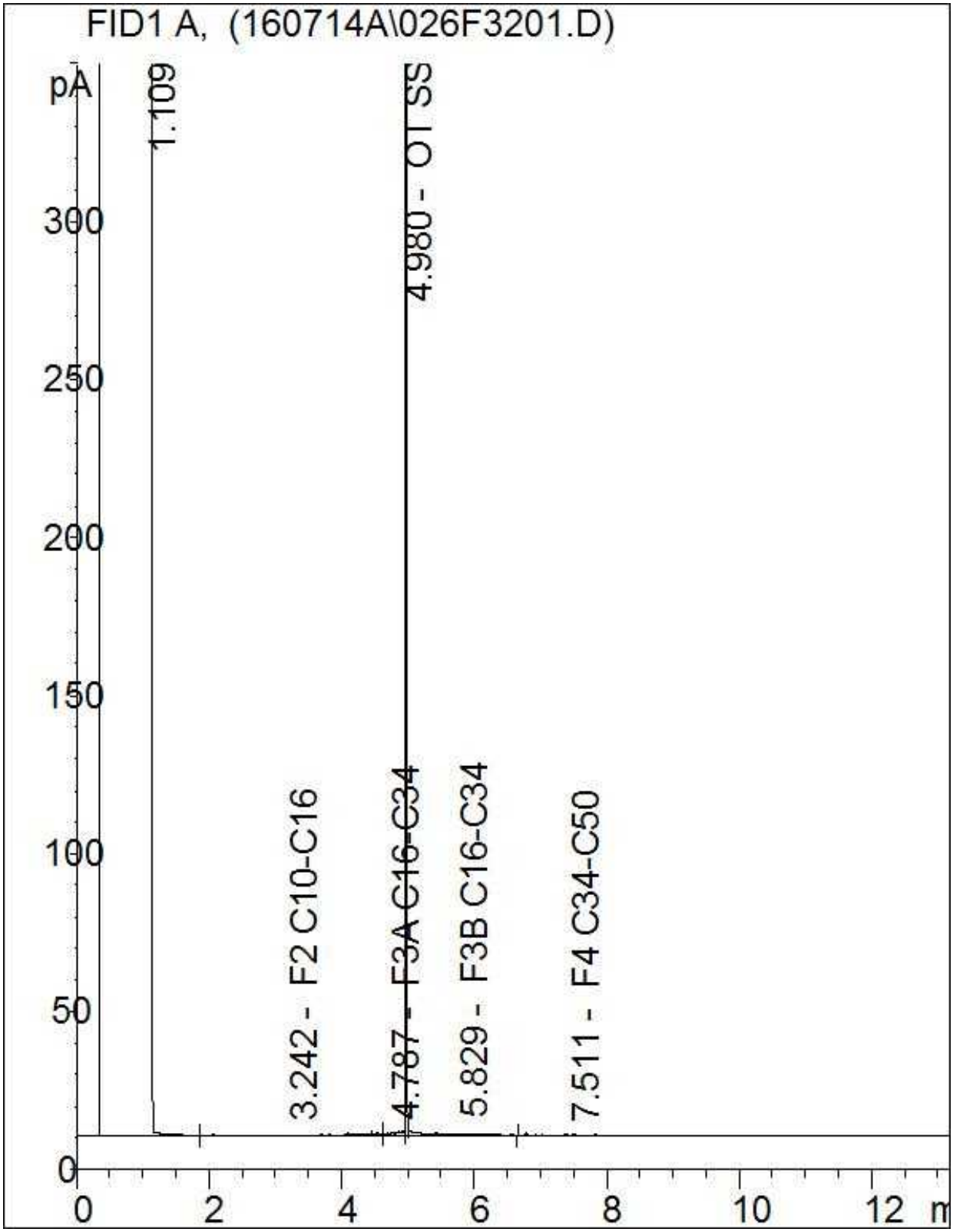
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your Project #: 5-2705-14-02
Your C.O.C. #: 569052-02-01

Attention:Kristian Peter

XCG Consulting Limited
820 Trillium Dr
Kitchener, ON
N2R 1K4

Report Date: 2016/07/20
Report #: R4074308
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B6E6644
Received: 2016/07/14, 15:37

Sample Matrix: Soil
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	7	N/A	2016/07/20	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	7	2016/07/19	2016/07/19	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	7	N/A	2016/07/20		EPA 8260C m
Cyanide (WAD) in Leachates	1	N/A	2016/07/19	CAM SOP-00457	OMOE 3015 m
Hexavalent Chromium in Soil by IC (1)	7	2016/07/15	2016/07/20	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	7	2016/07/18	2016/07/19	CAM SOP-00316	CCME CWS m
Fluoride by ISE in Leachates	1	2016/07/19	2016/07/19	CAM SOP-00449	SM 22 4500-F- C m
Mercury (TCLP Leachable) (mg/L)	1	N/A	2016/07/20	CAM SOP-00453	EPA 7470A m
Strong Acid Leachable Metals by ICPMS	7	2016/07/18	2016/07/19	CAM SOP-00447	EPA 6020A m
Total Metals in TCLP Leachate by ICPMS	1	2016/07/19	2016/07/19	CAM SOP-00447	EPA 6020A m
Moisture	7	N/A	2016/07/16	CAM SOP-00445	Carter 2nd ed 51.2 m
Moisture	1	N/A	2016/07/18	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM)	6	2016/07/18	2016/07/18	CAM SOP-00318	EPA 8270D m
PAH Compounds in Soil by GC/MS (SIM)	1	2016/07/19	2016/07/20	CAM SOP-00318	EPA 8270D m
TCLP - % Solids	1	2016/07/18	2016/07/19	CAM SOP-00401	EPA 1311 Update I m
TCLP - Extraction Fluid	1	N/A	2016/07/19	CAM SOP-00401	EPA 1311 Update I m
TCLP - Initial and final pH	1	N/A	2016/07/19	CAM SOP-00401	EPA 1311 Update I m
TCLP Zero Headspace Extraction	1	2016/07/14	2016/07/16	CAM SOP-00430	EPA 1311 m
Volatile Organic Compounds and F1 PHCs	7	N/A	2016/07/19	CAM SOP-00230	EPA 8260C m
VOCs in ZHE Leachates	1	2016/07/18	2016/07/19	CAM SOP-00226	EPA 8260C m

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	2	N/A	2016/07/18	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	2	N/A	2016/07/19		EPA 8260C m
Chromium (VI) in Water	2	N/A	2016/07/18	CAM SOP-00436	EPA 7199 m
Petroleum Hydrocarbons F2-F4 in Water (2)	2	2016/07/19	2016/07/20	CAM SOP-00316	CCME PHC-CWS m
Mercury	1	2016/07/18	2016/07/18	CAM SOP-00453	EPA 7470A m
Mercury	1	2016/07/19	2016/07/20	CAM SOP-00453	EPA 7470A m

Your Project #: 5-2705-14-02
Your C.O.C. #: 569052-02-01

Attention:Kristian Peter

XCG Consulting Limited
820 Trillium Dr
Kitchener, ON
N2R 1K4

Report Date: 2016/07/20
Report #: R4074308
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B6E6644
Received: 2016/07/14, 15:37

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Dissolved Metals by ICPMS	2	N/A	2016/07/15	CAM SOP-00447	EPA 6020A m
PAH Compounds in Water by GC/MS (SIM)	2	2016/07/15	2016/07/16	CAM SOP-00318	EPA 8270D m
Volatile Organic Compounds and F1 PHCs	2	N/A	2016/07/19	CAM SOP-00230	EPA 8260C m

Remarks:

Maxxam Analytics has performed all analytical testing herein in accordance with ISO 17025 and the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. All methodologies comply with this document and are validated for use in the laboratory. The methods and techniques employed in this analysis conform to the performance criteria (detection limits, accuracy and precision) as outlined in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act.

Maxxam Analytics is accredited for all specific parameters as required by Ontario Regulation 153/04. Maxxam Analytics is limited in liability to the actual cost of analysis unless otherwise agreed in writing. There is no other warranty expressed or implied. Samples will be retained at Maxxam Analytics for three weeks from receipt of data or as per contract.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Soils are reported on a dry weight basis unless otherwise specified.
(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marijane Cruz, Senior Project Manager
Email: MCruz@maxxam.ca
Phone# (905)817-5756

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 METALS PACKAGE (SOIL)

Maxxam ID		CSB169	CSB169	CSB170	CSB170	CSB171		
Sampling Date		2016/07/13 09:15	2016/07/13 09:15	2016/07/13 10:00	2016/07/13 10:00	2016/07/13 10:50		
COC Number		569052-02-01	569052-02-01	569052-02-01	569052-02-01	569052-02-01		
	UNITS	XCG-BH1-SS5	XCG-BH1-SS5 Lab-Dup	XCG-BH2-SS5	XCG-BH2-SS5 Lab-Dup	XCG-BH3-SS4	RDL	QC Batch
Inorganics								
Moisture	%	5.0	N/A	14	N/A	9.2	1.0	4582027
Chromium (VI)	ug/g	<0.2	N/A	<0.2	<0.2	<0.2	0.2	4581011
Metals								
Hot Water Ext. Boron (B)	ug/g	0.15	0.13	0.26	N/A	0.18	0.050	4584238
Acid Extractable Antimony (Sb)	ug/g	<0.20	N/A	0.37	N/A	<0.20	0.20	4583168
Acid Extractable Arsenic (As)	ug/g	1.0	N/A	4.6	N/A	1.9	1.0	4583168
Acid Extractable Barium (Ba)	ug/g	8.9	N/A	25	N/A	12	0.50	4583168
Acid Extractable Beryllium (Be)	ug/g	<0.20	N/A	<0.20	N/A	<0.20	0.20	4583168
Acid Extractable Boron (B)	ug/g	<5.0	N/A	<5.0	N/A	<5.0	5.0	4583168
Acid Extractable Cadmium (Cd)	ug/g	<0.10	N/A	0.59	N/A	0.35	0.10	4583168
Acid Extractable Chromium (Cr)	ug/g	5.8	N/A	9.6	N/A	5.6	1.0	4583168
Acid Extractable Cobalt (Co)	ug/g	1.3	N/A	3.6	N/A	1.6	0.10	4583168
Acid Extractable Copper (Cu)	ug/g	6.7	N/A	16	N/A	7.6	0.50	4583168
Acid Extractable Lead (Pb)	ug/g	6.8	N/A	120	N/A	10	1.0	4583168
Acid Extractable Molybdenum (Mo)	ug/g	0.64	N/A	1.1	N/A	0.55	0.50	4583168
Acid Extractable Nickel (Ni)	ug/g	3.2	N/A	11	N/A	4.3	0.50	4583168
Acid Extractable Selenium (Se)	ug/g	<0.50	N/A	0.52	N/A	<0.50	0.50	4583168
Acid Extractable Silver (Ag)	ug/g	<0.20	N/A	<0.20	N/A	<0.20	0.20	4583168
Acid Extractable Thallium (Tl)	ug/g	<0.050	N/A	0.11	N/A	<0.050	0.050	4583168
Acid Extractable Uranium (U)	ug/g	0.33	N/A	0.73	N/A	0.50	0.050	4583168
Acid Extractable Vanadium (V)	ug/g	6.0	N/A	13	N/A	7.9	5.0	4583168
Acid Extractable Zinc (Zn)	ug/g	43	N/A	350	N/A	190	5.0	4583168
Acid Extractable Mercury (Hg)	ug/g	<0.050	N/A	<0.050	N/A	<0.050	0.050	4583168

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 METALS PACKAGE (SOIL)

Maxxam ID		CSB172	CSB172	CSB173	CSB174	CSB176		
Sampling Date		2016/07/13 11:30	2016/07/13 11:30	2016/07/13 12:30	2016/07/13 13:00	2016/07/13 12:00		
COC Number		569052-02-01	569052-02-01	569052-02-01	569052-02-01	569052-02-01		
	UNITS	XCG-BH4-SS4	XCG-BH4-SS4 Lab-Dup	XCG-BH5-SS4	XCG-BH6-SS4	TM-200	RDL	QC Batch
Inorganics								
Moisture	%	5.3	N/A	13	11	6.3	1.0	4582027
Chromium (VI)	ug/g	<0.2	N/A	<0.2	<0.2	<0.2	0.2	4581011
Metals								
Hot Water Ext. Boron (B)	ug/g	0.12	N/A	0.097	0.085	0.18	0.050	4584238
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	0.34	<0.20	<0.20	0.20	4583168
Acid Extractable Arsenic (As)	ug/g	1.3	1.4	11	8.6	1.5	1.0	4583168
Acid Extractable Barium (Ba)	ug/g	13	12	22	23	12	0.50	4583168
Acid Extractable Beryllium (Be)	ug/g	<0.20	<0.20	<0.20	0.20	<0.20	0.20	4583168
Acid Extractable Boron (B)	ug/g	<5.0	<5.0	5.9	<5.0	5.0	5.0	4583168
Acid Extractable Cadmium (Cd)	ug/g	0.37	0.47	1.3	1.3	0.15	0.10	4583168
Acid Extractable Chromium (Cr)	ug/g	4.6	5.0	10	9.6	6.0	1.0	4583168
Acid Extractable Cobalt (Co)	ug/g	1.6	1.6	5.8	3.9	1.7	0.10	4583168
Acid Extractable Copper (Cu)	ug/g	6.1	6.3	37	31	6.6	0.50	4583168
Acid Extractable Lead (Pb)	ug/g	15	15	71	60	8.8	1.0	4583168
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	<0.50	7.7	0.82	0.53	0.50	4583168
Acid Extractable Nickel (Ni)	ug/g	3.6	3.6	16	11	4.0	0.50	4583168
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4583168
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	4583168
Acid Extractable Thallium (Tl)	ug/g	<0.050	<0.050	0.12	0.20	<0.050	0.050	4583168
Acid Extractable Uranium (U)	ug/g	0.41	0.38	1.1	0.72	0.37	0.050	4583168
Acid Extractable Vanadium (V)	ug/g	8.6	8.9	16	15	7.2	5.0	4583168
Acid Extractable Zinc (Zn)	ug/g	170	200	1400	650	100	5.0	4583168
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583168

