

**LIMITED PHASE II
ENVIRONMENTAL SITE ASSESSMENT
FOR
3775 MAYNARDVILLE HIGHWAY
MAYNARDVILLE, UNION COUNTY, TENNESSEE**

Prepared For:

Commercial Bank
10413 Kingston Pike
Knoxville, TN 37922

Prepared by:



GEO Services, LLC
2561 Willow Point Way
Knoxville, Tennessee 37931

July 30, 2014



July 30, 2014

Commercial Bank
10413 Kingston Pike
Knoxville, TN 37922

Subject: Limited Phase II Environmental Site Assessment
3775 Maynardville Highway
Maynardville, Tennessee
GEOServices Project No. 24-14445

Dear Mr. King

GEOServices has completed a Limited Phase II Environmental Site Assessment (ESA) of the subject property located at 3775 Maynardville Highway, Maynardville, Tennessee and consisting of a Castrol Quick Lube and Car Wash. The Limited Phase II ESA was conducted as outlined in the GEOServices Proposal No. 14-14420 dated July 1, 2014. The purpose of this Limited Phase II ESA was to determine if impacted soils and/or groundwater are present at the subject property. The following report contains our findings and conclusions.

GEOServices appreciates the opportunity to provide the Limited Phase II for this project. If you have any questions, please contact us at (865) 539-8242.

Respectfully,
GEOServices, LLC

A handwritten signature in black ink, appearing to read "Byron L. Barton". The signature is stylized and somewhat cursive.

Byron L. Barton, P.G.
Environmental Manager

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1.0 INTRODUCTION

GEOServices, LLC (GEOServices) has performed a Limited Phase II Environmental Site Assessment (ESA) of the subject property which is currently a vacant Castrol Lube and Carwash.

The subject property consists of one parcel totaling approximately 0.50 acres and is located at 3775 Maynardville Highway, Maynardville, Tennessee. A site location map is included is included as **Figure 1** in **Appendix A**.

2.0 SCOPE OF WORK

GEOServices performed the following scope of work specifically in an attempt to identify any environmental impacts to the soil and groundwater located on the subject property:

- Five soil borings were advanced across the site using a direct push technology drilling rig (Geoprobe®). The borings were placed to determine if any impact is likely to be present. The borings were advanced to 15 feet or refusal. All of the boring were advanced to a depth of 15 feet. Groundwater was not encountered in any of the borings.
- Soil samples were screened in the field with an organic vapor analyzer (OVA) calibrated to identify potential impacts. In addition, visual and olfactory was utilized to screen the soil sample.
- Soil samples were collected from four borings and delivered to a state certified laboratory for analysis.
- The soil samples from BH-1, BH-2, BH-3, BH-4 and BH-5 collected were be analyzed for benzene, toluene, ethylbenzene, total xylenes, (BTEX), methyl tertiary butyl ether (MtBE), naphthalene, polynuclear aromatic hydrocarbons (PAH) and Extractable Petroleum Hydrocarbons (EPH-TN).

3.0 FIELD ACTIVITIES

On July 11, 2014, Mr. Byron Barton and Mr. Scott Goan of GEOServices mobilized to the site to initiate soil and groundwater investigation activities. For every aspect of the field activities, measures were taken by personnel to ensure safety and quality of the project. The appropriate

equipment was donned for the field activities including nitrile gloves. During the logging and sampling procedures, sterile nitrile gloves were changed between each sampling point and a separate "clean" area for soil logging and sampling was maintained.

Direct Push Soil Borings

Prior to implementing intrusive activities, GEOServices contacted Tennessee One Call (a public utility locator) to locate and mark underground utilities. A track-mounted "direct-push" drilling rig was used to advance a total of four soil borings (BH-1 through BH-5) on the subject property in an attempt to identify potential impacts present from the historical site activities of the subject property and the UST. The sampling equipment including the direct push steel rods were decontaminated in between each boring location using detergents and rinsing to prevent cross contamination. All borings were advanced to refusal. Approximate soil boring locations are presented in **Figure 2** in **Appendix A**.

Soil cores were collected and continuously sampled in 5-foot long vinyl acetate liners. The soil cores were logged by the GEOServices' personnel, and the soil samples were analyzed for volatile petroleum compounds using the photo-ionization detector (PID). In addition to readings on the PID, olfactory (smell) and visual (stain or discolor observations) methods were noted to identify the soil for analysis for all the borings.

The soils ranged from sandy clays to clays. No visual or olfactory evidence of impacts were observed in any of the borings. The samples were collected based on the most likely region of contamination. The collected soil samples were placed in labeled laboratory-supplied, 4-ounce glass jars with Teflon®-coated lids. All samples were stored in a cooler with ice for transport to the laboratory. Proper chain-of-custody procedures were maintained from sample collection until delivery to the laboratory to protect sample integrity.

4.0 RESULTS

All analytical results from the soil samples were below the EPA Region IX Screening Levels (RSLs) and Tennessee Department of Environment and Conservation (TDEC) Department of

Underground Storage Tanks (UST) regulations for methyl tertiary butyl ether (MtBE). Extractable Petroleum Hydrocarbons (EPH-TN) was identified in the one soil sample as shown in the table below, but was below regulatory limits. The analytical results are summarized in the **Table**. The complete soil analytical results are included as **Appendix B**.

Table: Soil Results

| Boring Location | Parameter | Results (mg/kg) | EPA Region IX RSLs Regulatory Limits | |
|-----------------|-----------|-----------------|--------------------------------------|--------------------|
| | | | Residential (mg/kg) | Industrial (mg/kg) |
| BH-2 | EPH-TN | 25 | 500 | 500 |

5.0 SUMMARY

GEOServices has completed a Limited Phase II ESA for the subject property. The analyzed soil samples were below the regulatory action limits. EPH-TN was found above laboratory detection limits. However, the sample was found to be below both residential and industrial EPA Region IX RSLs. Groundwater was not encountered in any of the borings.

6.0 LIMITATIONS

The scope of work and field activities of this Limited Phase II ESA were conducted in accordance with, and consistent with generally accepted professional consulting principles and practices. Soil and groundwater sampling, collected as part of a Limited Phase II ESA, may or may not be representative of a larger impact.