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 PAHS (SOIL)

Maxxam ID		CSB169	CSB169	CSB170		CSB171		
Sampling Date		2016/07/13 09:15	2016/07/13 09:15	2016/07/13 10:00		2016/07/13 10:50		
COC Number		569052-02-01	569052-02-01	569052-02-01		569052-02-01		
	UNITS	XCG-BH1-SS5	XCG-BH1-SS5 Lab-Dup	XCG-BH2-SS5	QC Batch	XCG-BH3-SS4	RDL	QC Batch
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	N/A	<0.0071	4579228	<0.0071	0.0071	4579228
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Acenaphthylene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Anthracene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Benzo(a)anthracene	ug/g	0.0067	0.0084	<0.0050	4582576	0.0057	0.0050	4585542
Benzo(a)pyrene	ug/g	0.0068	0.0077	<0.0050	4582576	0.0065	0.0050	4585542
Benzo(b/j)fluoranthene	ug/g	0.0094	0.011	0.0050	4582576	0.0085	0.0050	4585542
Benzo(g,h,i)perylene	ug/g	0.0053	0.0055	<0.0050	4582576	0.0058	0.0050	4585542
Benzo(k)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Chrysene	ug/g	0.0060	0.0068	<0.0050	4582576	0.0057	0.0050	4585542
Dibenz(a,h)anthracene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Fluoranthene	ug/g	0.014	0.017	<0.0050	4582576	0.013	0.0050	4585542
Fluorene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Indeno(1,2,3-cd)pyrene	ug/g	0.0051	0.0056	<0.0050	4582576	0.0052	0.0050	4585542
1-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
2-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Naphthalene	ug/g	<0.0050	<0.0050	<0.0050	4582576	<0.0050	0.0050	4585542
Phenanthrene	ug/g	<0.0050	0.0052	<0.0050	4582576	0.0055	0.0050	4585542
Pyrene	ug/g	0.015	0.016	<0.0050	4582576	0.012	0.0050	4585542
Surrogate Recovery (%)								
D10-Anthracene	%	94	95	101	4582576	97	N/A	4585542
D14-Terphenyl (FS)	%	92	92	92	4582576	99	N/A	4585542
D8-Acenaphthylene	%	100	100	107	4582576	87	N/A	4585542

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O.REG 153 PAHS (SOIL)

Maxxam ID		CSB172	CSB173	CSB174	CSB175		
Sampling Date		2016/07/13 11:30	2016/07/13 12:30	2016/07/13 13:00	2016/07/13 12:00		
COC Number		569052-02-01	569052-02-01	569052-02-01	569052-02-01		
	UNITS	XCG-BH4-SS4	XCG-BH5-SS4	XCG-BH6-SS4	TM-100	RDL	QC Batch
Inorganics							
Moisture	%	N/A	N/A	N/A	6.0	1.0	4582781
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	<0.0071	<0.0071	<0.0071	0.0071	4579228
Polyaromatic Hydrocarbons							
Acenaphthene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	4582576
Acenaphthylene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	4582576
Anthracene	ug/g	0.0055	<0.0050	<0.0050	<0.0050	0.0050	4582576
Benzo(a)anthracene	ug/g	0.0080	<0.0050	<0.0050	0.011	0.0050	4582576
Benzo(a)pyrene	ug/g	0.0059	<0.0050	<0.0050	0.010	0.0050	4582576
Benzo(b/j)fluoranthene	ug/g	0.010	<0.0050	<0.0050	0.014	0.0050	4582576
Benzo(g,h,i)perylene	ug/g	0.0051	<0.0050	<0.0050	0.0065	0.0050	4582576
Benzo(k)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	0.0052	0.0050	4582576
Chrysene	ug/g	0.0071	0.0056	<0.0050	0.0088	0.0050	4582576
Dibenz(a,h)anthracene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	4582576
Fluoranthene	ug/g	0.019	<0.0050	<0.0050	0.026	0.0050	4582576
Fluorene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	4582576
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	<0.0050	<0.0050	0.0066	0.0050	4582576
1-Methylnaphthalene	ug/g	0.0055	<0.0050	<0.0050	<0.0050	0.0050	4582576
2-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	4582576
Naphthalene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	4582576
Phenanthrene	ug/g	0.0094	<0.0050	<0.0050	0.0085	0.0050	4582576
Pyrene	ug/g	0.019	0.0053	<0.0050	0.024	0.0050	4582576
Surrogate Recovery (%)							
D10-Anthracene	%	102	99	96	98	N/A	4582576
D14-Terphenyl (FS)	%	96	91	88	91	N/A	4582576
D8-Acenaphthylene	%	110	106	100	104	N/A	4582576

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 VOCS & F1-F4 (SOIL)

Maxxam ID		CSB169	CSB170	CSB171	CSB172	CSB173		
Sampling Date		2016/07/13 09:15	2016/07/13 10:00	2016/07/13 10:50	2016/07/13 11:30	2016/07/13 12:30		
COC Number		569052-02-01	569052-02-01	569052-02-01	569052-02-01	569052-02-01		
	UNITS	XCG-BH1-SS5	XCG-BH2-SS5	XCG-BH3-SS4	XCG-BH4-SS4	XCG-BH5-SS4	RDL	QC Batch
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4578831
Volatile Organics								
Acetone (2-Propanone)	ug/g	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4583290
Benzene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4583290
Bromodichloromethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Bromoform	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Bromomethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Carbon Tetrachloride	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Chlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Chloroform	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Dibromochloromethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,2-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,3-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,4-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Dichlorodifluoromethane (FREON 12)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,1-Dichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,2-Dichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,1-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
cis-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
trans-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,2-Dichloropropane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	4583290
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	4583290
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4583290
Ethylene Dibromide	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Hexane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Methylene Chloride(Dichloromethane)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4583290
Methyl Isobutyl Ketone	ug/g	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	4583290
Methyl t-butyl ether (MTBE)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Styrene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,1,1,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,1,2,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Tetrachloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4583290

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 VOCS & F1-F4 (SOIL)

Maxxam ID		CSB169	CSB170	CSB171	CSB172	CSB173		
Sampling Date		2016/07/13 09:15	2016/07/13 10:00	2016/07/13 10:50	2016/07/13 11:30	2016/07/13 12:30		
COC Number		569052-02-01	569052-02-01	569052-02-01	569052-02-01	569052-02-01		
	UNITS	XCG-BH1-SS5	XCG-BH2-SS5	XCG-BH3-SS4	XCG-BH4-SS4	XCG-BH5-SS4	RDL	QC Batch
1,1,1-Trichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
1,1,2-Trichloroethane	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Trichloroethylene	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Trichlorofluoromethane (FREON 11)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	4583290
Vinyl Chloride	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4583290
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4583290
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4583290
Total Xylenes	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4583290
F1 (C6-C10)	ug/g	<10	<10	<10	<10	<10	10	4583290
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	<10	10	4583290
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	<10	13	10	4583195
F3 (C16-C34 Hydrocarbons)	ug/g	62	<50	<50	85	130	50	4583195
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	<50	<50	50	4583195
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes	N/A	4583195
Surrogate Recovery (%)								
o-Terphenyl	%	106	104	100	101	102	N/A	4583195
4-Bromofluorobenzene	%	91	91	90	90	90	N/A	4583290
D10-o-Xylene	%	87	85	79	81	85	N/A	4583290
D4-1,2-Dichloroethane	%	108	91	108	108	109	N/A	4583290
D8-Toluene	%	97	97	97	97	96	N/A	4583290

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O.REG 153 VOCS & F1-F4 (SOIL)

Maxxam ID		CSB174	CSB175	CSB175		
Sampling Date		2016/07/13 13:00	2016/07/13 12:00	2016/07/13 12:00		
COC Number		569052-02-01	569052-02-01	569052-02-01		
	UNITS	XCG-BH6-SS4	TM-100	TM-100 Lab-Dup	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	N/A	0.050	4578831
Volatile Organics						
Acetone (2-Propanone)	ug/g	<0.50	<0.50	<0.50	0.50	4583290
Benzene	ug/g	<0.020	<0.020	<0.020	0.020	4583290
Bromodichloromethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Bromoform	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Bromomethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Carbon Tetrachloride	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Chlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Chloroform	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Dibromochloromethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,2-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,3-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,4-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Dichlorodifluoromethane (FREON 12)	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,1-Dichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,2-Dichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,1-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
cis-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
trans-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,2-Dichloropropane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	0.030	4583290
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	0.040	4583290
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	0.020	4583290
Ethylene Dibromide	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Hexane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Methylene Chloride(Dichloromethane)	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.50	<0.50	<0.50	0.50	4583290
Methyl Isobutyl Ketone	ug/g	<0.50	<0.50	<0.50	0.50	4583290
Methyl t-butyl ether (MTBE)	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Styrene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,1,1,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,1,2,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290

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Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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O.REG 153 VOCS & F1-F4 (SOIL)

Maxxam ID		CSB174	CSB175	CSB175		
Sampling Date		2016/07/13 13:00	2016/07/13 12:00	2016/07/13 12:00		
COC Number		569052-02-01	569052-02-01	569052-02-01		
	UNITS	XCG-BH6-SS4	TM-100	TM-100 Lab-Dup	RDL	QC Batch
Tetrachloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Toluene	ug/g	<0.020	<0.020	<0.020	0.020	4583290
1,1,1-Trichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
1,1,2-Trichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Trichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Trichlorofluoromethane (FREON 11)	ug/g	<0.050	<0.050	<0.050	0.050	4583290
Vinyl Chloride	ug/g	<0.020	<0.020	<0.020	0.020	4583290
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	4583290
o-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	4583290
Total Xylenes	ug/g	<0.020	<0.020	<0.020	0.020	4583290
F1 (C6-C10)	ug/g	<10	<10	<10	10	4583290
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	10	4583290
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	N/A	10	4583195
F3 (C16-C34 Hydrocarbons)	ug/g	<50	61	N/A	50	4583195
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	N/A	50	4583195
Reached Baseline at C50	ug/g	Yes	Yes	N/A	N/A	4583195
Surrogate Recovery (%)						
o-Terphenyl	%	100	104	N/A	N/A	4583195
4-Bromofluorobenzene	%	90	90	90	N/A	4583290
D10-o-Xylene	%	84	79	80	N/A	4583290
D4-1,2-Dichloroethane	%	107	108	93	N/A	4583290
D8-Toluene	%	96	97	97	N/A	4583290

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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NEWALTA LANDFILL TCLP MINIMUM PACKAGE (SOIL)

Maxxam ID		CSB177		
Sampling Date		2016/07/13		
COC Number		569052-02-01		
	UNITS	**TCLP**	**RDL**	**QC Batch**
Charge/Prep Analysis				
Amount Extracted (Wet Weight) (g)	N/A	25	N/A	4579985
Inorganics				
Final pH	pH	5.83	N/A	4584271
Leachable Fluoride (F-)	mg/L	0.24	0.10	4584696
Leachable Free Cyanide	mg/L	<0.010	0.010	4584703
Initial pH	pH	9.72	N/A	4584271
TCLP - % Solids	%	100	0.2	4584265
TCLP Extraction Fluid	N/A	FLUID 2	N/A	4584269
Metals				
Leachable Mercury (Hg)	mg/L	<0.0010	0.0010	4584410
Leachable Arsenic (As)	mg/L	<0.2	0.2	4584671
Leachable Barium (Ba)	mg/L	<0.2	0.2	4584671
Leachable Boron (B)	mg/L	0.2	0.1	4584671
Leachable Cadmium (Cd)	mg/L	<0.05	0.05	4584671
Leachable Chromium (Cr)	mg/L	<0.1	0.1	4584671
Leachable Lead (Pb)	mg/L	<0.1	0.1	4584671
Leachable Selenium (Se)	mg/L	<0.1	0.1	4584671
Leachable Silver (Ag)	mg/L	<0.01	0.01	4584671
Leachable Uranium (U)	mg/L	<0.01	0.01	4584671
Volatile Organics				
Leachable Benzene	mg/L	<0.020	0.020	4582505
Leachable Carbon Tetrachloride	mg/L	<0.020	0.020	4582505
Leachable Chlorobenzene	mg/L	<0.020	0.020	4582505
Leachable Chloroform	mg/L	<0.020	0.020	4582505
Leachable 1,2-Dichlorobenzene	mg/L	<0.050	0.050	4582505
Leachable 1,4-Dichlorobenzene	mg/L	<0.050	0.050	4582505
Leachable 1,2-Dichloroethane	mg/L	<0.050	0.050	4582505
Leachable 1,1-Dichloroethylene	mg/L	<0.020	0.020	4582505
Leachable Methylene Chloride(Dichloromethane)	mg/L	<0.20	0.20	4582505
Leachable Methyl Ethyl Ketone (2-Butanone)	mg/L	<1.0	1.0	4582505
Leachable Tetrachloroethylene	mg/L	<0.020	0.020	4582505
Leachable Trichloroethylene	mg/L	<0.020	0.020	4582505
Leachable Vinyl Chloride	mg/L	<0.020	0.020	4582505
Surrogate Recovery (%)				
Leachable 4-Bromofluorobenzene	%	97	N/A	4582505

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

NEWALTA LANDFILL TCLP MINIMUM PACKAGE (SOIL)

Maxxam ID		CSB177		
Sampling Date		2016/07/13		
COC Number		569052-02-01		
	UNITS	**TCLP**	**RDL**	**QC Batch**
Leachable D4-1,2-Dichloroethane	%	98	N/A	4582505
Leachable D8-Toluene	%	96	N/A	4582505

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
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Sampler Initials: TM

O.REG 153 METALS PACKAGE (WATER)

Maxxam ID		CSB178			CSB179		
Sampling Date		2016/07/13 15:00			2016/07/13 15:30		
COC Number		569052-02-01			569052-02-01		
	UNITS	XCG-MW2	RDL	QC Batch	MWB	RDL	QC Batch
Metals							
Chromium (VI)	ug/L	1.4	0.50	4580975	<0.50	0.50	4580975
Mercury (Hg)	ug/L	<0.1	0.1	4583914	<0.1	0.1	4580076
Dissolved Antimony (Sb)	ug/L	3.9	0.50	4580359	<0.50	0.50	4580359
Dissolved Arsenic (As)	ug/L	12	1.0	4580359	<1.0	1.0	4580359
Dissolved Barium (Ba)	ug/L	69	2.0	4580359	84	2.0	4580359
Dissolved Beryllium (Be)	ug/L	<0.50	0.50	4580359	<0.50	0.50	4580359
Dissolved Boron (B)	ug/L	83	10	4580359	92	10	4580359
Dissolved Cadmium (Cd)	ug/L	<0.10	0.10	4580359	<0.10	0.10	4580359
Dissolved Chromium (Cr)	ug/L	<5.0	5.0	4580359	<5.0	5.0	4580359
Dissolved Cobalt (Co)	ug/L	<0.50	0.50	4580359	<0.50	0.50	4580359
Dissolved Copper (Cu)	ug/L	9.7	1.0	4580359	<1.0	1.0	4580359
Dissolved Lead (Pb)	ug/L	<0.50	0.50	4580359	<0.50	0.50	4580359
Dissolved Molybdenum (Mo)	ug/L	110	0.50	4580359	2.2	0.50	4580359
Dissolved Nickel (Ni)	ug/L	3.0	1.0	4580359	<1.0	1.0	4580359
Dissolved Selenium (Se)	ug/L	<2.0	2.0	4580359	<2.0	2.0	4580359
Dissolved Silver (Ag)	ug/L	<0.10	0.10	4580359	<0.10	0.10	4580359
Dissolved Sodium (Na)	ug/L	320000	100	4580359	220000	100	4580359
Dissolved Thallium (Tl)	ug/L	<0.050	0.050	4580359	<0.050	0.050	4580359
Dissolved Uranium (U)	ug/L	2.8	0.10	4580359	0.59	0.10	4580359
Dissolved Vanadium (V)	ug/L	2.1	1.0	4580359	<0.50	0.50	4580359
Dissolved Zinc (Zn)	ug/L	5.7	5.0	4580359	<5.0	5.0	4580359

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 PAHS (WATER)

Maxxam ID		CSB178	CSB179		
Sampling Date		2016/07/13 15:00	2016/07/13 15:30		
COC Number		569052-02-01	569052-02-01		
	UNITS	XCG-MW2	MWB	RDL	QC Batch
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/L	<0.071	<0.071	0.071	4578062
Polyaromatic Hydrocarbons					
Acenaphthene	ug/L	<0.050	<0.050	0.050	4580844
Acenaphthylene	ug/L	<0.050	<0.050	0.050	4580844
Anthracene	ug/L	<0.050	<0.050	0.050	4580844
Benzo(a)anthracene	ug/L	<0.050	<0.050	0.050	4580844
Benzo(a)pyrene	ug/L	<0.010	<0.010	0.010	4580844
Benzo(b/j)fluoranthene	ug/L	<0.050	<0.050	0.050	4580844
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	0.050	4580844
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	0.050	4580844
Chrysene	ug/L	<0.050	<0.050	0.050	4580844
Dibenz(a,h)anthracene	ug/L	<0.050	<0.050	0.050	4580844
Fluoranthene	ug/L	<0.050	<0.050	0.050	4580844
Fluorene	ug/L	<0.050	<0.050	0.050	4580844
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	0.050	4580844
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	4580844
2-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	4580844
Naphthalene	ug/L	<0.050	<0.050	0.050	4580844
Phenanthrene	ug/L	0.030	<0.030	0.030	4580844
Pyrene	ug/L	<0.050	<0.050	0.050	4580844
Surrogate Recovery (%)					
D10-Anthracene	%	101	100	N/A	4580844
D14-Terphenyl (FS)	%	89	84	N/A	4580844
D8-Acenaphthylene	%	95	110	N/A	4580844

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 VOCS & F1-F4 (WATER)

Maxxam ID		CSB178	CSB179		
Sampling Date		2016/07/13 15:00	2016/07/13 15:30		
COC Number		569052-02-01	569052-02-01		
	UNITS	XCG-MW2	MWB	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	4578164
Volatile Organics					
Acetone (2-Propanone)	ug/L	21	<10	10	4580630
Benzene	ug/L	<0.20	<0.20	0.20	4580630
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	4580630
Bromoform	ug/L	<1.0	<1.0	1.0	4580630
Bromomethane	ug/L	<0.50	<0.50	0.50	4580630
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	4580630
Chlorobenzene	ug/L	<0.20	<0.20	0.20	4580630
Chloroform	ug/L	<0.20	<0.20	0.20	4580630
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	4580630
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	4580630
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	4580630
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	4580630
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	4580630
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	4580630
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	4580630
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	4580630
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	4580630
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	4580630
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	4580630
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	4580630
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	4580630
Ethylbenzene	ug/L	<0.20	<0.20	0.20	4580630
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	4580630
Hexane	ug/L	<1.0	<1.0	1.0	4580630
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	4580630
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	4580630
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	4580630
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	4580630
Styrene	ug/L	<0.50	<0.50	0.50	4580630
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	4580630
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	4580630
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	4580630
Toluene	ug/L	<0.20	<0.20	0.20	4580630

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

O.REG 153 VOCS & F1-F4 (WATER)

Maxxam ID		CSB178	CSB179		
Sampling Date		2016/07/13 15:00	2016/07/13 15:30		
COC Number		569052-02-01	569052-02-01		
	UNITS	XCG-MW2	MWB	RDL	QC Batch
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	4580630
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	4580630
Trichloroethylene	ug/L	<0.20	<0.20	0.20	4580630
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	4580630
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	4580630
p+m-Xylene	ug/L	<0.20	<0.20	0.20	4580630
o-Xylene	ug/L	<0.20	<0.20	0.20	4580630
Total Xylenes	ug/L	<0.20	<0.20	0.20	4580630
F1 (C6-C10)	ug/L	<25	<25	25	4580630
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	4580630
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	4584740
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	4584740
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	4584740
Reached Baseline at C50	ug/L	Yes	Yes	N/A	4584740
Surrogate Recovery (%)					
o-Terphenyl	%	101	101	N/A	4584740
4-Bromofluorobenzene	%	90	91	N/A	4580630
D4-1,2-Dichloroethane	%	109	109	N/A	4580630
D8-Toluene	%	99	99	N/A	4580630

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CSB169
Sample ID: XCG-BH1-SS5
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4579228	N/A	2016/07/20	Automated Statchk
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
1,3-Dichloropropene Sum	CALC	4578831	N/A	2016/07/20	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4583195	2016/07/18	2016/07/19	Zhiyue (Frank) Zhu
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri
Moisture	BAL	4582027	N/A	2016/07/16	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4582576	2016/07/18	2016/07/18	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

Maxxam ID: CSB169 Dup
Sample ID: XCG-BH1-SS5
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4582576	2016/07/18	2016/07/18	Jett Wu

Maxxam ID: CSB170
Sample ID: XCG-BH2-SS5
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4579228	N/A	2016/07/20	Automated Statchk
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
1,3-Dichloropropene Sum	CALC	4578831	N/A	2016/07/20	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4583195	2016/07/18	2016/07/19	Zhiyue (Frank) Zhu
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri
Moisture	BAL	4582027	N/A	2016/07/16	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4582576	2016/07/18	2016/07/18	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

Maxxam ID: CSB170 Dup
Sample ID: XCG-BH2-SS5
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin

Maxxam ID: CSB171
Sample ID: XCG-BH3-SS4
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4579228	N/A	2016/07/20	Automated Statchk

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CSB171
Sample ID: XCG-BH3-SS4
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
1,3-Dichloropropene Sum	CALC	4578831	N/A	2016/07/20	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4583195	2016/07/18	2016/07/19	Zhiyue (Frank) Zhu
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri
Moisture	BAL	4582027	N/A	2016/07/16	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4585542	2016/07/19	2016/07/20	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

Maxxam ID: CSB172
Sample ID: XCG-BH4-SS4
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4579228	N/A	2016/07/20	Automated Statchk
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
1,3-Dichloropropene Sum	CALC	4578831	N/A	2016/07/20	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4583195	2016/07/18	2016/07/19	Zhiyue (Frank) Zhu
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri
Moisture	BAL	4582027	N/A	2016/07/16	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4582576	2016/07/18	2016/07/18	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

Maxxam ID: CSB172 Dup
Sample ID: XCG-BH4-SS4
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri

Maxxam ID: CSB173
Sample ID: XCG-BH5-SS4
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4579228	N/A	2016/07/20	Automated Statchk
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
1,3-Dichloropropene Sum	CALC	4578831	N/A	2016/07/20	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4583195	2016/07/18	2016/07/19	Zhiyue (Frank) Zhu
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri
Moisture	BAL	4582027	N/A	2016/07/16	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4582576	2016/07/18	2016/07/18	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CSB174
Sample ID: XCG-BH6-SS4
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4579228	N/A	2016/07/20	Automated Statchk
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
1,3-Dichloropropene Sum	CALC	4578831	N/A	2016/07/20	Automated Statchk
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4583195	2016/07/18	2016/07/19	Zhiyue (Frank) Zhu
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri
Moisture	BAL	4582027	N/A	2016/07/16	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4582576	2016/07/18	2016/07/18	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

Maxxam ID: CSB175
Sample ID: TM-100
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4579228	N/A	2016/07/20	Automated Statchk
1,3-Dichloropropene Sum	CALC	4578831	N/A	2016/07/20	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4583195	2016/07/18	2016/07/19	Zhiyue (Frank) Zhu
Moisture	BAL	4582781	N/A	2016/07/18	Valentina Kaftani
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	4582576	2016/07/18	2016/07/18	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

Maxxam ID: CSB175 Dup
Sample ID: TM-100
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4583290	N/A	2016/07/19	Denis Reid

Maxxam ID: CSB176
Sample ID: TM-200
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	4584238	2016/07/19	2016/07/19	Suban Kanapathippllai
Hexavalent Chromium in Soil by IC	IC/SPEC	4581011	2016/07/15	2016/07/20	Sally Coughlin
Strong Acid Leachable Metals by ICPMS	ICP/MS	4583168	2016/07/18	2016/07/19	Viviana Canzonieri
Moisture	BAL	4582027	N/A	2016/07/16	Valentina Kaftani

Maxxam ID: CSB177
Sample ID: TCLP
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Cyanide (WAD) in Leachates	SKAL/CN	4584703	N/A	2016/07/19	Christine Pham
Fluoride by ISE in Leachates	ISE	4584696	2016/07/19	2016/07/19	Surinder Rai

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

TEST SUMMARY

Maxxam ID: CSB177
Sample ID: TCLP
Matrix: Soil

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury (TCLP Leachable) (mg/L)	CV/AA	4584410	N/A	2016/07/20	Magdalena Carlos
Total Metals in TCLP Leachate by ICPMS	ICP1/MS	4584671	2016/07/19	2016/07/19	Cristina Petran
TCLP - % Solids	BAL	4584265	2016/07/18	2016/07/19	Jian (Ken) Wang
TCLP - Extraction Fluid		4584269	N/A	2016/07/19	Jian (Ken) Wang
TCLP - Initial and final pH	PH	4584271	N/A	2016/07/19	Jian (Ken) Wang
TCLP Zero Headspace Extraction		4579985	2016/07/14	2016/07/16	Walt Wang
VOCs in ZHE Leachates	GC/MS	4582505	2016/07/18	2016/07/19	Juan Pangilinan

Maxxam ID: CSB178
Sample ID: XCG-MW2
Matrix: Water

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4578062	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4578164	N/A	2016/07/19	Automated Statchk
Chromium (VI) in Water	IC	4580975	N/A	2016/07/18	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4584740	2016/07/19	2016/07/20	Zhiyue (Frank) Zhu
Mercury	CV/AA	4583914	2016/07/19	2016/07/20	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4580359	N/A	2016/07/15	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4580630	N/A	2016/07/19	John Wu

Maxxam ID: CSB179
Sample ID: MWB
Matrix: Water

Collected: 2016/07/13
Shipped:
Received: 2016/07/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	4578062	N/A	2016/07/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	4578164	N/A	2016/07/19	Automated Statchk
Chromium (VI) in Water	IC	4580975	N/A	2016/07/18	Sally Coughlin
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	4584740	2016/07/19	2016/07/20	Zhiyue (Frank) Zhu
Mercury	CV/AA	4580076	2016/07/18	2016/07/18	Magdalena Carlos
Dissolved Metals by ICPMS	ICP/MS	4580359	N/A	2016/07/15	John Bowman
PAH Compounds in Water by GC/MS (SIM)	GC/MS	4580844	2016/07/15	2016/07/16	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	4580630	N/A	2016/07/19	John Wu

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GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	2.0°C
Package 2	0.3°C

Cooler custody seal was present and intact.