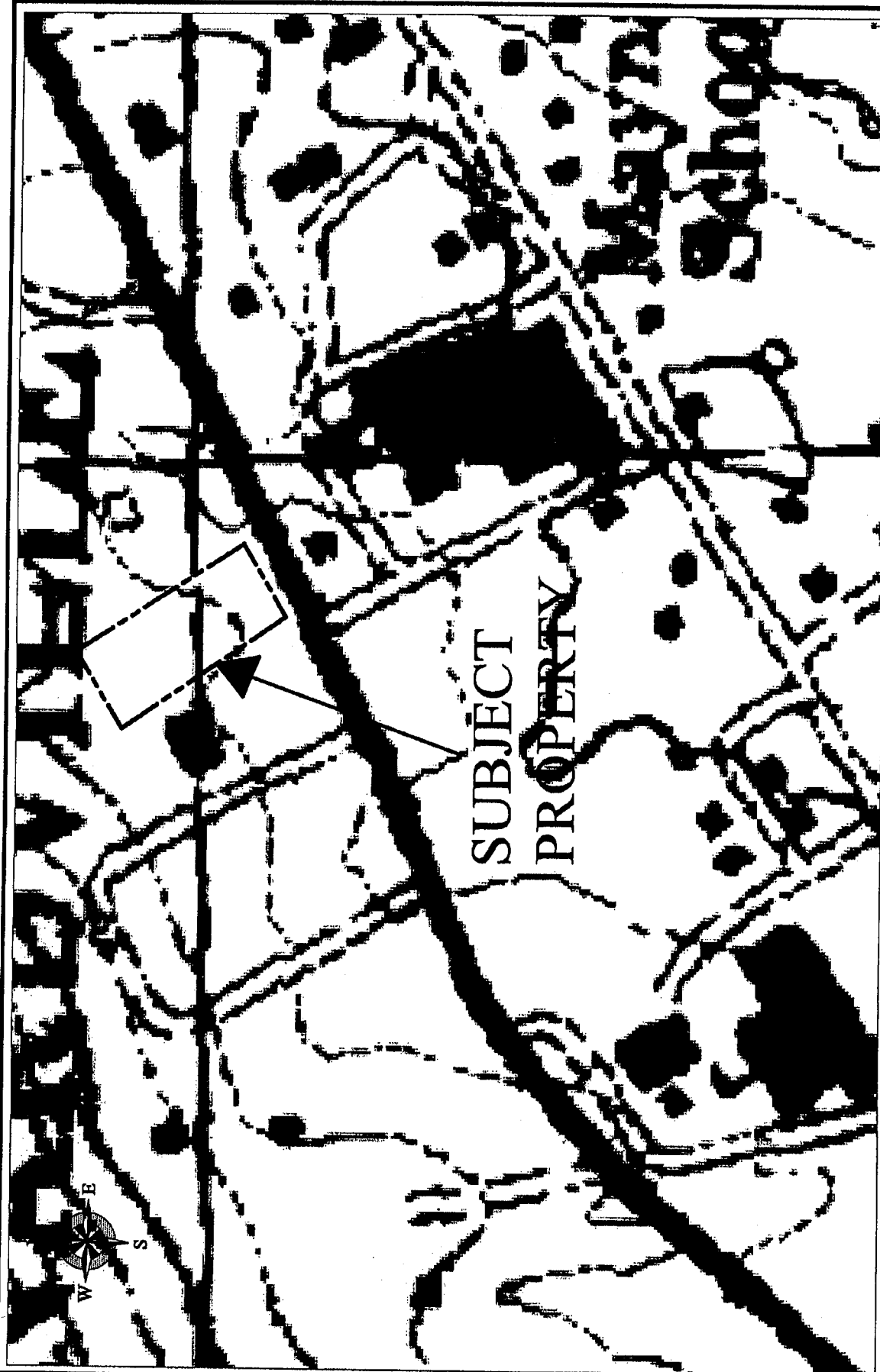
The conclusions of a Limited Phase II ESA regarding the conditions of the site will not represent a warranty that all areas within the subject property are of the same quality. A Limited Phase II ESA is restricted by conditions that may include, but are not limited to, complex geological settings, the fate and transport characteristics of certain hazardous substances and petroleum products, the distribution of existing contamination, and physical limitations imposed by the location of utilities and other man-made objects. Sampling, observations, and analysis completed during the Limited Phase II only represent the subject property conditions at the time

of data collection and at the locations that were sampled. GEOServices cannot be responsible for changes in state or federal environmental standards, practices, or regulations after performance of this Limited Phase II is completed.

Any use or modification of this document by a third party is expressly prohibited without a written, specific authorization from GEOServices, LLC. Such authorizations will require a signed waiver and release agreement. This document is issued with the understanding that the client, the property owner, or its representative is responsible for ensuring that the information, conclusions and recommendations contained herein are brought to the attention of the appropriate regulatory agencies, as required.

APPENDIX A

Figure 1: Site Location Map



Note:
 Site boundary and features shown are approximate only.
 Drawing composed from field notes and observations only.

| | |
|-------------|---------|
| SCALE: | NTS |
| CHECKED BY: | BB |
| DRAWN BY: | CSG |
| DATE: | 7-30-14 |

GEOS
 GEOServices, LP - Geotechnical and Materials Engineers
 3611 Wilshire Field Way
 Knoxville, Tennessee 37911
 Phone: (615) 594-4342
 Fax: (615) 594-4322

SITE LOCATION MAP
 CASTROL LUBE & CAR WASH PHASE II
 3775 MAYNARDVILLE HIGHWAY
 MAYNARDVILLE, TENNESSEE

JOB NO: 24-144-5

APPENDIX A

Figure 2: Boring Location Plan



Note:

Site boundary and features shown are approximate only.
 Drawing composed from field notes and observations only.