Sample CSB169-01 : VOC/F1 Analysis: Greater than 10g of soil was submitted in the field preserved vial. This significantly exceeds the protocol specification of approximately 5g. Additional methanol was added to the vial to ensure extraction efficiency.

Sample CSB170-01 : VOC/F1 Analysis: Greater than 10g of soil was submitted in the field preserved vial. This significantly exceeds the protocol specification of approximately 5g. Additional methanol was added to the vial to ensure extraction efficiency.

Sample CSB173-01 : VOC/F1 Analysis: Greater than 10g of soil was submitted in the field preserved vial. This significantly exceeds the protocol specification of approximately 5g. Additional methanol was added to the vial to ensure extraction efficiency.

Sample CSB174-01 : VOC/F1 Analysis: Greater than 10g of soil was submitted in the field preserved vial. This significantly exceeds the protocol specification of approximately 5g. Additional methanol was added to the vial to ensure extraction efficiency.

Results relate only to the items tested.

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Maxxam Job #: B6E6644
Report Date: 2016/07/20

QUALITY ASSURANCE REPORT

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4580630	4-Bromofluorobenzene	2016/07/18	97	70 - 130	97	70 - 130	92	%				
4580630	D4-1,2-Dichloroethane	2016/07/18	110	70 - 130	109	70 - 130	111	%				
4580630	D8-Toluene	2016/07/18	103	70 - 130	105	70 - 130	97	%				
4580844	D10-Anthracene	2016/07/15	99	50 - 130	97	50 - 130	97	%				
4580844	D14-Terphenyl (FS)	2016/07/15	85	50 - 130	92	50 - 130	92	%				
4580844	D8-Acenaphthylene	2016/07/15	109	50 - 130	102	50 - 130	103	%				
4582505	Leachable 4-Bromofluorobenzene	2016/07/19	102	70 - 130	102	70 - 130	98	%				
4582505	Leachable D4-1,2-Dichloroethane	2016/07/19	94	70 - 130	96	70 - 130	98	%				
4582505	Leachable D8-Toluene	2016/07/19	101	70 - 130	101	70 - 130	96	%				
4582576	D10-Anthracene	2016/07/18	98 (5)	50 - 130	97	50 - 130	95	%				
4582576	D14-Terphenyl (FS)	2016/07/18	94 (5)	50 - 130	91	50 - 130	90	%				
4582576	D8-Acenaphthylene	2016/07/18	105 (5)	50 - 130	103	50 - 130	100	%				
4583195	o-Terphenyl	2016/07/19	105	60 - 130	88	60 - 130	104	%				
4583290	4-Bromofluorobenzene	2016/07/19	96 (9)	60 - 140	97	60 - 140	91	%				
4583290	D10-o-Xylene	2016/07/19	88 (9)	60 - 130	97	60 - 130	86	%				
4583290	D4-1,2-Dichloroethane	2016/07/19	105 (9)	60 - 140	105	60 - 140	107	%				
4583290	D8-Toluene	2016/07/19	106 (9)	60 - 140	105	60 - 140	98	%				
4584740	o-Terphenyl	2016/07/19	103	60 - 130	104	60 - 130	102	%				
4585542	D10-Anthracene	2016/07/20	96	50 - 130	98	50 - 130	89	%				
4585542	D14-Terphenyl (FS)	2016/07/20	101	50 - 130	103	50 - 130	92	%				
4585542	D8-Acenaphthylene	2016/07/20	85	50 - 130	84	50 - 130	77	%				
4580076	Mercury (Hg)	2016/07/18	110	75 - 125	110	80 - 120	<0.1	ug/L	NC (1)	20		
4580359	Dissolved Antimony (Sb)	2016/07/15	101	80 - 120	102	80 - 120	<0.50	ug/L	NC (1)	20		
4580359	Dissolved Arsenic (As)	2016/07/15	99	80 - 120	100	80 - 120	<1.0	ug/L	NC (1)	20		
4580359	Dissolved Barium (Ba)	2016/07/15	102	80 - 120	99	80 - 120	<2.0	ug/L	7.9 (1)	20		
4580359	Dissolved Beryllium (Be)	2016/07/15	102	80 - 120	101	80 - 120	<0.50	ug/L	NC (1)	20		
4580359	Dissolved Boron (B)	2016/07/15	101	80 - 120	99	80 - 120	<10	ug/L	NC (1)	20		
4580359	Dissolved Cadmium (Cd)	2016/07/15	101	80 - 120	101	80 - 120	<0.10	ug/L	NC (1)	20		
4580359	Dissolved Chromium (Cr)	2016/07/15	99	80 - 120	98	80 - 120	<5.0	ug/L	NC (1)	20		
4580359	Dissolved Cobalt (Co)	2016/07/15	99	80 - 120	97	80 - 120	<0.50	ug/L	NC (1)	20		
4580359	Dissolved Copper (Cu)	2016/07/15	101	80 - 120	99	80 - 120	<1.0	ug/L	NC (1)	20		

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4580359	Dissolved Lead (Pb)	2016/07/15	97	80 - 120	97	80 - 120	<0.50	ug/L	NC (1)	20		
4580359	Dissolved Molybdenum (Mo)	2016/07/15	102	80 - 120	102	80 - 120	<0.50	ug/L	NC (1)	20		
4580359	Dissolved Nickel (Ni)	2016/07/15	98	80 - 120	97	80 - 120	<1.0	ug/L	NC (1)	20		
4580359	Dissolved Selenium (Se)	2016/07/15	101	80 - 120	100	80 - 120	<2.0	ug/L	NC (1)	20		
4580359	Dissolved Silver (Ag)	2016/07/15	99	80 - 120	96	80 - 120	<0.10	ug/L	NC (1)	20		
4580359	Dissolved Sodium (Na)	2016/07/15	100	80 - 120	99	80 - 120	<100	ug/L	1.3 (1)	20		
4580359	Dissolved Thallium (Tl)	2016/07/15	96	80 - 120	96	80 - 120	<0.050	ug/L	NC (1)	20		
4580359	Dissolved Uranium (U)	2016/07/15	98	80 - 120	98	80 - 120	<0.10	ug/L	NC (1)	20		
4580359	Dissolved Vanadium (V)	2016/07/15	99	80 - 120	97	80 - 120	<0.50	ug/L	NC (1)	20		
4580359	Dissolved Zinc (Zn)	2016/07/15	99	80 - 120	98	80 - 120	<5.0	ug/L	NC (1)	20		
4580630	1,1,1,2-Tetrachloroethane	2016/07/19	96	70 - 130	94	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	1,1,1-Trichloroethane	2016/07/19	89	70 - 130	89	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	1,1,2,2-Tetrachloroethane	2016/07/19	93	70 - 130	104	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	1,1,2-Trichloroethane	2016/07/19	101	70 - 130	99	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	1,1-Dichloroethane	2016/07/19	95	70 - 130	93	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	1,1-Dichloroethylene	2016/07/19	93	70 - 130	92	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	1,2-Dichlorobenzene	2016/07/19	95	70 - 130	92	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	1,2-Dichloroethane	2016/07/19	97	70 - 130	94	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	1,2-Dichloropropane	2016/07/19	92	70 - 130	90	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	1,3-Dichlorobenzene	2016/07/19	91	70 - 130	88	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	1,4-Dichlorobenzene	2016/07/19	91	70 - 130	87	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	Acetone (2-Propanone)	2016/07/19	104	60 - 140	100	60 - 140	<10	ug/L	NC (1)	30		
4580630	Benzene	2016/07/19	91	70 - 130	90	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Bromodichloromethane	2016/07/19	95	70 - 130	93	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	Bromoform	2016/07/19	96	70 - 130	93	70 - 130	<1.0	ug/L	NC (1)	30		
4580630	Bromomethane	2016/07/19	88	60 - 140	88	60 - 140	<0.50	ug/L	NC (1)	30		
4580630	Carbon Tetrachloride	2016/07/19	92	70 - 130	91	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Chlorobenzene	2016/07/19	92	70 - 130	89	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Chloroform	2016/07/19	95	70 - 130	94	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	cis-1,2-Dichloroethylene	2016/07/19	96	70 - 130	94	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	cis-1,3-Dichloropropene	2016/07/19	90	70 - 130	91	70 - 130	<0.30	ug/L	NC (1)	30		

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4580630	Dibromochloromethane	2016/07/19	98	70 - 130	95	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	Dichlorodifluoromethane (FREON 12)	2016/07/19	77	60 - 140	80	60 - 140	<1.0	ug/L	NC (1)	30		
4580630	Ethylbenzene	2016/07/19	84	70 - 130	82	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Ethylene Dibromide	2016/07/19	97	70 - 130	93	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	F1 (C6-C10) - BTEX	2016/07/19					<25	ug/L	NC (1)	30		
4580630	F1 (C6-C10)	2016/07/19	97	60 - 140	88	60 - 140	<25	ug/L	NC (1)	30		
4580630	Hexane	2016/07/19	87	70 - 130	87	70 - 130	<1.0	ug/L	NC (1)	30		
4580630	Methyl Ethyl Ketone (2-Butanone)	2016/07/19	94	60 - 140	90	60 - 140	<10	ug/L	NC (1)	30		
4580630	Methyl Isobutyl Ketone	2016/07/19	92	70 - 130	88	70 - 130	<5.0	ug/L	NC (1)	30		
4580630	Methyl t-butyl ether (MTBE)	2016/07/19	85	70 - 130	83	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	Methylene Chloride(Dichloromethane)	2016/07/19	102	70 - 130	100	70 - 130	<2.0	ug/L	NC (1)	30		
4580630	o-Xylene	2016/07/19	85	70 - 130	83	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	p+m-Xylene	2016/07/19	78	70 - 130	75	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Styrene	2016/07/19	81	70 - 130	80	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	Tetrachloroethylene	2016/07/19	96	70 - 130	93	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Toluene	2016/07/19	88	70 - 130	85	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Total Xylenes	2016/07/19					<0.20	ug/L	NC (1)	30		
4580630	trans-1,2-Dichloroethylene	2016/07/19	91	70 - 130	90	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	trans-1,3-Dichloropropene	2016/07/19	98	70 - 130	96	70 - 130	<0.40	ug/L	NC (1)	30		
4580630	Trichloroethylene	2016/07/19	108	70 - 130	88	70 - 130	<0.20	ug/L	NC (1)	30		
4580630	Trichlorofluoromethane (FREON 11)	2016/07/19	95	70 - 130	95	70 - 130	<0.50	ug/L	NC (1)	30		
4580630	Vinyl Chloride	2016/07/19	91	70 - 130	91	70 - 130	<0.20	ug/L	NC (1)	30		
4580844	1-Methylnaphthalene	2016/07/15	102	50 - 130	100	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	2-Methylnaphthalene	2016/07/15	101	50 - 130	99	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Acenaphthene	2016/07/15	103	50 - 130	103	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Acenaphthylene	2016/07/15	107	50 - 130	103	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Anthracene	2016/07/15	85	50 - 130	90	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Benzo(a)anthracene	2016/07/15	72	50 - 130	96	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Benzo(a)pyrene	2016/07/15	66	50 - 130	94	50 - 130	<0.010	ug/L	NC (1)	30		
4580844	Benzo(b/j)fluoranthene	2016/07/15	72	50 - 130	107	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Benzo(g,h,i)perylene	2016/07/15	58	50 - 130	81	50 - 130	<0.050	ug/L	NC (1)	30		

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4580844	Benzo(k)fluoranthene	2016/07/15	73	50 - 130	104	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Chrysene	2016/07/15	71	50 - 130	98	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Dibenz(a,h)anthracene	2016/07/15	62	50 - 130	86	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Fluoranthene	2016/07/15	99	50 - 130	110	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Fluorene	2016/07/15	104	50 - 130	105	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Indeno(1,2,3-cd)pyrene	2016/07/15	64	50 - 130	90	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Naphthalene	2016/07/15	98	50 - 130	96	50 - 130	<0.050	ug/L	NC (1)	30		
4580844	Phenanthrene	2016/07/15	102	50 - 130	103	50 - 130	<0.030	ug/L	NC (1)	30		
4580844	Pyrene	2016/07/15	91	50 - 130	105	50 - 130	<0.050	ug/L	NC (1)	30		
4580975	Chromium (VI)	2016/07/18	97	80 - 120	99	80 - 120	<0.50	ug/L	NC (1)	20		
4581011	Chromium (VI)	2016/07/20	48 (2,3)	75 - 125	90	80 - 120	<0.2	ug/g	NC (4)	35		
4582027	Moisture	2016/07/16							0.58 (1)	20		
4582505	Leachable 1,1-Dichloroethylene	2016/07/19	98	70 - 130	100	70 - 130	<0.020	mg/L	NC (1)	30		
4582505	Leachable 1,2-Dichlorobenzene	2016/07/19	99	70 - 130	98	70 - 130	<0.050	mg/L	NC (1)	30		
4582505	Leachable 1,2-Dichloroethane	2016/07/19	89	70 - 130	92	70 - 130	<0.050	mg/L	NC (1)	30		
4582505	Leachable 1,4-Dichlorobenzene	2016/07/19	107	70 - 130	106	70 - 130	<0.050	mg/L	NC (1)	30		
4582505	Leachable Benzene	2016/07/19	93	70 - 130	95	70 - 130	<0.020	mg/L	NC (1)	30		
4582505	Leachable Carbon Tetrachloride	2016/07/19	102	70 - 130	105	70 - 130	<0.020	mg/L	NC (1)	30		
4582505	Leachable Chlorobenzene	2016/07/19	101	70 - 130	100	70 - 130	<0.020	mg/L	NC (1)	30		
4582505	Leachable Chloroform	2016/07/19	95	70 - 130	97	70 - 130	<0.020	mg/L	NC (1)	30		
4582505	Leachable Methyl Ethyl Ketone (2-Butanone)	2016/07/19	83	60 - 140	84	60 - 140	<1.0	mg/L	NC (1)	30		
4582505	Leachable Methylene Chloride(Dichloromethane)	2016/07/19	91	70 - 130	94	70 - 130	<0.20	mg/L	NC (1)	30		
4582505	Leachable Tetrachloroethylene	2016/07/19	101	70 - 130	103	70 - 130	<0.020	mg/L	NC (1)	30		
4582505	Leachable Trichloroethylene	2016/07/19	97	70 - 130	99	70 - 130	<0.020	mg/L	NC (1)	30		
4582505	Leachable Vinyl Chloride	2016/07/19	98	70 - 130	102	70 - 130	<0.020	mg/L	NC (1)	30		
4582576	1-Methylnaphthalene	2016/07/18	93 (5)	50 - 130	96	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	2-Methylnaphthalene	2016/07/18	91 (5)	50 - 130	92	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Acenaphthene	2016/07/18	95 (5)	50 - 130	98	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Acenaphthylene	2016/07/18	102 (5)	50 - 130	102	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Anthracene	2016/07/18	90 (5)	50 - 130	88	50 - 130	<0.0050	ug/g	NC (6)	40		

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4582576	Benzo(a)anthracene	2016/07/18	102 (5)	50 - 130	103	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Benzo(a)pyrene	2016/07/18	106 (5)	50 - 130	102	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Benzo(b/j)fluoranthene	2016/07/18	104 (5)	50 - 130	104	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Benzo(g,h,i)perylene	2016/07/18	83 (5)	50 - 130	88	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Benzo(k)fluoranthene	2016/07/18	103 (5)	50 - 130	103	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Chrysene	2016/07/18	119 (5)	50 - 130	97	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Dibenz(a,h)anthracene	2016/07/18	86 (5)	50 - 130	89	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Fluoranthene	2016/07/18	116 (5)	50 - 130	105	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Fluorene	2016/07/18	99 (5)	50 - 130	97	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Indeno(1,2,3-cd)pyrene	2016/07/18	102 (5)	50 - 130	105	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Naphthalene	2016/07/18	83 (5)	50 - 130	88	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Phenanthrene	2016/07/18	98 (5)	50 - 130	96	50 - 130	<0.0050	ug/g	NC (6)	40		
4582576	Pyrene	2016/07/18	117 (5)	50 - 130	105	50 - 130	<0.0050	ug/g	NC (6)	40		
4582781	Moisture	2016/07/18							5.6 (1)	20		
4583168	Acid Extractable Antimony (Sb)	2016/07/19	103 (7)	75 - 125	101	80 - 120	<0.20	ug/g	NC (8)	30		
4583168	Acid Extractable Arsenic (As)	2016/07/19	101 (7)	75 - 125	101	80 - 120	<1.0	ug/g	NC (8)	30		
4583168	Acid Extractable Barium (Ba)	2016/07/19	NC (7)	75 - 125	102	80 - 120	<0.50	ug/g	4.0 (8)	30		
4583168	Acid Extractable Beryllium (Be)	2016/07/19	97 (7)	75 - 125	94	80 - 120	<0.20	ug/g	NC (8)	30		
4583168	Acid Extractable Boron (B)	2016/07/19	95 (7)	75 - 125	92	80 - 120	<5.0	ug/g	NC (8)	30		
4583168	Acid Extractable Cadmium (Cd)	2016/07/19	103 (7)	75 - 125	101	80 - 120	<0.10	ug/g	NC (8)	30		
4583168	Acid Extractable Chromium (Cr)	2016/07/19	106 (7)	75 - 125	102	80 - 120	<1.0	ug/g	NC (8)	30		
4583168	Acid Extractable Cobalt (Co)	2016/07/19	98 (7)	75 - 125	99	80 - 120	<0.10	ug/g	2.6 (8)	30		
4583168	Acid Extractable Copper (Cu)	2016/07/19	105 (7)	75 - 125	106	80 - 120	<0.50	ug/g	3.2 (8)	30		
4583168	Acid Extractable Lead (Pb)	2016/07/19	NC (7)	75 - 125	101	80 - 120	<1.0	ug/g	1.1 (8)	30		
4583168	Acid Extractable Mercury (Hg)	2016/07/19	98 (7)	75 - 125	102	80 - 120	<0.050	ug/g	NC (8)	30		
4583168	Acid Extractable Molybdenum (Mo)	2016/07/19	103 (7)	75 - 125	103	80 - 120	<0.50	ug/g	NC (8)	30		
4583168	Acid Extractable Nickel (Ni)	2016/07/19	97 (7)	75 - 125	101	80 - 120	<0.50	ug/g	1.9 (8)	30		
4583168	Acid Extractable Selenium (Se)	2016/07/19	102 (7)	75 - 125	99	80 - 120	<0.50	ug/g	NC (8)	30		
4583168	Acid Extractable Silver (Ag)	2016/07/19	102 (7)	75 - 125	102	80 - 120	<0.20	ug/g	NC (8)	30		
4583168	Acid Extractable Thallium (Tl)	2016/07/19	100 (7)	75 - 125	101	80 - 120	<0.050	ug/g	NC (8)	30		
4583168	Acid Extractable Uranium (U)	2016/07/19	100 (7)	75 - 125	101	80 - 120	<0.050	ug/g	5.8 (8)	30		

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4583168	Acid Extractable Vanadium (V)	2016/07/19	109 (7)	75 - 125	99	80 - 120	<5.0	ug/g	NC (8)	30		
4583168	Acid Extractable Zinc (Zn)	2016/07/19	NC (7)	75 - 125	99	80 - 120	<5.0	ug/g	13 (8)	30		
4583195	F2 (C10-C16 Hydrocarbons)	2016/07/19	108	50 - 130	87	80 - 120	<10	ug/g	NC (1)	30		
4583195	F3 (C16-C34 Hydrocarbons)	2016/07/19	109	50 - 130	89	80 - 120	<50	ug/g	NC (1)	30		
4583195	F4 (C34-C50 Hydrocarbons)	2016/07/19	113	50 - 130	91	80 - 120	<50	ug/g	NC (1)	30		
4583290	1,1,1,2-Tetrachloroethane	2016/07/19	100 (9)	60 - 140	100	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,1,1-Trichloroethane	2016/07/19	101 (9)	60 - 140	100	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,1,2,2-Tetrachloroethane	2016/07/19	103 (9)	60 - 140	104	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,1,2-Trichloroethane	2016/07/19	106 (9)	60 - 140	106	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,1-Dichloroethane	2016/07/19	105 (9)	60 - 140	104	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,1-Dichloroethylene	2016/07/19	112 (9)	60 - 140	110	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,2-Dichlorobenzene	2016/07/19	100 (9)	60 - 140	98	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,2-Dichloroethane	2016/07/19	103 (9)	60 - 140	103	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,2-Dichloropropane	2016/07/19	104 (9)	60 - 140	103	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,3-Dichlorobenzene	2016/07/19	98 (9)	60 - 140	96	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	1,4-Dichlorobenzene	2016/07/19	98 (9)	60 - 140	95	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Acetone (2-Propanone)	2016/07/19	108 (9)	60 - 140	109	60 - 140	<0.50	ug/g	NC (10)	50		
4583290	Benzene	2016/07/19	103 (9)	60 - 140	101	60 - 130	<0.020	ug/g	NC (10)	50		
4583290	Bromodichloromethane	2016/07/19	102 (9)	60 - 140	102	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Bromoform	2016/07/19	97 (9)	60 - 140	98	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Bromomethane	2016/07/19	100 (9)	60 - 140	97	60 - 140	<0.050	ug/g	NC (10)	50		
4583290	Carbon Tetrachloride	2016/07/19	104 (9)	60 - 140	103	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Chlorobenzene	2016/07/19	102 (9)	60 - 140	102	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Chloroform	2016/07/19	104 (9)	60 - 140	103	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	cis-1,2-Dichloroethylene	2016/07/19	103 (9)	60 - 140	103	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	cis-1,3-Dichloropropene	2016/07/19	100 (9)	60 - 140	99	60 - 130	<0.030	ug/g	NC (10)	50		
4583290	Dibromochloromethane	2016/07/19	101 (9)	60 - 140	102	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Dichlorodifluoromethane (FREON 12)	2016/07/19	122 (9)	60 - 140	121	60 - 140	<0.050	ug/g	NC (10)	50		
4583290	Ethylbenzene	2016/07/19	98 (9)	60 - 140	96	60 - 130	<0.020	ug/g	NC (10)	50		
4583290	Ethylene Dibromide	2016/07/19	103 (9)	60 - 140	104	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	F1 (C6-C10) - BTEX	2016/07/19					<10	ug/g	NC (10)	30		

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4583290	F1 (C6-C10)	2016/07/19	99 (9)	60 - 140	100	80 - 120	<10	ug/g	NC (10)	30		
4583290	Hexane	2016/07/19	108 (9)	60 - 140	105	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Methyl Ethyl Ketone (2-Butanone)	2016/07/19	103 (9)	60 - 140	103	60 - 140	<0.50	ug/g	NC (10)	50		
4583290	Methyl Isobutyl Ketone	2016/07/19	100 (9)	60 - 140	101	60 - 130	<0.50	ug/g	NC (10)	50		
4583290	Methyl t-butyl ether (MTBE)	2016/07/19	103 (9)	60 - 140	101	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Methylene Chloride(Dichloromethane)	2016/07/19	100 (9)	60 - 140	99	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	o-Xylene	2016/07/19	100 (9)	60 - 140	98	60 - 130	<0.020	ug/g	NC (10)	50		
4583290	p+m-Xylene	2016/07/19	94 (9)	60 - 140	92	60 - 130	<0.020	ug/g	NC (10)	50		
4583290	Styrene	2016/07/19	97 (9)	60 - 140	96	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Tetrachloroethylene	2016/07/19	101 (9)	60 - 140	100	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Toluene	2016/07/19	99 (9)	60 - 140	97	60 - 130	<0.020	ug/g	NC (10)	50		
4583290	Total Xylenes	2016/07/19					<0.020	ug/g	NC (10)	50		
4583290	trans-1,2-Dichloroethylene	2016/07/19	102 (9)	60 - 140	101	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	trans-1,3-Dichloropropene	2016/07/19	106 (9)	60 - 140	102	60 - 130	<0.040	ug/g	NC (10)	50		
4583290	Trichloroethylene	2016/07/19	98 (9)	60 - 140	98	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Trichlorofluoromethane (FREON 11)	2016/07/19	111 (9)	60 - 140	109	60 - 130	<0.050	ug/g	NC (10)	50		
4583290	Vinyl Chloride	2016/07/19	117 (9)	60 - 140	115	60 - 130	<0.020	ug/g	NC (10)	50		
4583914	Mercury (Hg)	2016/07/20	104	75 - 125	97	80 - 120	<0.1	ug/L	NC (1)	20		
4584238	Hot Water Ext. Boron (B)	2016/07/19	98 (11)	75 - 125	98	75 - 125	<0.050	ug/g	NC (12)	40		
4584410	Leachable Mercury (Hg)	2016/07/20	106	75 - 125	101	80 - 120	<0.0010	mg/L	NC (1)	25	<0.0010	mg/L
4584671	Leachable Arsenic (As)	2016/07/19	98	80 - 120	96	80 - 120	<0.2	mg/L	NC (1)	35	<0.2	mg/L
4584671	Leachable Barium (Ba)	2016/07/19	NC	80 - 120	99	80 - 120	<0.2	mg/L	NC (1)	35	<0.2	mg/L
4584671	Leachable Boron (B)	2016/07/19	104	80 - 120	122 (13)	80 - 120	0.1, RDL=0.1	mg/L	NC (1)	35	<0.1	mg/L
4584671	Leachable Cadmium (Cd)	2016/07/19	98	80 - 120	94	80 - 120	<0.05	mg/L	NC (1)	35	<0.05	mg/L
4584671	Leachable Chromium (Cr)	2016/07/19	96	80 - 120	94	80 - 120	<0.1	mg/L	NC (1)	35	<0.1	mg/L
4584671	Leachable Lead (Pb)	2016/07/19	96	80 - 120	98	80 - 120	<0.1	mg/L	NC (1)	35	<0.1	mg/L
4584671	Leachable Selenium (Se)	2016/07/19	102	80 - 120	101	80 - 120	<0.1	mg/L	NC (1)	35	<0.1	mg/L
4584671	Leachable Silver (Ag)	2016/07/19	96	80 - 120	96	80 - 120	<0.01	mg/L	NC (1)	35	<0.01	mg/L
4584671	Leachable Uranium (U)	2016/07/19	95	80 - 120	94	80 - 120	<0.01	mg/L	NC (1)	35	<0.01	mg/L
4584696	Leachable Fluoride (F-)	2016/07/19	80	80 - 120	100	80 - 120	<0.10	mg/L	NC (1)	25	<0.10	mg/L
4584703	Leachable Free Cyanide	2016/07/19	97	80 - 120	101	80 - 120	<0.0020	mg/L	NC (1)	20	<0.010	mg/L

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4584740	F2 (C10-C16 Hydrocarbons)	2016/07/20	123	50 - 130	109	60 - 130	<100	ug/L	NC (1)	30		
4584740	F3 (C16-C34 Hydrocarbons)	2016/07/20	101	50 - 130	105	60 - 130	<200	ug/L	NC (1)	30		
4584740	F4 (C34-C50 Hydrocarbons)	2016/07/20	103	50 - 130	100	60 - 130	<200	ug/L	NC (1)	30		
4585542	1-Methylnaphthalene	2016/07/20	76	50 - 130	86	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	2-Methylnaphthalene	2016/07/20	74	50 - 130	84	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Acenaphthene	2016/07/20	80	50 - 130	87	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Acenaphthylene	2016/07/20	79	50 - 130	83	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Anthracene	2016/07/20	82	50 - 130	86	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Benzo(a)anthracene	2016/07/20	87	50 - 130	85	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Benzo(a)pyrene	2016/07/20	81	50 - 130	83	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Benzo(b/j)fluoranthene	2016/07/20	87	50 - 130	93	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Benzo(g,h,i)perylene	2016/07/20	69	50 - 130	69	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Benzo(k)fluoranthene	2016/07/20	80	50 - 130	82	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Chrysene	2016/07/20	84	50 - 130	88	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Dibenz(a,h)anthracene	2016/07/20	60	50 - 130	54	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Fluoranthene	2016/07/20	93	50 - 130	97	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Fluorene	2016/07/20	79	50 - 130	82	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Indeno(1,2,3-cd)pyrene	2016/07/20	75	50 - 130	74	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Naphthalene	2016/07/20	73	50 - 130	85	50 - 130	<0.0050	ug/g	NC (1)	40		
4585542	Phenanthrene	2016/07/20	81	50 - 130	86	50 - 130	<0.0050	ug/g	NC (1)	40		

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Leachate Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
4585542	Pyrene	2016/07/20	95	50 - 130	98	50 - 130	<0.0050	ug/g	NC (1)	40		

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Leachate Blank: A blank matrix containing all reagents used in the leaching procedure. Used to determine any process contamination.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than 2x that of the native sample concentration).