— Subject Property.

| | |
|-------------|---------|
| SCALE: | NTS |
| CHECKED BY: | BB |
| DRAWN BY: | CSG |
| DATE: | 7-30-14 |

GEES
 Environmental, LP - Contracted Civil & Materials Engineers
 3011 Wilbur Road Hwy
 Knoxville, Tennessee 37918
 Phone: (615) 294-4242
 Fax: (615) 294-4222

SITE PLAN
 CASTROL LUBE & CAR WASH PHASE II
 BORE HOLE LOCATIONS
 3775 MAYNARDVILLE HIGHWAY
 MAYNARDVILLE, TENNESSEE

JOB NO: 24-14445

APPENDIX B
Laboratory Analytical Results



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Est. 1970

Bryon Barton
GEOServices, LLC
2561 Willow Point Way
Knoxville, TN 37931

Report Summary

Wednesday July 23, 2014

Report Number: L710652

Samples Received: 07/17/14

Client Project:

Description: Castrol Lube PII

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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REPORT OF ANALYSIS

July 23, 2014

Bryon Barton
 GEOServices, LLC
 2561 Willow Point Way
 Knoxville, TN 37931

ESC Sample # : L710652-01

Date Received : July 17, 2014
 Description : Castrol Lube P II

Site ID :

Sample ID : BH1

Project # :

Collected By : Byron Barton
 Collection Date : 07/11/14 00:00

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------------------------------|--------|------------|--------|--------|----------|------|
| Benzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Toluene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Ethylbenzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Total Xylenes | BDL | 0.015 | mg/kg | 8260B | 07/19/14 | 5 |
| Methyl tert-butyl ether | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Naphthalene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Surrogate Recovery | | | | | | |
| Toluene-d8 | 110. | | % Rec. | 8260B | 07/19/14 | 5 |
| Dibromofluoromethane | 108. | | % Rec. | 8260B | 07/19/14 | 5 |
| a,a,a-Trifluorotoluene | 101. | | % Rec. | 8260B | 07/19/14 | 5 |
| 4-Bromofluorobenzene | 91.5 | | % Rec. | 8260B | 07/19/14 | 5 |
| Extractable Petroleum Hydrocarb | BDL | 4.0 | mg/kg | EPH | 07/22/14 | 1 |
| Surrogate Recovery | | | | | | |
| o-Terphenyl | 88.7 | | % Rec. | EPH | 07/22/14 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | |
| Anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Acenaphthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Acenaphthylene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(a)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(a)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(b)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(g,h,i)perylene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(k)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Chrysene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Dibenz(a,h)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Fluorene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Indeno(1,2,3-cd)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Naphthalene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Phenanthrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Surrogate Recovery | | | | | | |
| Nitrobenzene-d5 | 79.0 | | % Rec. | 8270C | 07/20/14 | 1 |
| 2-Fluorobiphenyl | 58.2 | | % Rec. | 8270C | 07/20/14 | 1 |
| p-Terphenyl-d14 | 41.5 | | % Rec. | 8270C | 07/20/14 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

July 23, 2014

Bryon Barton
 GEOServices, LLC
 2561 Willow Point Way
 Knoxville, TN 37931

ESC Sample # : L710652-02

Date Received : July 17, 2014
 Description : Castrol Lube P II

Site ID :

Sample ID : BH2

Project # :

Collected By : Byron Barton
 Collection Date : 07/11/14 00:00

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------------------------------|--------|------------|--------|--------|----------|------|
| Benzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Toluene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Ethylbenzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Total Xylenes | BDL | 0.015 | mg/kg | 8260B | 07/19/14 | 5 |
| Methyl tert-butyl ether | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Naphthalene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Surrogate Recovery | | | | | | |
| Toluene-d8 | 105. | | % Rec. | 8260B | 07/19/14 | 5 |
| Dibromofluoromethane | 99.7 | | % Rec. | 8260B | 07/19/14 | 5 |
| a,a,a-Trifluorotoluene | 99.5 | | % Rec. | 8260B | 07/19/14 | 5 |
| 4-Bromofluorobenzene | 94.4 | | % Rec. | 8260B | 07/19/14 | 5 |
| Extractable Petroleum Hydrocarb | 25. | 4.0 | mg/kg | EPH | 07/22/14 | 1 |
| Surrogate Recovery | | | | | | |
| o-Terphenyl | 79.5 | | % Rec. | EPH | 07/22/14 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | |
| Anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Acenaphthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Acenaphthylene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo (a) anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo (a) pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo (b) fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo (g,h,i) perylene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo (k) fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Chrysene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Dibenz (a,h) anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Fluorene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Indeno (1,2,3-cd) pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Naphthalene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Phenanthrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Surrogate Recovery | | | | | | |
| Nitrobenzene-d5 | 125. | | % Rec. | 8270C | 07/20/14 | 1 |
| 2-Fluorobiphenyl | 83.3 | | % Rec. | 8270C | 07/20/14 | 1 |
| p-Terphenyl-d14 | 86.6 | | % Rec. | 8270C | 07/20/14 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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REPORT OF ANALYSIS

July 23, 2014

Bryon Barton
GEOServices, LLC
2561 Willow Point Way
Knoxville, TN 37931

ESC Sample # : L710652-03

Date Received : July 17, 2014
Description : Castrol Lube P II

Site ID :

Sample ID : BH3

Project # :

Collected By : Byron Barton
Collection Date : 07/11/14 00:00

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------------------------------|--------|------------|--------|--------|----------|------|
| Benzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Toluene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Ethylbenzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Total Xylenes | BDL | 0.015 | mg/kg | 8260B | 07/19/14 | 5 |
| Methyl tert-butyl ether | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Naphthalene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Surrogate Recovery | | | | | | |
| Toluene-d8 | 107. | | % Rec. | 8260B | 07/19/14 | 5 |
| Dibromofluoromethane | 103. | | % Rec. | 8260B | 07/19/14 | 5 |
| a,a,a-Trifluorotoluene | 99.0 | | % Rec. | 8260B | 07/19/14 | 5 |
| 4-Bromofluorobenzene | 94.6 | | % Rec. | 8260B | 07/19/14 | 5 |
| Extractable Petroleum Hydrocarb | BDL | 4.0 | mg/kg | EPH | 07/22/14 | 1 |
| Surrogate Recovery | | | | | | |
| o-Terphenyl | 58.1 | | % Rec. | EPH | 07/22/14 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | |
| Anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Acenaphthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Acenaphthylene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(a)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(a)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(b)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(g,h,i)perylene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Benzo(k)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Chrysene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Dibenz(a,h)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Fluorene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Indeno(1,2,3-cd)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Naphthalene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Phenanthrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Pyrene | BDL | 0.033 | mg/kg | 8270C | 07/20/14 | 1 |
| Surrogate Recovery | | | | | | |
| Nitrobenzene-d5 | 96.5 | | % Rec. | 8270C | 07/20/14 | 1 |
| 2-Fluorobiphenyl | 61.7 | | % Rec. | 8270C | 07/20/14 | 1 |
| p-Terphenyl-d14 | 50.4 | | % Rec. | 8270C | 07/20/14 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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REPORT OF ANALYSIS

July 23, 2014

Bryon Barton
GEOServices, LLC
2561 Willow Point Way
Knoxville, TN 37931

ESC Sample # : L710652-04

Date Received : July 17, 2014
Description : Castrol Lube P II

Site ID :

Sample ID : BH4

Project # :

Collected By : Byron Barton
Collection Date : 07/11/14 00:00

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------------------------------|--------|------------|--------|--------|----------|------|
| Benzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Toluene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Ethylbenzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Total Xylenes | BDL | 0.015 | mg/kg | 8260B | 07/19/14 | 5 |
| Methyl tert-butyl ether | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Naphthalene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Surrogate Recovery | | | | | | |
| Toluene-d8 | 108. | | % Rec. | 8260B | 07/19/14 | 5 |
| Dibromofluoromethane | 102. | | % Rec. | 8260B | 07/19/14 | 5 |
| a,a,a-Trifluorotoluene | 99.1 | | % Rec. | 8260B | 07/19/14 | 5 |
| 4-Bromofluorobenzene | 90.3 | | % Rec. | 8260B | 07/19/14 | 5 |
| Extractable Petroleum Hydrocarb | BDL | 4.0 | mg/kg | EPH | 07/22/14 | 1 |
| Surrogate Recovery | | | | | | |
| o-Terphenyl | 79.5 | | % Rec. | EPH | 07/22/14 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | |
| Anthracene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Acenaphthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Acenaphthylene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(a)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(a)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(b)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(g,h,i)perylene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(k)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Chrysene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Dibenz(a,h)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Fluorene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Indeno(1,2,3-cd)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Naphthalene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Phenanthrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Pyrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Surrogate Recovery | | | | | | |
| Nitrobenzene-d5 | 98.5 | | % Rec. | 8270C | 07/21/14 | 1 |
| 2-Fluorobiphenyl | 80.1 | | % Rec. | 8270C | 07/21/14 | 1 |
| p-Terphenyl-d14 | 64.9 | | % Rec. | 8270C | 07/21/14 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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12065 Lebanon Rd.
 Mt. Juliet, TN 37122
 (615) 758-5858
 1-800-767-5859
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Bryon Barton
 GEOServices, LLC
 2561 Willow Point Way
 Knoxville, TN 37931