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

(1) Duplicate Parent ID

(2) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results.

(3) Matrix Spike Parent ID [CSB170-01]

(4) Duplicate Parent ID [CSB170-01]

(5) Matrix Spike Parent ID [CSB169-02]

(6) Duplicate Parent ID [CSB169-02]

(7) Matrix Spike Parent ID [CSB172-01]

(8) Duplicate Parent ID [CSB172-01]

(9) Matrix Spike Parent ID [CSB175-03]

(10) Duplicate Parent ID [CSB175-03]

(11) Matrix Spike Parent ID [CSB169-01]

(12) Duplicate Parent ID [CSB169-01]

(13) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B6E6644
Report Date: 2016/07/20

XCG Consulting Limited
Client Project #: 5-2705-14-02
Sampler Initials: TM

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Brad Newman, Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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IMMEDIATE TEST

Maxxam Analytics International Corporation o/a Maxxam Analytics
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CHAIN OF CUSTODY RECORD

Page 1 of 1

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#1200 XCG Consulting Limited	Company Name:		Quotation #:	B30503	Maxxam Job #:	Bottle Order #: 569052
Attention:	Accounts Payable	Attention:	Kristian Peter	P.O. #:			
Address:	820 Trillium Dr Kitchener ON N2R 1K4	Address:		Project:	5-2705-14-02	COC #: C#569052-02-01	Project Manager: Marijane Cruz
Tel:	(519) 741-5774 Fax: (519) 741-5627	Tel:	(519) 741-5774 x291 Fax:	Project Name:			
Email:	accounting@xcg.com	Email:	kristian.peter@xcg.com Tyler.Mahn@xcg.com	Site #:			
				Sampled By:	TM		

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE MAXXAM DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011): ☐ Table 1 ☐ Res/Park ☐ Medium/Fine; ☐ Table 2 ☒ Ind/Comm ☐ Coarse; ☐ Table 3 ☐ Agri/Other ☐ For RSC; ☒ Table 8

Other Regulations: ☐ CCME ☐ Sanitary Sewer Bylaw; ☐ Reg 558 ☐ Storm Sewer Bylaw; ☐ MISA Municipality; ☐ PWQO; ☐ Other

Special Instructions:

Include Criteria on Certificate of Analysis (Y/N)? N

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Turnaround Time (TAT) Required: Please provide advance notice for rush projects

Regular (Standard) TAT: ☒
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
Date Required: ______ Time Required: ______
Rush Confirmation Number: ______ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O Reg 153 Petroleum Hydrocarbons (Soil)	O Reg 153 Volatile Organics (Soil)	O Reg 153 PAHs (Soil)	O Reg 153 Metals Package (Soil)	O Reg 153 Petroleum Hydrocarbons (Water)	O Reg 153 Volatile Organics (Water)	O Reg 153 PAHs (Water)	O Reg 153 Metals Package (Water)	TCLP Metals	TCLP VOC	# of Bottles	Comments
1		XCG-BH1-SS5	July 13/16	9:15	Soil		X	X	X	X							7	
2		XCG-BH2-SS5		10:00			X	X	X	X							7	
3		XCG-BH3-SS4		10:50			X	X	X	X							7	
4		XCG-BH4-SS4		11:30			X	X	X	X							7	
5		XCG-BH5-SS4		12:30			X	X	X	X							7	
6		XCG-BH6-SS4		1:00			X	X	X	X							7	
7		TM-100		12:00			X	X	X								6	
8		TM-200		12:00						X							1	
9		TCLP													X	X	2	
10		XCG-MW2		3:00	GW	Y	[illegible]				X	X	X	X			10	Limited PAH & PHC Sample Volume
		MWB		3:30	GW	Y					X	X	X	X			12	

14-Jul-16 15:37
Marijane Cruz
B6F6644
SD3 ENV-887
REC'D IN WATERLOO

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
[signature] Tyler Mahn	16/07/14	9:40am	Tracy [illegible]	20160714	09:45	
			[signature] MARC [illegible]	20160714	15:3?	

Laboratory Use Only				
Time Sensitive	Temperature (°C) on Receipt	Custody Seal	Yes	No
	2 · 2 · 2 ·	Present	✓	
		Intact	✓	

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

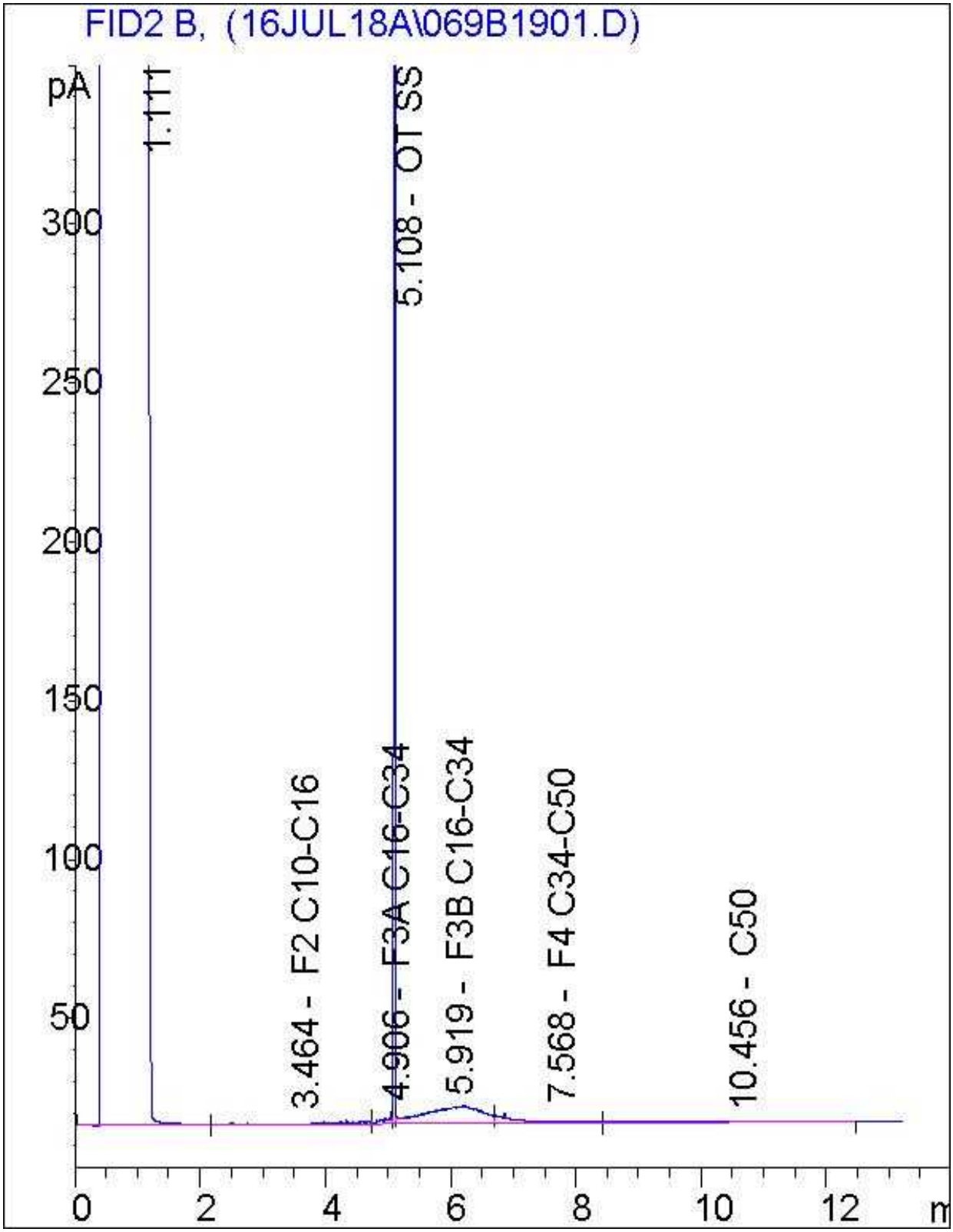
SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

White: Maxxam Yellow: Client

2016/07/14 [initials] 5/7/10 5/3/2 [illegible]

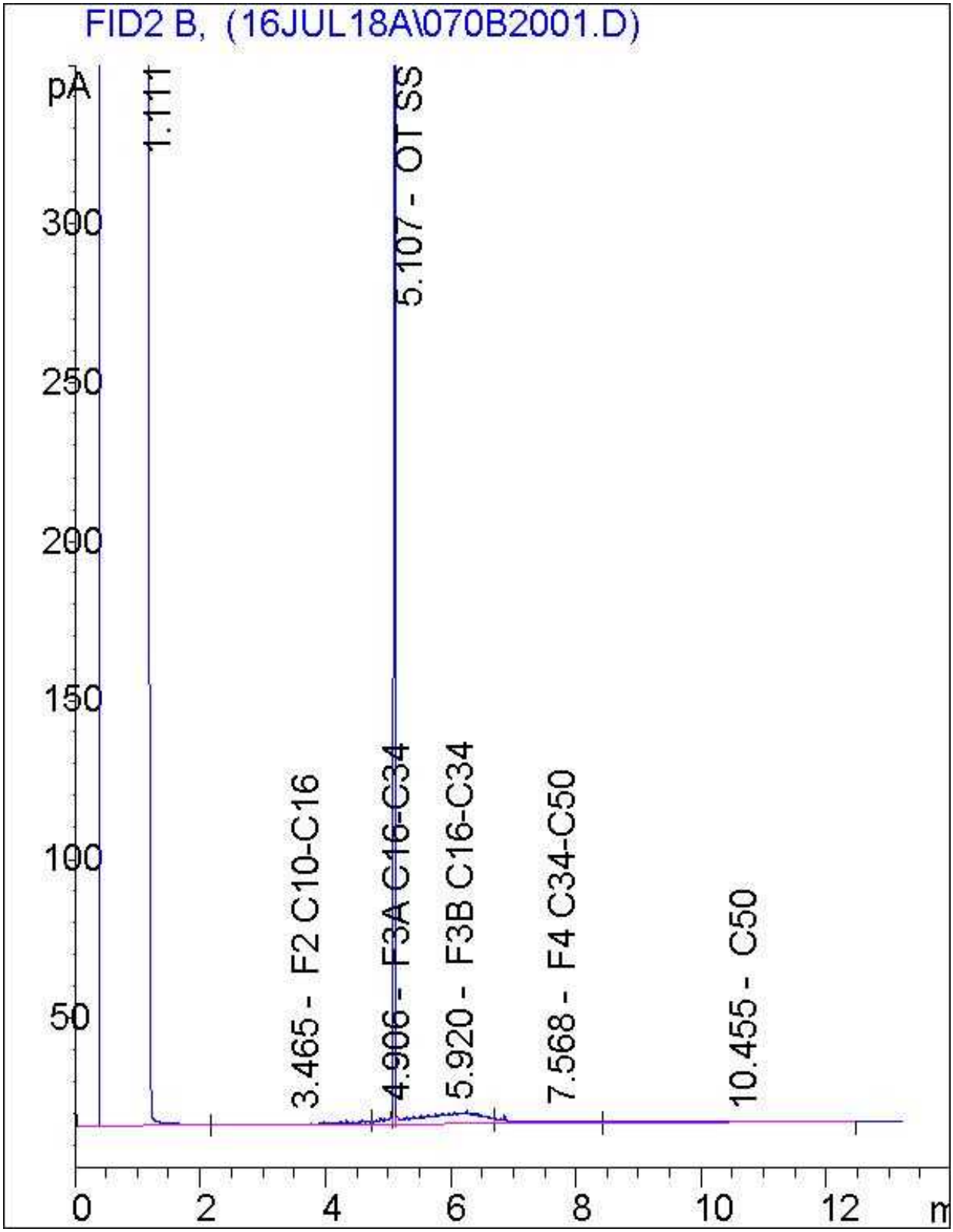
Maxxam Analytics International Corporation o/a Maxxam Analytics