July 23, 2014

Date Received : July 17, 2014
 Description : Castrol Lube P II
 Sample ID : BH5
 Collected By : Byron Barton
 Collection Date : 07/11/14 00:00

ESC Sample # : L710652-05

Site ID :

Project # :

| Parameter | Result | Det. Limit | Units | Method | Date | Dil. |
|-----------------------------------|--------|------------|--------|--------|----------|------|
| Benzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Toluene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Ethylbenzene | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Total Xylenes | BDL | 0.015 | mg/kg | 8260B | 07/19/14 | 5 |
| Methyl tert-butyl ether | BDL | 0.0050 | mg/kg | 8260B | 07/19/14 | 5 |
| Naphthalene | BDL | 0.025 | mg/kg | 8260B | 07/19/14 | 5 |
| Surrogate Recovery | | | | | | |
| Toluene-d8 | 97.6 | | % Rec. | 8260B | 07/19/14 | 5 |
| Dibromofluoromethane | 103. | | % Rec. | 8260B | 07/19/14 | 5 |
| a,a,a-Trifluorotoluene | 99.1 | | % Rec. | 8260B | 07/19/14 | 5 |
| 4-Bromofluorobenzene | 99.5 | | % Rec. | 8260B | 07/19/14 | 5 |
| Extractable Petroleum Hydrocarb | BDL | 4.0 | mg/kg | EPH | 07/22/14 | 1 |
| Surrogate Recovery | | | | | | |
| o-Terphenyl | 82.8 | | % Rec. | EPH | 07/22/14 | 1 |
| Polynuclear Aromatic Hydrocarbons | | | | | | |
| Anthracene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Acenaphthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Acenaphthylene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(a)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(a)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(b)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(g,h,i)perylene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Benzo(k)fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Chrysene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Dibenz(a,h)anthracene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Fluoranthene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Fluorene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Indeno(1,2,3-cd)pyrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Naphthalene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Phenanthrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Pyrene | BDL | 0.033 | mg/kg | 8270C | 07/21/14 | 1 |
| Surrogate Recovery | | | | | | |
| Nitrobenzene-d5 | 112. | | % Rec. | 8270C | 07/21/14 | 1 |
| 2-Fluorobiphenyl | 84.9 | | % Rec. | 8270C | 07/21/14 | 1 |
| p-Terphenyl-d14 | 72.4 | | % Rec. | 8270C | 07/21/14 | 1 |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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Summary of Remarks For Samples Printed
07/23/14 at 15:55:57

TSR Signing Reports: 134
R5 - Desired TAT

PENDING SIGNED Net 90 PMT AGREEMENT

Sample: L710652-01 Account: GEOSERSTN Received: 07/17/14 07:15 Due Date: 07/24/14 00:00 RPT Date: 07/23/14 15:55

Sample: L710652-02 Account: GEOSERSTN Received: 07/17/14 07:15 Due Date: 07/24/14 00:00 RPT Date: 07/23/14 15:55

Sample: L710652-03 Account: GEOSERSTN Received: 07/17/14 07:15 Due Date: 07/24/14 00:00 RPT Date: 07/23/14 15:55

Sample: L710652-04 Account: GEOSERSTN Received: 07/17/14 07:15 Due Date: 07/24/14 00:00 RPT Date: 07/23/14 15:55

Sample: L710652-05 Account: GEOSERSTN Received: 07/17/14 07:15 Due Date: 07/24/14 00:00 RPT Date: 07/23/14 15:55