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

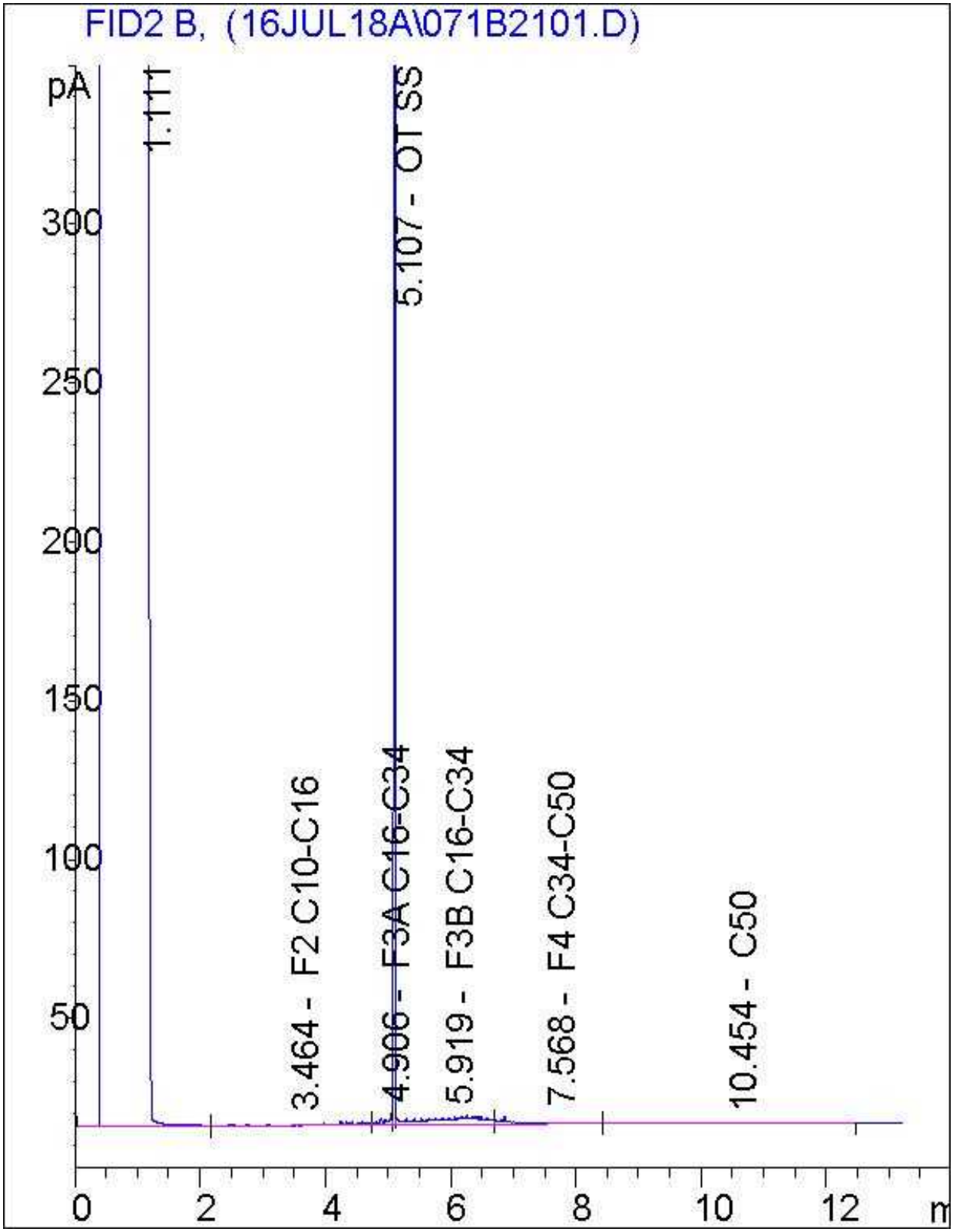


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6E6644
Report Date: 2016/07/20
Maxxam Sample: CSB171

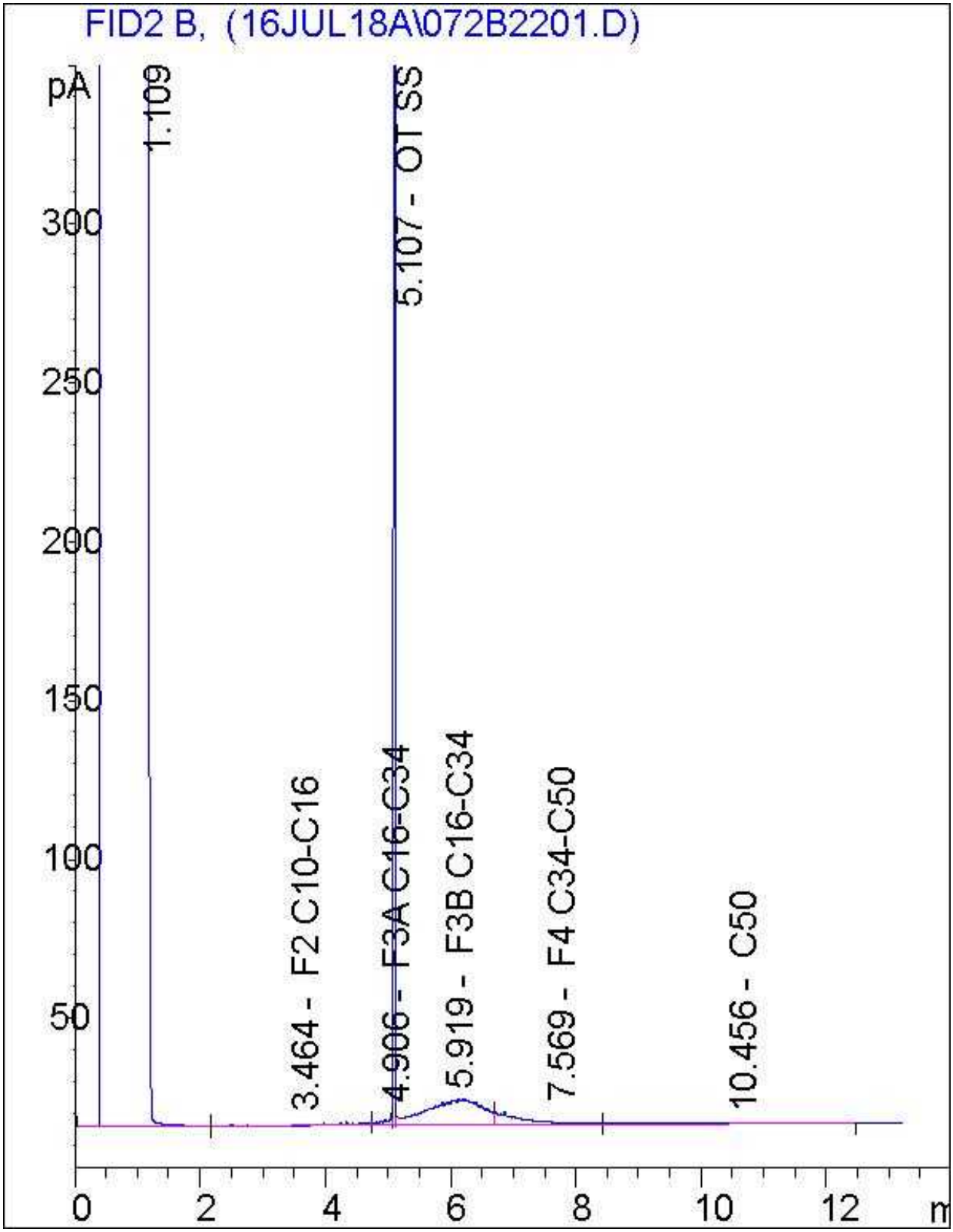
XCG Consulting Limited
Client Project #: 5-2705-14-02
Client ID: XCG-BH3-SS4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



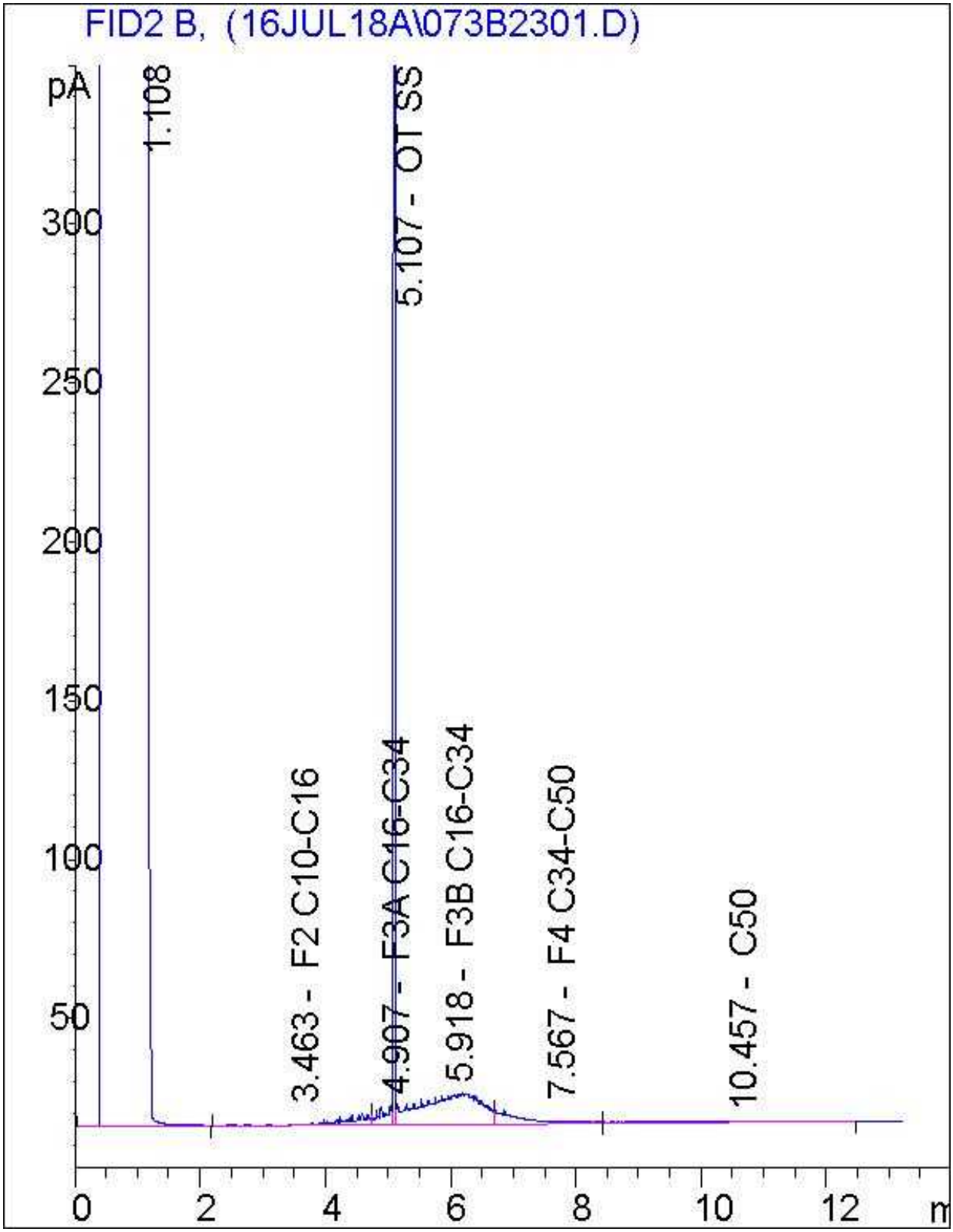
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



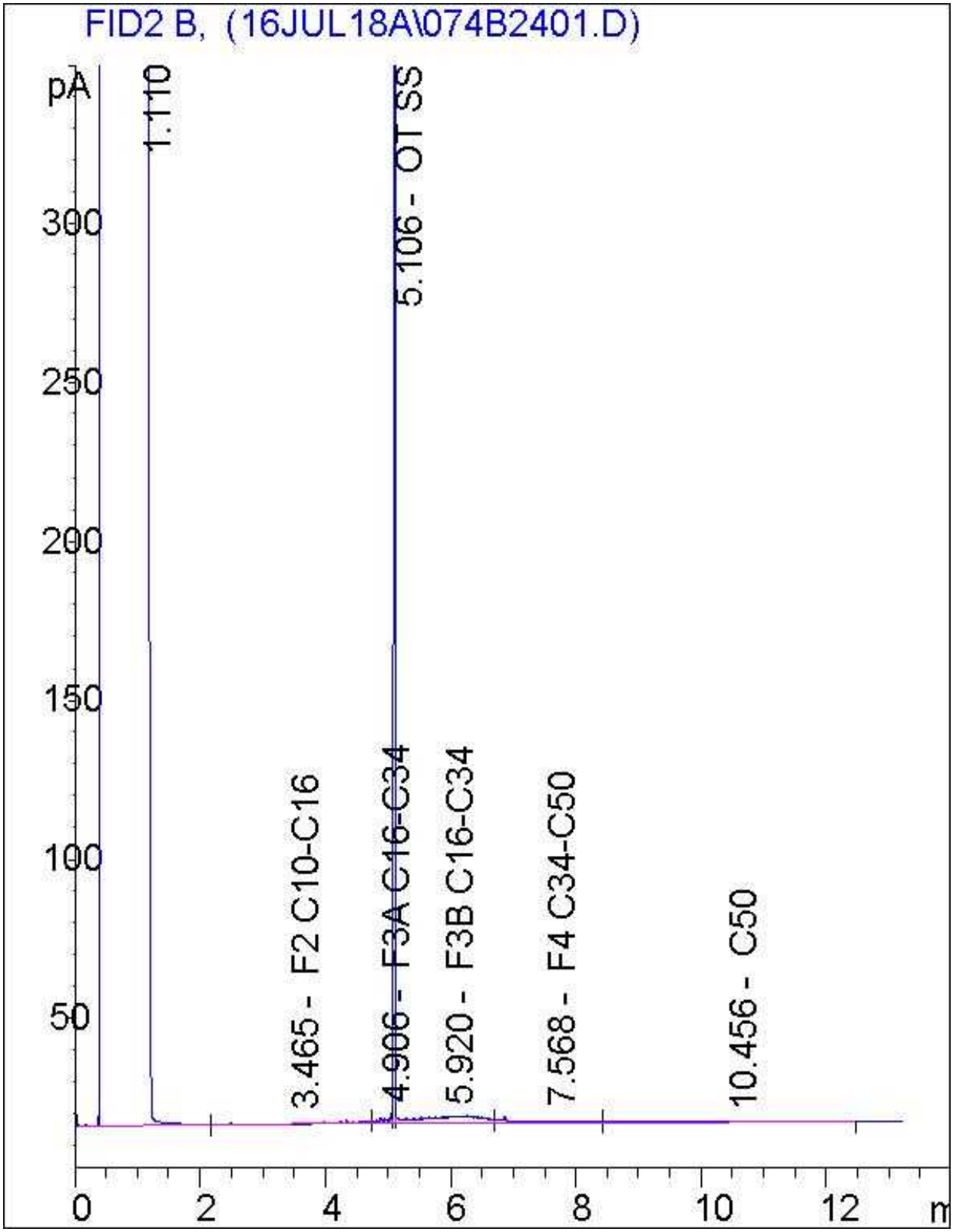
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



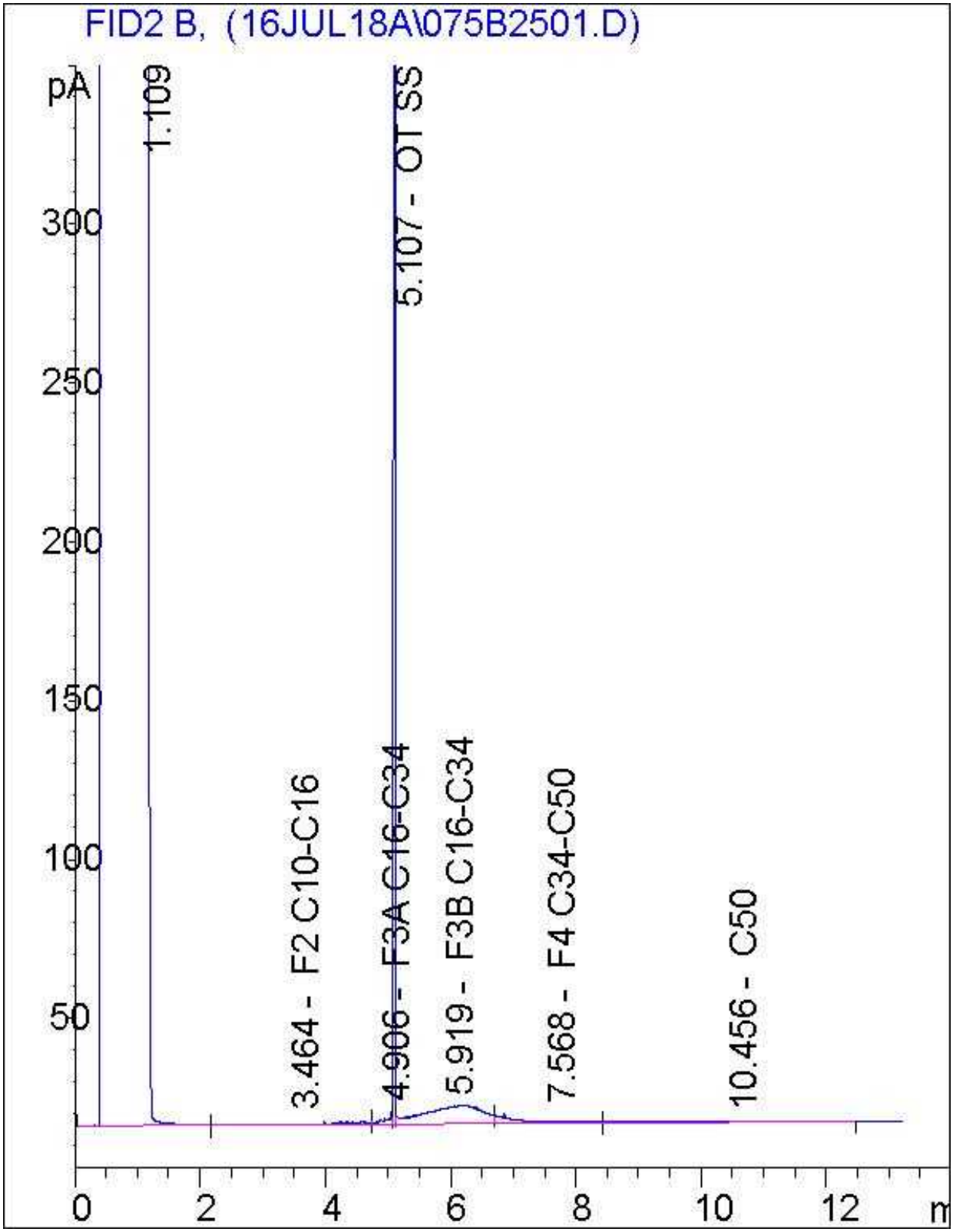
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

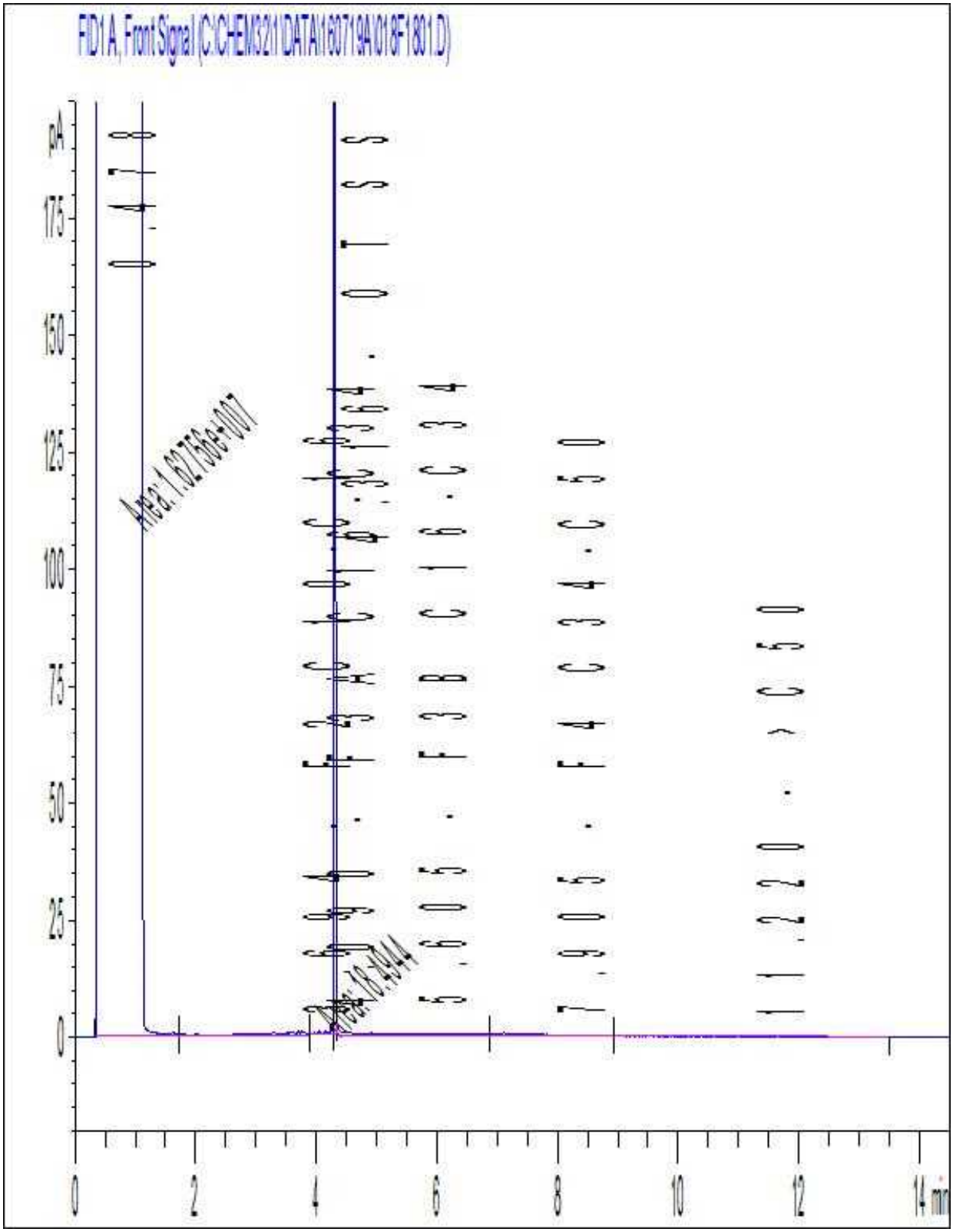


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6E6644
Report Date: 2016/07/20
Maxxam Sample: CSB178

XCG Consulting Limited
Client Project #: 5-2705-14-02
Client ID: XCG-MW2

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

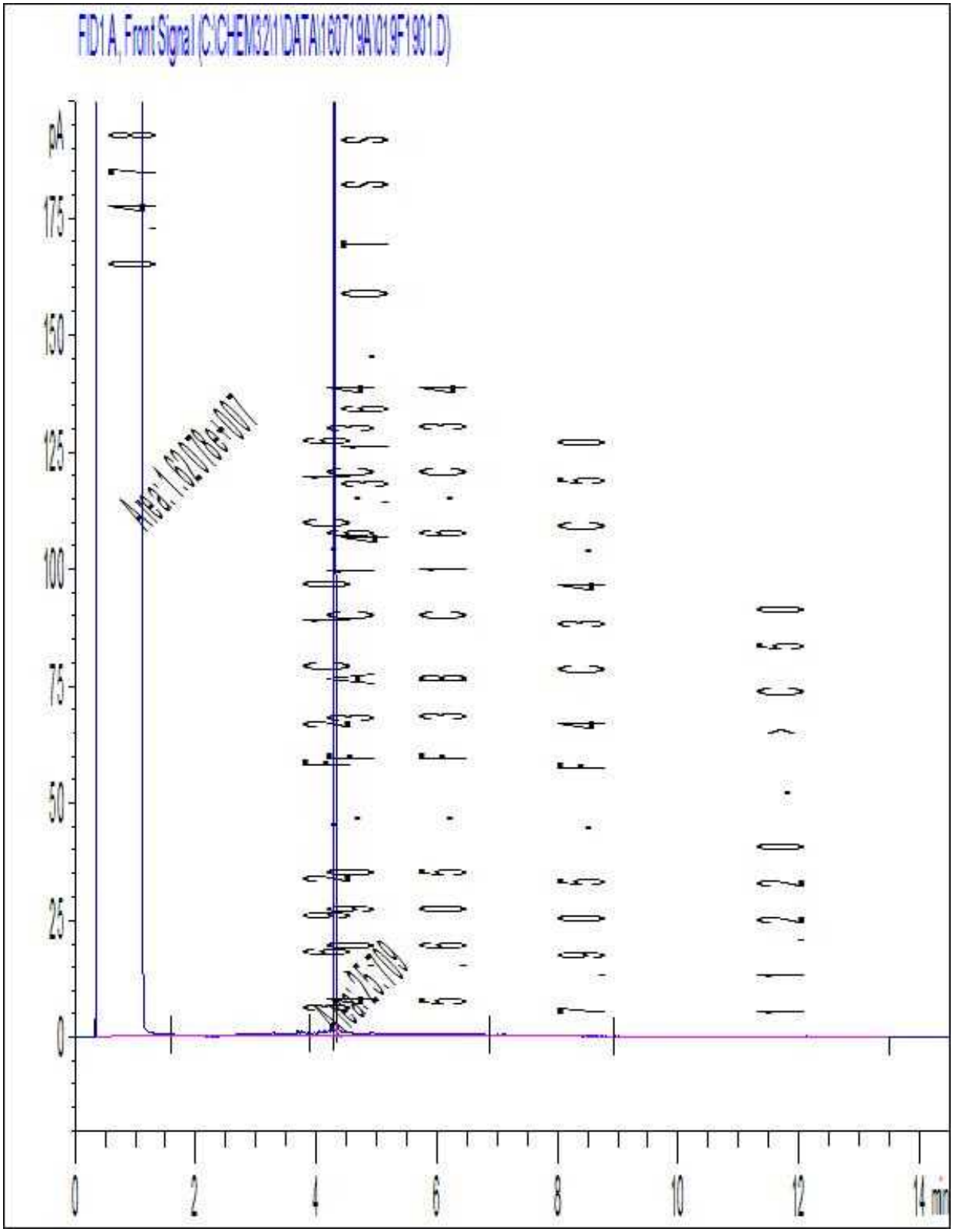


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6E6644
Report Date: 2016/07/20
Maxxam Sample: CSB179

XCG Consulting Limited
Client Project #: 5-2705-14-02
Client ID: MWB

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.